German Sustainable Development Strategy
New Version 2016
In 2015 the international community, meeting in New York, gave the world a piece of truly good news. By adopting the 2030 Agenda for Sustainable Development world leaders clearly affirmed their shared responsibility to improve prospects for present and future generations around the globe. Work on the Agenda was a fine example of international cooperation. The outcome shows that global consensus can be reached on issues which are vital for our future.

This success speaks for itself. But it will only have a lasting impact if we actually work step by step towards the goals we have set ourselves. The Federal Government was quick to start down this demanding route—demanding because it requires a fundamental change in the way we behave at national level, as well as at European and international level. We in Germany can build on the fact that sustainability has a long tradition in this country. More than 300 years have passed since Hans Carl von Carlowitz described the principle of sustainability in his study on forest management. But it was not until 2002 that this principle was first incorporated into our national policies in a systematic and meaningful way. That year, the Federal Government adopted the National Sustainable Development Strategy, which has been constantly refined ever since. As a result, we possess a sustainable development framework which now provides a firm foundation for the national implementation of the 2030 Agenda.

In the present, fully revised National Sustainable Development Strategy, the Federal Government sets out the challenges stemming from this commitment to sustainable development, the specific targets it has set itself and the measures it is taking to meet them. The revised Strategy may seem somewhat abstract and technocratic in places, but it does address questions of existential importance. It centres on nothing less than living life in dignity, justice and peace, on social security, and on freedom to pursue a chosen livelihood while at the same time protecting the natural resources on which life depends.

Sustainable development can only succeed as a concerted effort. It will benefit each and every one of us. And everyone can do something to contribute. In the course of drafting the new Strategy, we were pleased to discover just how much knowledge and support we could count on from our citizens, agencies and civil society associations, from the worlds of business and academia. Our policies will be able to build on this. I am equally grateful to the German Bundestag’s Parliamentary Advisory Council on Sustainable Development and the Council for Sustainable Development, as well as the German Länder and the associations of local authorities, which also provided valuable input.

The Agenda 2030 has lent tremendous new momentum to the global efforts to foster good economic development, peaceful coexistence and an intact environment. The Federal Government is seizing this momentum and seeks to amplify it with the German Sustainable Development Strategy 2016. For this we earn respect, at home and abroad. This should spur us to continue resolutely on our chosen sustainable course. The determination to do so is there—at all levels, in all fields, on the part of all the various stakeholders. And where there’s a will, there’s a way. Our Sustainable Development Strategy is the compass that will keep us on course.
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Summary

The German Sustainable Development Strategy 2016 – the way to a fair future for our grandchildren

What can we do to avoid diminishing the chances of people today and the chances of our children and grandchildren for a prosperous life? How can we preserve natural resources for us and for future generations? How can we make it possible for everyone to lead a life in dignity?

The answer to these questions lies in the guiding principle of sustainable development. To secure humankind’s resources and opportunities in the long term, we have to think globally and always consider tomorrow in today’s decisions.

Global targets – national responsibility

2015 brought a new momentum to international politics. In September 2015, world leaders gathered in New York adopted a global agenda for sustainable development – the 2030 Agenda. In Paris in December 2015, they reached a follow-up agreement on international climate protection. Germany campaigned passionately for the success of both negotiation processes.

The 17 global goals for sustainable development of the 2030 Agenda, the SDGs (Sustainable Development Goals), are aimed at everybody: at governments around the world, but also at civil society, the private sector and science.

The world already had around 7.35 billion inhabitants in 2015; in 2050, it is expected to be more than 9 billion. Everybody should be able to lead a life in dignity now and in the future, all have a right to food and water, education, healthcare and a life in safety. This requires the protection of natural resources, the observance of planetary boundaries and the alignment of policies to the Earth’s ability to regenerate.

For the Federal Government, the promotion of sustainable development is a fundamental goal and yardstick of government action. The Federal Government has committed to the ambitious implementation of the 2030 Agenda. Germany is one of the highest-performing countries in the world, with one of the strongest economies. High employment, a large middle class, social security, a well-developed research landscape, innovative products and high environmental and social standards are a great achievement and simultaneously an obligation to campaign for sustainable development beyond our own borders.

The focus on sustainability offers an opportunity for technological innovation and economic competitiveness. “Made in Germany” has stood for quality products from Germany for decades. A report by international experts (“Peer Review”) on sustainability back in 2009 expressed it as “Sustainability made in Germany”. Having said that, we in Germany are in some respects also still a long way off from sustainable living, sustainable working and sustainable use of natural resources. For this reason, we have to change our thinking in many areas in Germany, too.

New version of the German Sustainable Development Strategy

On 11 January 2017, the Federal Government approved this new version of the Sustainable Development Strategy, the most extensive enhancement of the Strategy since its first adoption in 2002.

The notion of sustainable development has never been so pervasive and accepted among the public as it is today. The greater attention has also increased the expectations of and demands on the Strategy.
The German Sustainable Development Strategy outlines the importance of sustainable development for the Federal Government’s policies and defines concrete targets and measures over the entire range of political issues. It thus provides a benchmark for the required long-term perspective. All federal institutions are called upon to contribute to achieving the targets with activities in their own fields.

Dialogue

The Federal Government relied on dialogue and cooperation to compile the new version of the Strategy.

Between autumn 2015 and spring 2016, there were five public conferences with high-level attendees including representatives of the Federal Government, Länder governments and local authorities, a large number of non-governmental groups and members of the public. At the end of May 2016, the German Chancellor gave the go-ahead for the second phase of the dialogue regarding the draft Strategy published online. Representatives from more than 40 associations participated in a subsequent central consultation event in the Federal Chancellery, and lots of opinions were expressed. The suggestions that emerged from the dialogue process proved valuable.

The Länder, the Parliamentary Advisory Council on Sustainable Development in the German Bundestag, the Sustainable Development Council and the municipal umbrella organisations have once again made their own contributions to the Strategy.

Strategy aim / implementation of the 2030 Agenda

The Sustainable Development Strategy is based on a holistic, integrated approach: long-term, viable solutions can only be achieved if interdependencies between the three dimensions of sustainability are taken into account. The Strategy aims at economically efficient, socially balanced and environmentally sustainable development, whereby the planetary boundaries of our Earth together with the objective of a life in dignity for everyone form the ultimate constraints for political decisions.

The Strategy bundles the contributions of the various policy areas to sustainability and works towards greater coherence and the resolution of conflicting goals in light of the large number of systemic interdependencies. It thus directs globally responsible, intergenerationally equitable and socially integrative policy.

The Sustainable Development Strategy presents Germany’s measures to implement the 17 SDGs at three levels (see Chapter C). Alongside measures with effects in Germany, there are also measures by Germany with a global impact. In addition, there is also the support of other countries in the form of bilateral cooperation (measures with Germany). Germany thereby shows that it is committed to the full implementation of the 2030 Agenda and its SDGs and is taking on this challenge comprehensively as its own.

Sustainability management

At the heart of the German Sustainable Development Strategy is a sustainability management system: goals with time frames for their attainment, indicators for continuous monitoring, rules for management and definitions for institutional configuration (see overview on p. 236).

Management rules

The twelve management rules define general requirements for sustainable policy-making.

“Each generation is required to solve the challenges facing it and must not unload them onto future generations. It must also make provisions for foreseeable future problems”, according to the first fundamental rule of the strategy.

Measuring success with targets and indicators

The Sustainable Development Strategy contains 63 “key indicators”. The indicators are mostly associated with quantified targets. At least one indicator-backed target is defined for each of the 17 SDGs (overview in Chapter B. II 2. b; details in Chapter C II.).
Among the public, sustainable development is often primarily associated with environmental issues or questions of international cooperation. In fact, however, the sustainability principle concerns all policy areas.

Therefore, the Sustainable Development Strategy does not merely cover climate and biodiversity protection, resource efficiency and mobility, for example. Issues such as the fight against poverty, health, education, equality, sound government finances, distributive justice and anti-corruption are also incorporated into the Strategy with political goals. In line with the content of the 2030 Agenda, 13 new topics and 30 indicators have therefore been added to the Sustainable Development Strategy.

Regular monitoring

Transparent and regular monitoring allows the important tracking of successes and failures in the attainment of the Strategy’s goals. It serves as a basis for the management of sustainable policies and necessary realignments, but also as a transparent source of information for democratic decision-making and debate.

Every two years, the Federal Statistical Office publishes an Indicator Report. The Strategy itself is updated every four years. The statisticians are responsible for the technical analysis of the indicators and their development. Weather symbols illustrate whether the target will be achieved if the current trend continues.

The latest analysis by the Federal Statistical Office shows that 27 indicators with a more positive status or trend are offset by 29 indicators with a more negative status or trend; for seven indicators, no status/trend can be identified at present. Even if many targets have positive trends, there are still areas with little or no progress.

Sustainability impact assessment

The guiding principle of sustainability should be considered in every law and every decree from the start. Sustainability is therefore enshrined in the Joint Rules of Procedure of the Federal Ministries as a mandatory criterion when assessing the impact of the Federal Government’s proposed laws and regulations.

Programme of sustainability measures

The Federal Government adopted a new, extensive programme of measures for sustainable administrative activities in 2015 with the theme “Setting a good example”. For example, it includes targets and measures regarding the reduction of energy consumption in government buildings, procurement standards, sustainable event management and the better compatibility of work and family life or nursing care.

Sustainability institutions

Sustainability is a top priority – cooperation of all Federal Ministries

Sustainability involves all areas of political activity. Due to its overarching, cross-cutting relevance and special significance, responsibility for the German Sustainable Development Strategy lies with the Federal Chancellery. In Germany, sustainable development is therefore a top-level priority. All ministries are involved in shaping and implementing the Strategy. To further strengthen the coherence of political measures, Ministry Coordinators for Sustainable Development will be appointed in all ministries as central contact persons.

The coordinator: the State Secretaries’ Committee

The State Secretaries’ Committee chaired by the Head of the Federal Chancellery serves as the central coordinator for the Sustainable Development Strategy. Its role is to ensure that the Strategy is applied to all policy areas like a common thread. External experts are invited to the Committee’s meetings according to the topic (e.g. business, civil society/associations, Länder, local authorities, EU Commission). In addition, the ministries present departmental reports on sustainability.
Parliamentary Advisory Council on Sustainable Development

Sustainability has been enshrined in the German Bundestag since 2004, when the Parliamentary Advisory Council on Sustainable Development began monitoring the National and European Sustainable Development Strategy. It also reviews the sustainability impact assessment of laws.

Sustainable Development Council

The Sustainable Development Council has advised the Federal Government on all matters relating to sustainability and raised public awareness of the issue since 2001. Its 15 members, last appointed by the German Chancellor on 26 October 2016 for a term of three years, stand for the three dimensions of sustainability on the basis of their professional and personal backgrounds. The Council is functionally independent and issues opinions and proposals regarding the enhancement of the Strategy.

Sustainability is rooted throughout politics and society

Progress towards sustainability is conceivable only as a joint effort. This is the only way to create a world that is fit for our grandchildren. In Germany, the idea of sustainability is closely intertwined with the social and political culture—not only because “Nachhaltigkeit”, the German word for sustainability, was first used over 300 years ago. Nowadays, numerous stakeholders from business, science and associations as well as Länder and local authorities advocate a focus on sustainable development. More and more people are guided in their everyday decisions by the principle of sustainability.

In Germany’s federal structure, the powers to enact and enforce legislation on important areas of sustainable development lie with the Länder and local authorities. The Sustainable Development Strategy creates mechanisms and a framework for the better coordination of measures for sustainable development between the Federal Government, Länder and municipalities. The Federal Government works closely with the Länder and helps the municipal level contribute to the implementation of the 2030 Agenda. This is also assisted by activities such as the Sustainability Network of Lord Mayors initiated and supported by the Sustainable Development Council and the new initiative to create regional hubs.

The Strategy supports dialogue and cooperation between groups in society committed to sustainability and promotes knowledge, responsibility and opportunities for participation. In the future, the Federal Government will get the social stakeholders more involved than before in the ongoing work on the Strategy and its implementation. Plans for this include a regular dialogue format (working title: “Sustainability Forum”) and the greater involvement of social stakeholders in the preparation of meetings of the State Secretaries’ Committee. In science, various initiatives have been launched to support the implementation of the SDGs. The Federal Government has embraced these initiatives and offers a platform on which scientific support for the implementation of the SDGs will be pooled.

Taking responsibility at all levels, national and international

Germany argues that the “High-Level Political Forum” set up at the United Nations must play a large role. This is also why Germany was one of the first countries to report to this body in New York about the ongoing work on the German Sustainable Development Strategy in the first year of implementation of the 2030 Agenda. Both in bilateral cooperation and in multilateral bodies, Germany provides other nations with extensive support on the road to sustainable development.

At European level, too, Germany is campaigning consistently for the ambitious implementation of the 2030 Agenda for Sustainable Development by the EU, including by calling for a new EU Sustainable Development Strategy. The implementation of the 2030 Agenda also requires a new strategic framework at the European level.

Like during its presidency of the G7 in 2015, Germany will introduce sustainable development as an important overriding issue during its upcoming presidency of the G20 in 2017.
Sustainability – a process

The guiding principle of sustainability is – in the words of cultural historian Ulrich Grober – a kind of compass, a “navigation device for a journey into unknown territory – the future.”

There are no simple answers to the complex challenges of our time. As the focus on sustainable development demands a holistic approach and requires thinking backwards from the endpoint, it can become an engine for real social, economic and political progress.

In the Federal Government’s view, the new version of the German Sustainable Development Strategy is an important step on the road to the implementation of the 2030 Agenda. The Federal Government will rigorously continue the work on the Sustainable Development Strategy after it is adopted. It invites all governmental and non-governmental institutions, social groups and every individual to make an active contribution to this process.
Chapter A. Sustainability: the Current Challenge

Sustainable development requires responsible action – for today and for future generations, both nationally and internationally. The National Sustainable Development Strategy, which is being reissued here, has targeted necessary, long-term, viable solutions since 2002. The new version of the Strategy was compiled by the State Secretaries’ Committee on Sustainable Development led by Federal Minister Peter Altmaier as Head of the Federal Chancellery and approved by the Federal Cabinet on 11 January 2017.

I. Background

The new version of the Sustainable Development Strategy is very much a response to the “2030 Agenda for Sustainable Development” adopted by the heads of state and government of the 193 member states of the United Nations on 25 September 2015 in New York. Its adoption is an expression of the conviction that global challenges can be overcome only as a joint effort. For this reason, the guiding principle of sustainable development must be applied consistently to all policy areas in all countries.

The title of the Agenda – “Transforming our world” – makes clear the magnitude of the challenge facing the international community. It prescribes a framework for global sustainable development up to 2030 and calls on politicians to purposefully initiate the necessary change processes in all areas.

“The 2030 Agenda”

People: We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.

Planet: We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.

Prosperity: We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

Peace: We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.

Partnership: We are determined to mobilise the means required to implement this Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

(Excerpt from the Preamble of the “2030 Agenda”)

For German policy-making too, the “2030 Agenda” thus provides the most important international incentive for sustainable development since the National Sustainable Development Strategy was first issued in 2002. The Federal Government has committed to the ambitious national implementation of this Agenda.

“So the global community has given itself a lot to do in the next 15 years with the “2030 Agenda”. The Federal Government is committed to an ambitious implementation of this Agenda. For in Germany too, we are in some respects still too far away from living, working and using our natural resources sustainably.”

Chancellor Angela Merkel, Policy Speech on 24 September 2015

Major challenges remain

In 2000, the United Nations adopted the Millennium Development Goals (MDGs). Impressive progress has been made since then, such as halving the number of people living in extreme poverty.

But the world continues to be confronted with major challenges. By 2050, the world’s population is expected to rise to more than nine billion people. They all have a right to develop. How can we secure the subsistence of an ever-growing world population while at the same time protecting our natural resources in the long term?

Milestones of international sustainability policy

1987: “Our Common Future” report by the Brundtland Commission
2000: Millennium Summit of the United Nations as a basis for the subsequent drafting of the 8 Millennium Development Goals

Progress towards sustainable development – achievable only as a joint effort

In order to make progress towards sustainable development, sustainability must be understood as a guiding principle – globally, nationally and locally. The goal is a world in which economic prosperity for all goes hand in hand with social cohesion and the protection of natural resources – a world which recognises a commitment to inter-generational equity, respect for human rights and the peaceful coexistence of peoples. Many modern problems are also due to the present being prioritised over the future. Living at the future’s expense not only builds up debt for oneself but also mortages future generations. One thing is clear: both nationally and internationally, a good future can be achieved if only everyone works on it together.

A strong Germany – international responsibility

In its campaign for a peaceful world that conserves its natural resources, Germany can play to its strengths. These include a competitive, innovative economy, a high level of environmental awareness in society and strong social cohesion.

German businesses, especially from among the medium-sized companies, are global ambassadors for the social market economy – an economic system that links freedom with responsibility. Internationally respected German attributes include the high employment rates, which go hand in hand with a good social system. Sustainability “made in Germany” stands for advanced production while maintaining a high level of social and environmental protection.

Considerable progress has been made in recent years regarding the financial sustainability of public budgets. Its importance has been acknowledged and the aim of sound state finances is constitutionally protected by the balanced-budget provision in Germany’s Basic Law. Since 2014, the Federal Government’s budgets have managed without new debt (“black zero” policy).

With its energy transition, Germany is showing that a switch to renewable, sustainable energy sources is possible even for an industrialised country. Germany obtains nearly a third of the electricity it consumes from renewable energy. By 2035, the proportion of electricity generated from renewable energy is set to reach 55 to 60% of gross electricity consumption. Economic growth has been decoupled from the growth of energy consumption, i.e. energy consumption is growing more slowly than gross domestic product.

We “must expose the false choice between prosperity and sustainability. Germany has shown by pursuing a green economy based on clean and renewable energy that these aims can go hand in hand.”

Kofi Annan, 7 November 2013

From Germany’s strength follows the obligation to take responsibility for people in other countries too. In the long term, this is also in the country’s own national interests. After all, in a globalised and interconnected world, even the most faraway regions are “right next door”. The social and ecological costs of prosperity in rich countries must not be passed on to poorer countries; we must face up to this responsibility.
II. Sustainability policy in the 21st century

What do we want for life in Germany and our position in the world in this century? A “sustainable” Germany must be a progressive, innovative, open and liveable country. It is characterised by a high quality of life and effective environmental protection. It is integrated, inclusive and excludes no one, creates opportunities for the equal participation of everyone in all areas and at all levels. It fulfils its international responsibility.

Nothing stays the same

Since the start of the 21st century, immense changes have occurred around the globe that will probably continue to accelerate. At the same time, it is important to keep long-term trajectories in mind. The years 2050 or 2100 sound far off, but people born today statistically have a good chance of seeing the year 2100.

The drivers of structural economic change in recent years and the years ahead include the digitalisation of business, education, work organisation and society and the increase in the intensity of knowledge, e.g. through the increasing interconnectivity of systems, new models of cooperation and a shift in demand. The structural transformation will affect all countries and value chains. If used correctly, it offers opportunities to develop and implement new solutions to social and ecological problems.

Sustainability – modern technological and social policy-making

Sustainability and innovation are not contradictory, but are rather mutually dependent terms. Openness to innovation is a condition for sustainable policy-making aimed at progress that is viable in the long term. Technological change and a sustainable future are inextricably linked when it comes to things such as improvements in the fields of mobility, natural resources, health, nutrition, urbanisation and cooperation. Innovative policy-making focused rigorously on sustainable development could stimulate a new age of industrial expansion, a new qualitative emergence into modernity.

“The principle of sustainability fundamentally gives us a defining feature, an identifier for what progress means in our society. Progress must namely meet the condition that nature and our ecological systems really can sustain the changes permanently.”

Chancellor Angela Merkel, 2007

Culture of sustainability

A new modern politics also requires social innovation in the sense of developing a culture of sustainability. Sustainable development will not be achieved globally without technological progress, but it also cannot be achieved solely or primarily through technological progress. Persuading individuals, social groups and societies as a whole to think and act sustainably requires a cultural shift.

An important prerequisite for the societal focus on sustainability to work as a driver of innovation is awareness of sustainability as a concept. According to a 2015 survey, 85% of the German population are now aware of it; this proportion has grown from 77% in 2012. The concept of sustainability has therefore made its way into the public consciousness – more than 300 years after it was first coined. However, it remains a task for education, science, culture and the media, business and politics to make knowledge of sustainability deficiencies and potential the dominant active culture.

More than 300 years of sustainability in Germany

The concept was first mentioned in 1713 by mining administrator Hans Carl von Carlowitz from Saxony in “Sylvicultura oeconomica”, his book on forestry. A rising population, growing cities, and in particular the great demand for ore mining and the smelting of ores were leading to shortages of wood at the time. In his book, Carl von Carlowitz criticised the short-termist overfelling of the forests, calling for their “sustainable” use.

Achieving prosperity and growth sustainably

The focus on the guiding principle of sustainability is a driver for more prosperity and growth and an opportunity for the economy to tap into new ways to create added value. In the long term, the economy will have to find sustainable responses to global megatrends. These include urbanisation, the growing demand for resources and energy, a change in consumption patterns and lifestyles, digitalisation, climate change and demographic trends.
III. The example of refugee policy

The global refugee situation, which is also confronting Germany with big challenges, is showing us the urgent need for a concrete, global and sustainable approach.

More than 65 million people around the world were seeking refuge in 2015. The vast majority live as internally displaced persons in their own countries or as refugees in neighbouring countries. Be it war and persecution, hunger or the lack of prospects – the numerous causes of refugeeism and migration are also an expression of a current lack of sustainable development. The “2030 Agenda” addresses all of the chief reasons for refugeeism and migration in its catalogue of goals. It allows for the fact that refugeeism or migration is often the result of multiple factors coinciding and accordingly supports a holistic approach. The “2030 Agenda” thus provides a framework for the prevention and combating of the causes of refugeeism.

“No matter where the refugees are coming from – whether they come from Sub-Saharan or North Africa, from the Middle East, from Yemen, from Syria, from Egypt, from Iran, from Iraq, from Afghanistan, from Pakistan – sustainability has failed there in recent years. The absence of sustainable policies in every respect has also resulted in hundreds of thousands and millions of people seeing no prospects of remaining in their immediate vicinity.

The lack of sustainable environmental policy, the lack of sustainable government structures, the lack of sustainable rule of law, the lack of sustainable social security, the lack of sustainable opportunities for participation – politically, economically, in every respect – has resulted in an exodus the like of which we have not seen since the end of the Second World War.”

Federal Minister Peter Altmaier, Head of the Federal Chancellery, Berlin 29 October 2015

The present situation requires concerted action not only nationally but also at a European and international level. In light of the growing numbers of refugees since 2015, the Federal Government has prioritised the following measures:

- **Global cooperation to fight the causes of refugeeism**
  
  Both nationally and at the European and international levels, the Federal Government is concentrating mainly on counteracting the causes of refugeeism. The London donor conference co-hosted with other partner states and the United Nations in early February 2016 raised over USD 12 billion in pledges for Syrian refugees. Germany made the largest single bilateral contribution: EUR 2.3 billion will be provided by 2018. More than two thirds of the 1.3 billion for 2016 will flow into United Nations aid plans. Not least thanks to such pledges, the World Food Programme (WFP) for example is in a much better position to provide food to people in Syria and to Syrian refugees in neighbouring countries.

  In addition, improved employment opportunities and access to education were agreed for Syrian refugees in the communities taking them in. For example, all Syrian refugee children in the region are to be given access to education by the end of the 2016/2017 school year. Moreover, over one million job opportunities are to be created for Syrian refugees and citizens of the receiving countries by 2018. Another priority is the establishment of local partnerships. In addition, the African Union and its member states, including many important origin, transit and host countries, are also called upon to bear their share of the responsibility. At the European Union summit with important African origin and transit countries in Malta in November 2015, the heads of state and government therefore agreed, among other things, on a joint action plan for sustainably fighting the causes of refugeeism and irregular migration.

- **Stabilisation of host regions**
  
  The majority of refugees flee to the countries adjacent to their home countries and stay there. In 2015, 86% of international refugees found refuge in developing countries. The receiving developing countries’ own development is sometimes substantially impaired by uncontrolled refugee and migrant movements. In order to stabilise the situation in the countries that host refugees, Germany invests in infrastructure there – for example in the water supply. The aim is to integrate the refugees into society, avoid conflicts and secure resources for all. The Federal Government wants to substantially increase the funds for development cooperation again in 2017 in order to
make a greater contribution to the sustainable improvement of living conditions in refugees’ countries of origin and asylum even beyond the acute crises.

• **Activities in Europe**

Some of the conflicts that are causing the current refugee migrations occur in Europe’s direct vicinity. Therefore, concerted action and solidarity on the part of the European Union is meaningful and necessary. The tasks specifically include the effective protection of the EU’s external borders, a European asylum system with a fair distribution of refugees in the EU, the increased repatriation of migrants who do not require protection and cooperation with origin and transit states in the EU’s immediate vicinity. In this context, the EU-Turkey Statement of 18 March 2016, the aims of which include putting an end to people-smuggling in the Aegean and giving refugees in Turkey better educational opportunities and healthcare, is particularly noteworthy. It resulted in a drastic reduction of illegal migration via the Aegean and thus to a considerable reduction in the number of deaths in the eastern Mediterranean. The EU migration partnerships with African nations are also part of this context. On 7 June 2016, the European Commission announced a New Partnership Framework with third countries. On this basis, the conclusions of the European Council of 28 June 2016 provide for the conclusion of the first migration compacts with major origin and transit countries in Africa by the end of the year. Effective incentives and appropriate conditionality are intended to promote cooperation on readmission, border protection, the prevention of trafficking and the fight against the causes of refugeeism. Together with France, Italy and others, Germany is taking particular responsibility for the migration partnerships with Niger and Mali.

• **Integration**

Nationally, the integration of the people coming to Germany with good prospects of being permitted to stay is of central importance to the Federal Government. Learning German, acquiring qualifications through vocational training or study, and the recognition of existing professional qualifications are crucial. Instruments and measures can be drawn upon that have been developed over decades to ensure fruitful cooperation. The Federal Government works closely with the Länder and local authorities, as demonstrated for example by the integration concept adopted by the Federal Government and the Länder on 22 April 2016.

The conditions for successful and sustainable labour market integration have already been improved by numerous measures. The Federal Government already provided integration opportunities for asylum seekers with good prospects of being permitted to stay and certain people whose deportation has been suspended by way of its Act on the Acceleration of Asylum Procedures. The main burden of labour market integration will have to be handled at local job centres. The 2016 Federal Budget provided human and financial resources to ensure the practical implementation.

The main parts of the Integration Act (IntG) and accompanying subordinate legislation came into force on 6 August 2016. The guiding principle is that of “give and take”: the people coming to us are provided with opportunities from the state, but they must also work actively on their own integration at the same time. On the basis of and in addition to the IntG, the Federal Government is implementing the following measures:

- The Federal Government will provide funding for a temporary “Refugee Integration Measures” labour market programme. This programme will create up to 100,000 additional job opportunities for those eligible under the Asylum Seekers’ Benefits Act. Asylum seekers will thus be able to acquire their first experience in the employment market while their claim for asylum is being processed.

- The language, culture and values are to be learned as early as possible. Therefore, access to integration courses will be improved.

- If an asylum seeker refuses mandatory integration measures without a good reason, their benefits will be cut.

- In the future, a permanent right to remain (settlement permit) will be made conditional on certain efforts to integrate even for those entitled to asylum, recognised refugees and resettlement refugees.

- Those entitled to protection without sufficient labour market integration will be able to be assigned to a specific place of residence in the future.
Access to the labour market has also been eased for people whose deportation has been suspended or who have permission to stay pending asylum procedures. For example, the labour market priority check has been suspended for a period of three years in 133 of the Federal Employment Agency’s 156 agency districts. This also allows temporary employment. In addition, experience of the German labour market can be acquired in work placement schemes with no minimum wage.

Integration into the labour market focuses on sustainability. For young refugees, vocational training offers good opportunities for entering the labour market directly. Recognised refugees over 35 years of age may consider on-the-job qualifications.

Access to certain educational promotion services has also been temporarily widened depending on residency status and prior period of stay.

In addition, the IntG has created more legal certainty for businesses and trainees by suspending deportation for the total duration of eligible vocational training plus a further six months after successful completion. On commencement of subsequent employment in line with the qualification earned, this is followed by a two-year right to remain.

Access to long-term unemployment benefits has been made easier by accounting for time spent participating in integration measures when accessing specific labour-market benefits that require long-term unemployment.

Many businesses, the SMEs in particular, make an important contribution to the integration of refugees in training and work. By providing internships and apprenticeship places, they are smoothing the way for refugees entering the workplace. The Federal Government supports this commitment on the part of the business community with a range of measures (e.g. the “welcome pilots” at the chambers of commerce). In addition, language support services have been continuously enhanced and adjusted to meet demand because an adequate knowledge of German is a basic requirement for successful integration into the labour market and society. As part of the overall language programme, the Federal Government is pursuing the further integration of general and job-related language support services. For this reason, the Act on the Acceleration of Asylum Procedures has enshrined federally financed job-related German language support services in law. These German-language support services paid for with federal funds allow the integration of language acquisition with training, employment and labour-market measures. The overall language programme is intended to result in the flexible, open and modular promotion of a homogeneous level of language ability, which imparts general and professional language skills and ensures transparency in both phases. For the participants, this is intended to create integrated language support services without unnecessary waiting times in transitional periods.

Integration is offered to people, but they are also obliged to make their own efforts. This includes learning, accepting and observing our laws and values.

IV. The 2030 Agenda for Sustainable Development

1. Significance of the 2030 Agenda

The 2030 Agenda was compiled in an unprecedentedly participatory and transparent process of negotiations at the United Nations lasting more than three years. Under the joint leadership of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and the Federal Ministry for Economic Cooperation and Development (BMZ), the Federal Government was intensely engaged in these negotiations in a way that was highly regarded nationally and internationally.

The title “Transforming our world: the 2030 Agenda for Sustainable Development” spells out the task for policy-makers and society of effecting a radical change at every level.

“This [2030] Agenda [for Sustainable Development] is very ambitious. It is about no less than everything: the people of the Earth, prosperity in peace, a new Global Partnership.”

Federal Minister Peter Altmaier, Head of the Federal Chancellery, Berlin, 29 October 2015
The 2030 Agenda is an expression of a new quality of international sustainability policy. It breaks down the dichotomy of the two perspectives “environment and development”, which characterised the basic consensus of Rio 1992, by integrating the global sustainability criteria and goals developed after Rio and the development policy discourse with the Millennium Development Goals (MDGs) in a comprehensive system of global goals for sustainable development. The 2030 Agenda – as correctly highlighted by the Länder (see Chapter D. III.) – represents a paradigm shift towards a profound transformation of business and society in both the North and the South in order to take joint responsibility for making the world sustainable and just.

The Agenda applies universally, i.e. equally for industrialised, emerging and developing countries. All share responsibility for purposefully advancing sustainable development in the next 15 years by fundamentally reorganising structures, processes and modes of thought and behaviour. This requires a new Global Partnership.

The 17 Sustainable Development Goals (SDGs)

At the heart of the Agenda are the 17 Sustainable Development Goals (SDGs), with a total of 169 associated targets that are to be achieved by the target year 2030 (and some by 2020). The new UN Agenda presents vast new challenges for the Federal Government’s work.

2030 Agenda: a challenge for policy-makers

The 2030 Agenda creates an opportunity for and demands new forms of cooperation. This equally affects both vertical and horizontal integration, i.e. greater cooperation between bodies on the same and different levels of the political system.

- Implementation affects all policy areas

The strength of the 2030 Agenda is that it combines the economic, social and ecological dimensions of sustainable development. The implementation of the Agenda by policy-makers can succeed only through the efforts of the entire Federal Government and all government stakeholders. The radically revised management concept of the current Strategy (Chapter C) serves as a decision-making aid.

- Implementation requires concerted action

However, policy-makers’ contributions will be far from sufficient for a successful implementation of the Agenda. Many stakeholders from civil society, business and science contributed to the successful drafting of the Agenda with their valuable, constructive work and will also play an important role in its implementation. The new Global Partnership and the multi-stakeholder approach this entails demand new forms of cooperation between these stakeholders and the people politically responsible for the implementation of the Agenda.
In order to achieve sustainable development worldwide, it must be promoted at all levels—internationally, regionally, nationally and at the level of the Länder and local authorities. For the Federal Government, the Agenda offers the first opportunity to systematically integrate its sustainability policy into an international framework and a European approach. It also re-illustrates the necessity of better coordinating activities with the Länder and local authorities.

**Statement from the Dialogue on Sustainability**

“We welcome the update of the National Sustainable Development Strategy of 2012 into a strategy that describes the implementation of the 2030 Agenda in and by Germany and with partner countries. The GSDS can and should become a reference document for all stakeholders, be it parliament, government, implementing organisations, business, churches or civil society in all its diversity.”

*German Commission for Justice and Peace*

- **Leave no one behind**

In order to achieve sustainable development, no one may be left behind. This requirement pervades the entire 2030 Agenda as a rule with the words “leave no one behind”. In the next 15 years, therefore, even greater efforts than before will be required in order to reach all disadvantaged people and populations and to counteract rising inequality.

**2. Progress towards sustainable development is possible**

The existing challenges for our country are immense, but—with clever planning and concerted effort—they can be overcome. The leading role that is ascribed to Germany both nationally and internationally is an obligation and a motivation in equal measure. As a highly developed industrialised nation, Germany has the opportunity to prove that prosperity and consistent adherence to the guiding principle of sustainability can (and indeed must) go hand in hand in the long term.

The foundation for this was laid when the National Sustainable Development Strategy was first issued in 2002 and then regularly updated. With this new version, the Federal Government is now prepared to face the new challenges.

For in Germany too, we are in some respects still too far away from living, working and using our natural resources sustainably. The 2030 Agenda therefore results, for all nations as well as for Germany, in a task of transformation. Extensive, accelerated changes to the economy and society must be initiated and driven forward: changes to our way of living, working and consuming, to technologies, institutions and practices.
Chapter B. 
German Sustainable Development Strategy

The new version of the Sustainable Development Strategy, now the “German Sustainable Development Strategy” (GSDS), shows specifically how the guiding principle of sustainability is being implemented in the Federal Government’s work now and in the future. The Sustainable Development Strategy forms an essential framework for the national implementation of the 2030 Agenda. Its adoption in 2016 is intended to serve as a starting point for a further continuous reinforcement of the concept of sustainability in all policy areas. The Strategy will also be updated in the future – next in 2018 – with the involvement of social stakeholders (see Chapter C. IV.).

I. Aim and principles of the Strategy

“For us, the promotion of sustainable development is a fundamental goal and yardstick of government action.”

Coalition Agreement in the 18th legislative period

With this commitment in the Coalition Agreement, the coalition parties also committed to the guiding principle of sustainable development for the current legislative period.

1. Sustainability definition

The concept of sustainable development or sustainability as a political guiding principle goes back to the Report of the Brundtland Commission of 1987:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given;

- the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs.”

World Commission on Environment and Development (“Brundtland Commission”), 1987

The Sustainable Development Strategy follows this definition.

“Each generation is required to solve the challenges facing it and must not unload them onto future generations.”

First management rule of the Sustainable Development Strategy

For the Federal Government, following the guiding principle of sustainable development therefore means working towards its policies equally meeting the needs of today’s and future generations – in Germany and in all parts of the world – and allowing them lives of dignity.

This requires economically efficient, socially balanced and environmentally sustainable development, constrained only by the planetary boundaries of our Earth together with the objective of a life in dignity for everyone (a life without poverty and hunger; a life in which all people can fulfil their potential in dignity and equality, see key message of the 2030 Agenda).
The boundaries of our planet’s resilience, as identified by an international team of scientists in 2009, define a “safe operating space”, within which development, global justice, prosperity and a “good life” can be achieved and permanently secured. According to this research, humanity has already left the safe operating space with regard to the loss of biological diversity, the disruption of biogeochemical cycles of nitrogen and phosphorous, climate change and land-system change.

Committee of Enquiry on growth, prosperity, quality of life

“A balanced path of development for humanity in the 21st century requires a global increase in prosperity – also viewed globally as fairly distributed – while the planet’s environmental boundaries (as well as the social objectives and financial conditions for sustainable development) are observed. Despite increasing prosperity for the world’s population, the impact of human activities on the planet must – in consideration of the planetary boundaries – decrease overall.”

German Bundestag, closing report by the Committee of Enquiry on “Growth, prosperity, quality of life – How to achieve economic sustainability and social progress in a social market economy”, 3 May 2013, p. 500 (summary and outlook)

The value of the sustainability principle is thinking in various dimensions in order first to highlight their interdependencies and often conflicting targets. These can and must then be resolved by balancing the three sustainability dimensions of economy, environment and society in fulfilment of Germany’s international responsibility.

2. Development of the Strategy

The Federal Government presented the first National Sustainable Development Strategy at the UN World Summit on Sustainable Development in Johannesburg in 2002. It did this in response to a call to draw up national sustainable development strategies formulated at the UN Conference on Environment and Development in Rio de Janeiro in 1992. From 2004, the Sustainable Development Strategy was updated every four years in the form of “progress reports”.

New version: German Sustainable Development Strategy

The new opportunities and challenges for sustainability policy since the last progress report in 2012 have necessitated – and enabled – a radical revision of the Sustainable Development Strategy.

Statement from the Dialogue on Sustainability

“Business as usual will be far from enough to achieve even the previous objectives, let alone the more demanding goals set by the 2030 Agenda. Instead, this can succeed only if the new version of the Sustainable Development Strategy also significantly enhances governance, i.e. the architecture and processes of implementation, monitoring and reviewing.”

Sustainable Development Solutions Network (SDSN) Germany

A resolution of the State Secretaries’ Committee for Sustainable Development in September 2014 stipulated that the Sustainable Development Strategy would be used as an essential framework for the national implementation of the 2030 Agenda from 2016. It was therefore decided that all material aspects of the Sustainable Development Strategy would be updated to reflect the 2030 Agenda. The State Secretaries’ Committee also pointed the way at an early stage in terms of content: back in June 2014, it stipulated that the current Strategy should be made to focus more on measures and place greater emphasis on the international dimension of sustainability. The State Secretaries’ Committee also drew this conclusion from the statement on Germany’s sustainability policy by international experts (“Peer Review”).

Statement from the Dialogue on Sustainability

“German industry supports the Federal Government in its efforts to make the global 2030 Agenda for Sustainable Development the benchmark of German sustainability policy and to align its Sustainable Development Strategy structurally to the SDGs.”

Federation of German Industries

The Sustainable Development Strategy is therefore now being published in a new version – not as a completely new Strategy, but rather as a substantial update to the old Strategy. The former overwhelmingly national focus of the Strategy has been augmented with a more international perspective.

In order to formally express this and the more multi-tiered and multi-stakeholder approach, it has been renamed the “German” Sustainable Development Strategy.
Dialogue 2015/2016

From the start, the drafting of the Strategy was accompanied by a broad-based dialogue process, especially with interested members of the (expert) public. In this respect, the multi-stakeholder approach of the 2030 Agenda already determined the process of drawing up this Strategy.

The series of dialogue events started on 29 October 2015 in Berlin, followed by regional conferences in Dresden, Stuttgart, Bonn and Hamburg until February 2016. The Head of the Federal Chancellery, Peter Altmaier, opened the Berlin conference. The regional conferences were attended by Ministers and Undersecretaries of State of the Länder and Undersecretaries of State of the Federal Government. They, other representatives from politics and experts from science, business and society were involved as speakers, discussion participants and motivators.

The five events in total were attended by around 1,200 persons. During and after the events, around 750 oral and written contributions were made in the first phase.

In the second dialogue phase, there was a central, full-day consultation event in the Federal Chancellery with around 40 representatives of social stakeholders (associations, institutions) and approximately 100 participants. In the period up to the end of August, more than 200 statements, some of which extensive, were obtained from social institutions, organisations and citizens, which were evaluated by the Federal Chancellery and the relevant ministries.

Detailed information on the content of the events and the written statements (if the authors consented to their publication) can be found on-line at www.nationale-nachhaltigkeitsstrategie.de.

II. Architecture and functioning of the Strategy

1. Institutions

An internationally highly regarded sustainability management system was established as part of the Federal Government’s Sustainable Development Strategy for the first time since the original version in 2002.

This designates structures and procedures to guarantee that the guiding principle of sustainable development is tangibly applied in the practical work of the Federal Government.

The three most important bodies are the State Secretaries’ Committee on Sustainable Development, the Parliamentary Advisory Council on Sustainable Development and the Sustainable Development Council.

Over the course of the last 14 years, this sustainable development architecture has been ever further refined and stood the test of time. Nonetheless, the national implementation of the 2030 Agenda in particular necessitates changes and additions, which shall be outlined in the following paragraphs.
a) Leadership of the Federal Chancellery and responsibility of the ministries

Due to the great political importance of the sustainability principle and its policy-spanning approach, the German Sustainable Development Strategy is under the direct aegis of the Federal Chancellery. Aside from this, all ministries retain their primary responsibility for their own contributions to the implementation of the Sustainable Development Strategy and the 2030 Agenda in their respective policy areas. The Federal Government is taking the 2030 Agenda as an opportunity to increase its efforts for policy coherence (see Chapter B. II. 5.).

b) State Secretaries’ Committee on Sustainable Development

The State Secretaries’ Committee on Sustainable Development is the central body in charge of steering the Sustainable Development Strategy. As the highest-ranking government body for sustainable development, its task is to ensure that this guiding principle is tangibly applied to all policy areas. The State Secretaries’ Committee is chaired by the Head of the Federal Chancellery.

All ministries are represented on the Committee at Permanent Undersecretary of State level. The Committee provides impetus for the work of the Federal Government, works towards policy coherence between the ministries and also serves as a platform for high-level communication between the ministries regarding their sustainable development activities.

Work on the further development of the Strategy

The focus of the State Secretaries’ Committee’s work in its role as the central body in charge of steering the Sustainable Development Strategy was and is intensive monitoring of the further development of the Strategy.

Topic meetings

The Committee also dealt with a range of urgent topics on the basis of the usually two-year work programmes, consulting leading experts. In addition, representatives of the Parliamentary Advisory Council on Sustainable Development and the Sustainable Development Council were regularly invited to attend the Committee’s meetings.

In its public resolutions, it recorded the Federal Government’s position on the topic discussed, evaluated achievements so far, gave suggestions for future activities and initiated specific measures. In March 2015, for example, it set up the interdepartmental working group “Sustainable Urban Development from a National and International Perspective” in cooperation with the Association of German Cities and the German Association of Towns and Municipalities in order to promote the implementation of the goals of the 2030 Agenda at municipal level.

Topics of meetings of the Committee since 2012

- Sustainability in the European Union
- Natural resources – increasing resource efficiency/recycling management
- Education for sustainable development
- Sustainable corporate governance
- 2013 Peer Review of the Sustainable Development Strategy
- Post-2015 agenda for sustainable development
- Strengthening and enhancing sustainability targets and indicators
- Cooperation with Länder and local authorities to reduce the consumption of new land for development (land use)
- Sustainable urban development
- Sustainable consumption
- Sustainable action in business – opportunities and prospects
- Sustainable public finances – sound and intergenerationally equitable

In addition, one Undersecretary of State at each meeting reports on their ministry’s activities regarding sustainable development.

Flagship projects

Since the announcement to this effect in the 2012 progress report, the State Secretaries’ Committee on Sustainable Development has designated a “flagship project” of the Sustainable Development Strategy every year. This title is used to increase the visibility of particularly innovative and exemplary projects by the ministries that involve various stakeholders working together on complex sustainable development challenges. The projects honoured so far:
Flagship projects of the Sustainable Development Strategy


The strategy presented by the Federal Ministry of Transport and Digital Infrastructure and approved by the Federal Cabinet in June 2013 shows how the energy transition can be continuously and plannably implemented in transport in the form of a learning strategy. In expert dialogue, political, business and scientific stakeholders agreed on medium- and long-term prospects for sustainable mobility.

2013: “Competence Centre for Sustainable Procurement” (KNB)

The KNB, set up at the Procurement Agency of the Federal Ministry of the Interior, helps contracting authorities consider sustainability criteria in their procurement projects. It thus offers the approximately 30,000 contracting agencies of the Federal Government, Länder and municipalities information material and training and develops new approaches for anchoring the sustainability principle in the activities of contracting authorities, drawing on the assistance of an expert body set up for this purpose.


The Federal Ministry for Economic Cooperation and Development’s Charter for the Future was drawn up in a wide-ranging dialogue process with stakeholders from civil society, business, foundations, science, churches, Länder and local authorities. The Charter’s eight action areas describe major questions for the future and show the common priorities of the stakeholders’ work with regard to issues such as the projection of natural resources, decent employment and good governance.

2015: “Sustainability Standards Quality Check”

The initiative of the Federal Ministry for Economic Cooperation and Development is developing an IT-based evaluation and comparison tool for eco- and social labels in order to create transparency in the “jungle of quality marks” and give consumers practical assistance for purchasing decisions and thus promote sustainable consumption.

2016: “German Initiative on Sustainable Cocoa”

In this multi-stakeholder initiative, policy-makers and business stakeholders from the cocoa, chocolate and confectionery industry, the German retail grocery trade and civil society campaign together to promote sustainable cocoa production. The aim is to improve the lives of cocoa farmers and their families and conserve natural resources and biodiversity in cocoa-producing countries. The Federal Government is represented in the alliance by the Federal Ministry of Food and Agriculture and the Federal Ministry for Economic Cooperation and Development.

Preparation of meetings

The ongoing specialised preparation of the State Secretaries’ Committee for Sustainable Development at operational level continues to be performed by the established directors’ working group for sustainable development (UAL-AG). This comprises representatives from all ministries and, led by the Federal Chancellery, deals with all questions of sustainable development relevant to the ministries. The strategic and content-related work of the UAL-AG will be expanded in future also in line with its role as a central interface in the overall architecture of the strategy. An important function regarding the supervision of the development of sustainability indicators and goals is performed by an Interdepartmental Working Group (IMA) led since the beginning of the Strategy by the BMUB, which prepares specialised advice on questions regarding sustainability indicators, drawing on all ministries.

c) Parliamentary Advisory Council on Sustainable Development

Sustainability has been enshrined in the German Bundestag’s institutions since 2004: the Parliamentary Advisory Council on Sustainable Development monitors the Federal Government’s sustainability policy (at national, European and international level) in the Bundestag.

The Advisory Council has 17 ordinary and 17 deputy members. Currently, the CDU/CSU parliamentary group provides eight ordinary and eight deputy members, the SPD five ordinary and five deputy members, and BÜNDNIS 90/DIE GRÜNEN and DIE LINKE two ordinary and two deputy members. The Chairman is Andreas Jung, MP (CDU/CSU), the Deputy Chairman is Dr Lars Castellucci, MP (SPD).
PARLIAMENTARY ADVISORY COUNCIL ON SUSTAINABLE DEVELOPMENT

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The Parliamentary Advisory Council on Sustainable Development has brought sustainable development onto the parliamentary level. “Don’t live today at tomorrow’s expense” is the guiding principle of sustainability-oriented policy-making that takes responsibility for people living today as well as for future generations.”

Andreas Jung, MP, Chairman of the Parliamentary Advisory Council on Sustainable Development

The Advisory Council meets in the Bundestag’s session weeks in partly public, partly non-public meetings.

**Statements from the Dialogue on Sustainability**

“The Parliamentary Advisory Council on Sustainable Development should be enshrined in the Bundestag’s Rules of Procedure, its authority should be increased and it should be empowered to materially scrutinise the sustainability of all draft laws as a kind of ‘sustainability TÜV’.”

VENRO

It brings the issue of sustainability to the German Bundestag. Its tasks include preparing expert opinions and recommendations for discussions in Bundestag committees that cover aspects of sustainable development. It also submits recommendations (including discussion and position papers) to improve sustainability in budgetary and subsidy policy, in procurement or in urban development. On its initiative, plenary debates are held on sustainability issues, e.g. on the Advisory Council’s opinion regarding the Federal Statistical Office’s Indicator Report 2014 and the expectations for this Sustainable Development Strategy.

One of its calls therein was for an implementation of the SDGs as part of the Sustainable Development Strategy, because the latter already provides a functioning institutional framework. At the same time, it stressed the necessity firstly of resolving new targets relating to poverty/inequality, oceans, water and sustainable consumption. Secondly, the Strategy should “continue to allow political control of the targets and be clear and communicable.”

In addition, after multiple hearings the Advisory Council recommends – following an initiative of the Sustainable Development Council – more in-depth discussion of legal policy deliberations and proposals regarding the elevation of the sustainability principle to constitutional status.

The Advisory Council also networks with and consults other stakeholders for the promotion of sustainable development, e.g. with the Länder, other national parliaments and the institutions of the European Union.

**Statement from the Dialogue on Sustainability**

“The Bundestag should resolve to include the Parliamentary Advisory Council in its Rules of Procedure and to appoint it automatically together with the parliamentary committees. In addition, the Parliamentary Advisory Council’s work should be developed into material scrutiny of the Federal Government’s central strategies and of legislation. This requires the Parliamentary Advisory Council to be better staffed and funded.”

German Foundation for World Population

Another priority in the work of the Parliamentary Advisory Council on Sustainable Development is the evaluation of the Federal Government’s sustainability assessment (see B. II. 4.). For this purpose, it submits the result of its evaluation to the relevant leading committee in the form of an opinion, which this committee must in turn discuss and evaluate in writing.

The Parliamentary Advisory Council is not yet enshrined in the German Bundestag’s Rules of Procedure. Unlike the Bundestag’s specialist committees, it is currently re-appointed in each legislative period.

**d) Sustainable Development Council**

Since 2001, the Sustainable Development Council (SDC) has been a valuable advisory body supporting the Federal Government on all questions of sustainable development.

The members of the Council are appointed ad personam (and not as formal representatives of individual interests or associations) by the German Chancellor for three years; the last appointment took place on 28 October 2016. With their professional and personal backgrounds, the members stand for the economic, ecological and social aspects of sustainable development in their national and international dimension; however, they are free in their mandate. The Chairwoman of the 15-member Council is Marlehn Thieme, Member of the Council of the Evangelical Church in Germany (EKD) and Chairwoman of the ZDF Television Council. The Deputy Chairman is Olaf...
Tschimpke, President of the Nature And Biodiversity Conservation Union.

The Council is functionally independent. The Federal Government has entrusted it with the following tasks:

1. Developing contributions to the Sustainable Development Strategy,
2. Specifying concrete areas for action and projects to promote sustainable development,
3. Strengthening the public discussion of sustainability.

The Council is an important stakeholder in the public dialogue and facilitates coordination between society and politics.

**SUSTAINABLE DEVELOPMENT COUNCIL**

Prof. Dr. Alexander Bassen  
Professor of Business Economics at the University of Hamburg

Ulla Burchardt  
Former Member of the Bundestag

Kathrin Menges  
Chief Human Resources Officer, Chairwoman Sustainability Council Henkel

Alexander Müller  
Head of a global study conducted by the UN Environment Program

Katherina Reiche  
Former Member of the Bundestag, Managing Director of the German Association of Local Utilities (VKU)

Prof. Dr. Lucia A. Reisch  
Professor at Copenhagen Business School, visiting Professor at Zeppelin University Friedrichshafen

Dr. Werner Schnappauf  
Former Bavarian State Minister, Former CEO of the Federation of the German Industry (BDI); Bank of America M

Dr. Imme Scholz  
Deputy Director of the German Development Institute (DIE)

Prof. Dr. Ulrich Schraml  
Forest Research Institute of Baden-Württemberg, Freiburg im Breisgau

Prof. Dr. Wolfgang Schuster  
Chairman of Deutsche Telekom Stiftung, former Lord Mayor of the state capital of Stuttgart

Achim Steiner  
Former Executive Director of the United Nations Environment Programme (UNEP); Director of the Oxford Martin School

Marlene Thiemer  
Chairwoman of the Council, Member of the Evangelical Church in Germany, Chairwoman of the ZDF Television Council

Olaf Tschimpke  
Deputy Chairman of the Council, President of the German Nature and Biodiversity Conservation Union (NABU)

Prof. Dr. Hubert Weiger  
Chairman of Friends of the Earth Germany (Bund für Umwelt und Naturschutz Deutschland - BUND)

Heidemarie Wieczorek-Zeul  
Former Member of the Bundestag, former German Federal Minister for Economic Cooperation and Development

Prof. Dr. Günther Bachmann  
Secretary General

Victoria Diekkamp  
Deputy Secretary General
The Sustainable Development Council is supported in its work by the office financed by the Federal Chancellery led by the General Secretary Prof. Günther Bachmann.

In recent years, the Council has developed numerous valuable activities, of which a number of examples are as follows:

**The Sustainable Shopping Basket**

The publication “The Sustainable Shopping Basket”, which is available as a booklet and as an app, is designed to illustrate sustainable consumption alternatives and rules of thumb for specific shopping decisions and currently comprises 16 topics. Among other things, it provides information on food, travel and mobility, living and building, household and electronics, fashion and cosmetics. In addition, it includes assessments of labels and product markers and poses basic questions about sustainable consumption. The offering is continually updated.

**Workshop N**

Since 2010, the Sustainable Development Council has distinguished ideas and initiatives that point the way to a sustainable society with the logo “Workshop N” (in German: “Werkstatt N”). In this way, the Council is seeking to provide an overview of the best approaches to sustainable development. The process on the way to a sustainable society is emphasised by the term “Workshop”; the “N” stands for “Nachhaltigkeit”, the German word for sustainability. As of 2016, Workshop N has become part of “Project Sustainability” (in German: Projekt Nachhaltigkeit) und gathers #tatenfuer-morgen (deeds for tomorrow).

**German Sustainability Code**

The Sustainable Development Council developed the German Sustainability Code (GSC) in 2011 in dialogue with businesses, investors and civil society as a tool for the transparent reporting of enterprises’ sustainability performance. After the collection of initial practical experience, the GSC has since been reviewed, adjusted to changes in international standards and adopted in an updated version of 4 August 2014.

The objective of the GSC is to allow enterprises and organisations to report their sustainability activities on the basis of 20 criteria in the four areas of strategy, process management, environment and society. In their “declaration of conformity”, the enterprises report on their compliance with the criteria and explain any deviations. It is conveyed to the Sustainable Development Council and placed in a public database.

The GSC ties in with existing international reporting standards. The Sustainability Code is therefore also suitable for global companies. The European Commission highlighted the GSC on several occasions as a tool that meets the EU requirement to report non-financial information that will apply from 2017. The Federal Government supports the GSC as a voluntary tool for spreading the idea of sustainability and promoting sustainable business. It therefore invites all companies, and especially companies with federal investment, to consider applying the GSC and take the opportunities of sustainable business.

Together with the Bertelsmann Foundation and in dialogue with businesses, the Sustainable Development Council has issued GSC guidelines for small and medium-sized enterprises. A check list takes them through all the steps for compiling a declaration of conformity. In addition, the Sustainable Development Council is developing industry-specific enhancements to the GSC for the housing sector, universities, the food industry, waste management and city cleaning as well as for banking and other sectors.

So far, a total of 10 declarations of conformity have been received from companies with federal investment (Bundesdruckerei, Deutsche Bahn AG, Deutsche Telekom AG, Deutsche Flugsicherung, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Munich Airport, Forschungszentrum Jülich, High-Tech Gründerfonds, KfW, ÖPP Deutschland AG). Further companies are preparing theirs.

**Regional Hubs for Sustainability Strategies (RENNs)**

In line with parliamentary deliberation, EUR 2 million each was earmarked for the establishment of four RENNs over five years (2016 to 2020).

The objective is to network and expand sustainability activities at Federal, Länder and municipal levels. The funding is aimed at existing, primarily civil-society institutions that are already working on sustainability and will take on the additional task of networking.

The Sustainable Development Council was entrusted with selecting and supervising the RENNs. Each of the four RENNs (West, South, Central and North) works across different Länder, and all RENNs together cover all of Germany. The office of the Sustainable Development Council supports and coordinates the four RENNs.

The RENNs commenced their work in the fourth quarter of 2016: RENN West (Landesarbeitsgemeinschaft Agenda 21 NRW e.V.; six syndicate partners), South (Sustainability Bureau of the Baden-Württemberg...
The Sustainable Development Council’s cooperation on the further development of the Strategy

The international peer review of sustainability policy (see Chapter B. II. 1 b) assisted by the Council provided valuable pointers for the further development of the Strategy. The Federal Government will commission the Council to carry out another international peer review.


By commissioning the peer review of the National Sustainable Development Strategy in 2013, Germany implemented a requirement from the expanded EU Sustainable Development Strategy of 2006. The Federal Government subjected itself to an independent review and assessment of its engagement for sustainable development for the second time since 2009. The international expert team led by Professor Björn Stigson, the former President of the World Business Council for Sustainable Development, held extensive talks with representatives from civil society, business and science, with Länder, local authorities, the Parliamentary Advisory Council on Sustainable Development in the Bundestag and Federal Ministries. Ultimately, the group acknowledged the Federal Government’s sustainability measures with clear words:

“We are impressed by the progress made in the four years since we last visited Germany.”

The report includes 15 recommendations for how Germany can drive forward the implementation of the targets it has set itself for the promotion of sustainable development. For example, it makes specific proposals to strengthen the conditions for sustainability policy in the Federal Government, to strengthen the role of parliament, for the cooperation of the Federal Government and local authorities, the involvement of civil society or the German position on EU sustainability policy. Recommendations are also made for selected sustainability policy issues such as the energy transition, sustainable business and education for sustainable development.

The Council contributed to the deliberations on the further development of the Sustainable Development Strategy by publishing a statement under the title “Germany’s Sustainability Architecture and the SDGs” on 26 May 2015. The Council followed this up with another statement in January 2016. Among other things, the Council called for the structure of the German Sustainable Development Strategy to make the implementation of the global goals for sustainable development clearly recognisable. It proposed a moderate increase in the number of the Strategy’s indicators (from 38 to 43) and a partial replacement of existing indicators. Representatives of the Council also took part in the Federal Government’s events for the development of the Strategy. The Council made an initial assessment of the draft Strategy in a statement of 20 June 2016, in which it called for a bolder update to the Strategy.

2 Sustainability management

a) Management rules

The now 12 management rules of the German Sustainable Development Strategy comprise three basic rules, which are followed by requirements for specific prominent policy areas.

Management rules for sustainability

- Basic rules -

(1) Each generation is required to solve the challenges facing it and must not unload them onto future generations. It must also make provisions for foreseeable future problems.

(2) In order to achieve intergenerational equity, social cohesion, quality of life, and the acceptance of international responsibility and to implement human rights and maintain peaceful societies, economic performance, the protection of natural resources, and social responsibility are to be united so that developments will be permanently sustainable.

(3) The shared responsibility for sustainable development requires that economic, social and political stakeholders be appropriately involved in political decision-making processes.

- Rules of sustainability for specific action areas -

(4) Renewable natural goods (e.g. forests or fish populations) should, on a long-term basis, be used only within the bounds of their ability to regenerate.

Non-renewable natural goods (such as mineral raw materials or fossil fuels) should, on a long-term basis, be used only to the extent that their functions cannot be replaced by other materials or fuels.

The release of materials into the environment should, in the long run, not exceed the adaptability of the ecosystem – e.g. the climate, forests and oceans.
(5) Dangers and unjustifiable risks to human health should be avoided.

(6) Structural change triggered by technical developments and international competition should be shaped in a way that is economically successful as well as ecologically and socially sustainable. For this purpose, political fields should be integrated so that economic growth, high employment, social cohesion, respect, protection and the guarantee of human rights and environmental protection go hand in hand.

(7) Energy and natural resource consumption and the provision of transport services should be decoupled from economic growth. At the same time, we should aim for growth-related increases in demand for energy, resources and transport to be more than offset by efficiency gains. In this context, adding to the body of knowledge through R&D and disseminating it through education have a decisive role to play.

(8) Public authorities are obliged to take into account intergenerational equity. This requires compliance with the constitutional debt restrictions on the part of the Federal Government, Länder and local authorities. In a further step, the debt ratio should be continually reduced to a fair level from an intergenerational perspective.

(9) Sustainable agriculture needs to be productive and competitive while compatible with nature and the environment and must take into account the requirements of livestock farming in a way that is fair to the animals and provides consumer protection, particularly concerning health matters.

(10) In order to strengthen social cohesion and leave no one behind,
- poverty and social exclusion should be prevented to the greatest possible extent and inequality reduced,
- opportunities for participating in economic development should be open to all sections of society,
- necessary adaptations to demographic change should take place at an early stage at the political and economic level and in society, and
- everybody should take part in social and political life.

(11) All decisions must take the latest scientific findings and the necessary research into account. The necessary qualifications and competence should be enshrined in the education system in order to create “education for sustainable development”.

(12) Our actions in Germany must consider the burdens they create in other parts of the world. General international conditions should be shaped jointly in a manner which ensures that people in all countries can lead a life worthy of a human being and according to their ideas and in unison with their regional environment while at the same time profiting from economic developments. Environment and development form a unit. Sustainable global action is based on the 2030 Agenda for Sustainable Development of the United Nations. An integrated approach should link the fight against poverty and hunger with
- the respect of human rights,
- economic development,
- environmental protection, and
- responsible action by governments (good governance).

The management rules in the 2002 Strategy were the result of a long-term process involving both research projects and results of Committees of Enquiry of the German Bundestag. Since then, they have only been updated to a minor degree and only moderately adapted for the new version of the Strategy. In order to technically prepare for any further change in due time, the Federal Government will instruct the Sustainable Development Council to perform a review.

b) Indicators and indicator-related goals

As a controlling instrument, the Strategy also includes indicators and targets that together depict the status of sustainable development and form the basis of the management of the Strategy. The previously 38 and now 63 indicators with their associated targets allow an objective check of the status of development.

When updating the indicators and targets for the new version of the Sustainable Development Strategy, the Federal Government was guided among other things by the following principles:

• Greater international orientation of the Strategy, embracing the impetus of the 2030 Agenda;
• Reflecting political priorities for an ambitious implementation of the 2030 Agenda and enhancement of sustainability policy while the number of indicators and targets remains limited;
• Balance between desirable continuity of targets and indicators and meaningful enhancement;
• Preservation of controllability and communicability.

The new version of the Sustainable Development Strategy reformulates outdated objectives with
reference to the year 2030 and defines new targets in line with the 2030 Agenda for Sustainable Development. For every SDG, at least one indicator-backed political target is listed under II., which identifies relevant need for action in the area without describing it comprehensively. Instead, the indicators are like keys; they open up the topic area and reveal its relevance for the further development of German policy. They are linked to considerably more extensive and detailed indicator systems or data collections on the website of the Federal Statistical Office or data collections on the website of the Federal Statistical Office.

The analysis is performed by way of an independent report by the Federal Office of Statistics on the Strategy’s indicators and targets. The Federal Office of Statistics describes the status of development and evaluates the trend of target attainment. For this purpose, there is a symbol for each level of achievement.

The targets illustrated by indicators are not limited to ones that are achievable only through measures by the Federal Government or even politicians. Sustainable development is a shared task, many aspects of which require the long-term, joint engagement of all stakeholders – alongside the Federal Government, also the Länder, local authorities, business, science and civil society. Sustainable development also does not stop at national borders. Parts of the indicator set also reflect our international responsibility.

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The Strategy’s new indicator system

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
<th>Sustainability postulate</th>
<th>Indicators</th>
<th>Targets</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG 1. End poverty in all its forms everywhere</td>
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<tr>
<td>1.1.a</td>
<td>Poverty</td>
<td>Reducing poverty</td>
<td>Material deprivation</td>
<td>Keeping the proportion of people who are materially deprived significantly below the EU-28 level up to 2030.</td>
<td>🌡️</td>
</tr>
<tr>
<td>1.1.b</td>
<td>Severe material deprivation</td>
<td>Keeping the proportion of people suffering from severe material deprivation significantly below the EU-28 level up to 2030.</td>
<td>🌡️</td>
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<td>SDG 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</td>
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<tr>
<td>2.1.a</td>
<td>Farming</td>
<td>Environmentally sound production in our cultivated landscapes</td>
<td>Nitrogen surplus</td>
<td>Overall nitrogen surpluses for Germany to be reduced to 70 kilograms per hectare of utilised agricultural land in the annual average from 2028–2032.</td>
<td>🌡️</td>
</tr>
<tr>
<td>2.1.b</td>
<td>Organic farming</td>
<td>Share of organic farming on land used for agriculture to be increased to 20 percent in coming years</td>
<td>🌡️</td>
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<tr>
<td>SDG 3. Ensure healthy lives and promote well-being for all at all ages</td>
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<tr>
<td>3.1.a</td>
<td>Health and nutrition</td>
<td>Living healthy longer</td>
<td>Premature mortality (Cases of death per 100,000 residents under 70): women</td>
<td>To be reduced to 100 per 100,000 residents (women) by 2030</td>
<td>🌡️</td>
</tr>
<tr>
<td>No.</td>
<td>Indicator field</td>
<td>Sustainability postulate</td>
<td>Indicators</td>
<td>Targets</td>
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<tr>
<td>3.1.b</td>
<td>Premature mortality</td>
<td>(Cases of death per 100,000 residents under 70): men</td>
<td>To be reduced to 190 per 100,000 residents (men) by 2030</td>
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<tr>
<td>3.1.c</td>
<td>Smoking rate among young people</td>
<td>(12- to 17-year-olds)</td>
<td>To be reduced to percent by 2030</td>
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<tr>
<td>3.1.d</td>
<td>Smoking rate among adults</td>
<td>(15 years and older)</td>
<td>To be reduced to 1 percent by 2030</td>
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<tr>
<td>3.1.e</td>
<td>Obesity rate among young people</td>
<td>(11- to 17-year-olds)</td>
<td>Increase to be permanently halted</td>
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<tr>
<td>3.1.f</td>
<td>Obesity rate among adults</td>
<td>(18 years and older)</td>
<td>Increase to be permanently halted</td>
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<tr>
<td>3.2.a</td>
<td>Air pollution</td>
<td>Keeping the environment healthy</td>
<td>Emissions of air pollutants (index of national emissions of air pollutants SO$_2$, NO$_x$, NH$_3$, NMVOC and PM2.5)</td>
<td>Emissions of 2005 to be reduced to 55 percent (unweighted average of the five pollutants) by 2030</td>
<td></td>
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<tr>
<td>3.2.b</td>
<td>Share of the population with increased exposure to PM10 in Germany</td>
<td>WHO particulate matter benchmark of an annual average of 20 micrograms/cubic metre for PM10 to be achieved as widely as possible by 2030</td>
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</tbody>
</table>

**SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

| 4.1.a | Education and training | Continuously improving education and vocational training | Early school leavers (18- to 24-year-olds without a school leaving certificate) | To be reduced to less than 10 percent by 2020 |
| 4.1.b | | | 30- to 34-year-olds with a tertiary or post-secondary level of education | To be increased to 42 percent by 2020 |
| 4.2.a | Prospects for families | Improving the compatibility of work and family life | All-day care provision for children 0- to 2-year-olds | To be increased to 35 percent by 2030 |
| 4.2.b | | | All-day care provision for children 3- to 5-year-olds | To be increased to 60 percent by 2020 and 70 percent by 2030 |

**SDG 5. Achieve gender equality and empower all women and girls**

| 5.1.a | Equal opportunities | Promoting equal opportunities in society | Gender pay gap | To be reduced to 10 percent by 2020, maintained until 2030 |
| 5.1.b | | | Women in management positions in business | 30 percent women in supervisory boards of listed and fully co-determined companies by 2030. |
| 5.1.c | Strengthening the economic participation of women globally | Vocational qualification of women and girls through German development cooperation | To be successively increased by a third by 2030 compared to 2015 as the base year |

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<tr>
<th>No.</th>
<th>Indicator field</th>
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<tr>
<td>6.1.a</td>
<td>Water quality</td>
<td>Reducing the pollution of water with substances</td>
<td>Phosphorous in flowing waters</td>
<td>The benchmark values for specific types of water to be met or beaten at all monitoring points by 2030</td>
<td>☁️</td>
</tr>
<tr>
<td>6.1.b</td>
<td></td>
<td></td>
<td>Nitrate in groundwater – proportion of monitoring points in Germany at which the threshold of 50 mg/l for nitrate is exceeded</td>
<td>&quot;50 mg/l&quot; of nitrate in groundwater to be complied with by 2030</td>
<td>☁️</td>
</tr>
<tr>
<td>6.2</td>
<td>Clean water and sanitation</td>
<td>Better access to drinking water and sanitation worldwide, higher (safer) quality</td>
<td>Number of people gaining access to drinking water and sanitation through support from Germany</td>
<td>10 million people a year to gain access to water up to 2030</td>
<td>☀️</td>
</tr>
<tr>
<td>7.1.a</td>
<td>Resource conservation</td>
<td>Using resources economically and efficiently</td>
<td>Final energy productivity</td>
<td>Final energy productivity to be increased by 2.1 percent per year from 2008 to 2050</td>
<td>☁️</td>
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<tr>
<td>7.1.b</td>
<td></td>
<td></td>
<td>Primary energy consumption</td>
<td>To be reduced by 20 percent by 2020 and 50 percent by 2050 compared to 2008</td>
<td>☁️</td>
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<td>7.2.a</td>
<td>Renewable energy</td>
<td>Strengthening a sustainable energy supply</td>
<td>Share of renewable energy sources in gross final energy consumption</td>
<td>To be increased to 18 percent by 2020, to 30 percent by 2030 and 60 percent by 2050</td>
<td>☀️</td>
</tr>
<tr>
<td>7.2.b</td>
<td></td>
<td></td>
<td>Share of renewable energies in gross electricity consumption</td>
<td>To be increased to at least 35 percent by 2020, to at least 50 percent by 2030, to at least 65 percent by 2040 and to at least 80 percent by 2050</td>
<td>☀️</td>
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<tr>
<td>8.1</td>
<td>Resource conservation</td>
<td>Using resources economically and efficiently</td>
<td>Total raw material productivity: (GDP+imports)/raw material input (RMI)</td>
<td>Trend of 2000–2010 to be maintained until 2030</td>
<td>☀️</td>
</tr>
<tr>
<td>8.2.a</td>
<td>Government debt</td>
<td>Consolidating public finances – creating intergenerational equity</td>
<td>General government deficit</td>
<td>Government deficit less than 3 percent of GDP</td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.2.b</td>
<td></td>
<td></td>
<td>Structural deficit</td>
<td>Structurally balanced public spending, total national structural deficit of no more than 0.5 percent of GDP</td>
<td>To be maintained until 2030</td>
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<tr>
<td>8.2.c</td>
<td></td>
<td></td>
<td>Government debt</td>
<td>Ratio of government debt to GDP no more than 60 percent</td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.3</td>
<td>Provision for future economic stability</td>
<td>Creating favourable investment conditions – securing long-term prosperity</td>
<td>Gross fixed capital formation in relation to GDP</td>
<td>Appropriate development of the ratio</td>
<td>☁️</td>
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<td>8.4.</td>
<td>Economic output</td>
<td>Combining greater economic output with environmental and social responsibility</td>
<td>Gross domestic product per capita</td>
<td>Steady and appropriate economic growth</td>
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<tr>
<td>8.5.a</td>
<td>Employment</td>
<td>Boosting employment levels</td>
<td>Employment rate (total) 20- to 64-year-olds</td>
<td>To be increased to 78 percent by 2030</td>
<td>🌞</td>
</tr>
<tr>
<td>8.5.b</td>
<td>Employment</td>
<td></td>
<td>Employment rate (older people) (60- to 64-year-olds)</td>
<td>To be increased to 60 percent by 2030</td>
<td>🌞</td>
</tr>
<tr>
<td>8.6.</td>
<td>Global supply chains</td>
<td>Enabling decent work worldwide</td>
<td>Number of members of the Textile Partnership</td>
<td>To be significantly increased by 2030</td>
<td>-</td>
</tr>
</tbody>
</table>

**SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
<th>Sustainability postulate</th>
<th>Indicators</th>
<th>Targets</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>Innovation</td>
<td>Shaping the future with new solutions</td>
<td>Private and public spending on research and development</td>
<td>At least 3 percent of GDP by 2030</td>
<td>🌧️</td>
</tr>
</tbody>
</table>

**SDG 10. Reduce inequality within and among countries**

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
<th>Sustainability postulate</th>
<th>Indicators</th>
<th>Targets</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Equal educational opportunities</td>
<td>Educational success of foreigners in German schools</td>
<td>Foreign school graduates</td>
<td>Proportion of foreign school leavers with at least a Hauptschule certificate (lower secondary schooling) is to be increased, with their diploma rate to be raised to that of German school leavers by 2030</td>
<td>🌧️</td>
</tr>
<tr>
<td>10.2</td>
<td>Distributive justice</td>
<td>Preventing too-great inequality within Germany</td>
<td>Gini income coefficient after social transfers</td>
<td>Gini income coefficient after social transfers to be below the EU28 figure by 2030</td>
<td>✨</td>
</tr>
</tbody>
</table>

**SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable**

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
<th>Sustainability postulate</th>
<th>Indicators</th>
<th>Targets</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1.a</td>
<td>Land use</td>
<td>Sustainable land use</td>
<td>Built-up area and transport infrastructure expansion</td>
<td>To be reduced to 30 ha minus x per day by 2030</td>
<td>🌞</td>
</tr>
<tr>
<td>11.1.b</td>
<td></td>
<td></td>
<td>Loss of open space in m²/inhabitant</td>
<td>Reduction in the loss of open space per inhabitant</td>
<td>🌞</td>
</tr>
<tr>
<td>11.1.c</td>
<td></td>
<td></td>
<td>Inhabitants by area occupied by built-up areas and transport infrastructure (settlement density)</td>
<td>No reduction in settlement density</td>
<td>🌧️</td>
</tr>
<tr>
<td>11.2.a</td>
<td>Mobility</td>
<td>Guaranteeing mobility – protecting the environment</td>
<td>Final energy consumption in freight transport</td>
<td>Reduced by 15 to 20 percent by 2030</td>
<td>🌧️</td>
</tr>
<tr>
<td>11.2.b</td>
<td></td>
<td></td>
<td>Final energy consumption in passenger transport</td>
<td>Reduced by 15 to 20 percent by 2030</td>
<td>🌧️</td>
</tr>
<tr>
<td>11.2.c</td>
<td></td>
<td></td>
<td>Population-weighted average travel time with public transport from each stop to the next medium-sized/large city</td>
<td>Reduction</td>
<td>-</td>
</tr>
<tr>
<td>11.3</td>
<td>Housing</td>
<td>Affordable housing for all</td>
<td>Housing cost overload</td>
<td>Proportion of the population to decline to 13 percent by 2030</td>
<td>🌧️</td>
</tr>
<tr>
<td>No.</td>
<td>Indicator field</td>
<td>Sustainability postulate</td>
<td>Indicators</td>
<td>Targets</td>
<td>Status</td>
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</tr>
<tr>
<td>12.1</td>
<td>Sustainable consumption</td>
<td>Making consumption environmentally and socially compatible</td>
<td>Market share of goods certified by independently verified sustainability labelling schemes (future perspective: market share of products and services with trustworthy and ambitious eco- and social labels)</td>
<td>Increase to 34 percent by 2030</td>
<td>-</td>
</tr>
<tr>
<td>12.1</td>
<td>Sustainable production</td>
<td></td>
<td>Energy consumption and CO₂ emissions from consumption</td>
<td>Continuous reduction of energy consumption</td>
<td>-</td>
</tr>
<tr>
<td>12.2</td>
<td>Increasing the proportion of sustainable production</td>
<td></td>
<td>EMAS eco-management</td>
<td>5,000 organisation locations by 2030</td>
<td>-</td>
</tr>
<tr>
<td>13.1.a</td>
<td>Climate protection</td>
<td>Reducing greenhouse gases</td>
<td>Greenhouse gas emissions</td>
<td>To be reduced by at least 40 percent by 2020, by at least 55 percent by 2030, by at least 70 percent by 2040 and by 80 percent to 95 percent by 2050, in each case compared to 1990</td>
<td>-</td>
</tr>
<tr>
<td>13.1.b</td>
<td>Germany’s contribution to international climate protection funding</td>
<td></td>
<td>International climate protection funding for the reduction of greenhouse gases and adaptation to climate change</td>
<td>Financing to be doubled by 2020 compared to 2014</td>
<td>-</td>
</tr>
<tr>
<td>14.1.aa</td>
<td>Protecting the oceans</td>
<td>Protection and sustainable use of oceans and marine resources</td>
<td>Nutrient inputs in coastal waters and marine waters – nitrogen input via the inflows into the Baltic</td>
<td>Adherence to the good conditions according to the Ordinance on the Protection of Surface Waters (annual averages for total nitrogen in rivers flowing into the Baltic shall not exceed 2.6 milligrams per litre).</td>
<td>-</td>
</tr>
<tr>
<td>14.1.ab</td>
<td></td>
<td></td>
<td>Nutrient inputs in coastal waters and marine waters – nitrogen input via the inflows into the North Sea</td>
<td>Adherence to the good conditions according to the Ordinance on the Protection of Surface Waters (annual averages for total nitrogen in rivers flowing into the North Sea shall not exceed 2.8 milligrams per litre).</td>
<td>-</td>
</tr>
<tr>
<td>14.1.b</td>
<td></td>
<td></td>
<td>Share of sustainably fished fish stocks in the North Sea and Baltic Sea</td>
<td>Fish stocks used for economic purposes to be sustainably managed in accordance with the Maximum Sustainable Yield approach by 2020</td>
<td>-</td>
</tr>
<tr>
<td>15.1</td>
<td>Species diversity</td>
<td>Conserving species – protecting habitats</td>
<td>Species diversity and landscape quality</td>
<td>To be increased to the index value of 100 by 2030</td>
<td>-</td>
</tr>
<tr>
<td>15.2</td>
<td>Ecosystems</td>
<td>Protecting ecosystems, conserving ecosystem services and preserving habitats</td>
<td>Eutrophication of ecosystems</td>
<td>To be reduced by 35 percent by 2030 compared to 2005</td>
<td>-</td>
</tr>
</tbody>
</table>
### SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
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<th>Targets</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.3.</td>
<td>Forests</td>
<td>Preventing deforestation</td>
<td>Payments to developing countries for the verified preservation or restoration of forests under the REDD+ rulebook</td>
<td>To be increased by 2030</td>
<td></td>
</tr>
</tbody>
</table>

| SDG 17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development

<table>
<thead>
<tr>
<th>17.1.</th>
<th>Development cooperation</th>
<th>Supporting sustainable development</th>
<th>Share of expenditure for official development assistance in gross national income</th>
<th>To be increased to 0.7 percent of gross national income by 2030</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17.2.</td>
<td>Knowledge transfer, especially in technical areas</td>
<td>Sharing knowledge internationally</td>
<td>Number of students and researchers from developing countries and LDCs per year (semester)</td>
<td>To be increased by 10 percent by 2020, then stabilised</td>
<td></td>
</tr>
<tr>
<td>17.3.</td>
<td>Opening markets</td>
<td>Improving trade opportunities for developing countries</td>
<td>Share of imports from LDCs in total imports to Germany</td>
<td>To be increased by 100 percent by 2030 (base value: 2014)</td>
<td></td>
</tr>
</tbody>
</table>

Data broken down by gender, age and disability, for example, can be useful for identifying existing inequality and ensuring that no one is left behind (principle of the 2030 Agenda). In this Strategy, this is implemented as far as is reasonable. See Chapter C. III. for the planned enhancement of the indicators.

c) Monitoring

Every four years since 2004, the Strategy has been updated and the development described in detail in progress reports. Every two years, the status of the indicators is analysed in reports by the Federal Statistical Office.

This is an expression of the Federal Government’s understanding that sustainability-oriented policy-making is an ongoing task that requires a long-term and transparent approach.

d) Sustainability impact assessment

aa) Regulatory impact assessment

Since 2009, there has been an obligation to subject draft laws and regulations to a sustainability impact assessment, which is enshrined in the
Joint Rules of Procedure of the Federal Ministries (GGO). As the GGO comes under internal procedural law, its validity is not restricted to a particular legislative period.

“It must be shown whether the impact of the draft legislation is consistent with sustainable development, and in particular what will be its long-term impact.”

Art. 44 (1), fourth sentence of the GGO

It enables the Federal Government to scrutinise the consequences of draft legislation in terms of sustainable development. The sustainability impact assessment for laws and regulations has become an established part of legislative practice.

Impact

The sustainability impact assessment contributes to improved legislation, as it makes it possible to recognise, at an early stage, undesirable side-effects of legal provisions, either in the long term or across policy areas. It also allows a direct link to be created between the Strategy and law-making.

The sustainability impact assessment is conducted by the ministry responsible for the legislative project in consultation with the other ministries concerned. The assessment refers to the management rules, indicators and goals of the National Sustainable Development Strategy. Recommendations for this are contained in a guide published by the Federal Ministry of the Interior (BMI) with an appropriate tool. The BMI is currently preparing a computer-assisted assessment cascade intended to improve the sustainability impact assessment by the ministries and the evaluation of the assessment by the Parliamentary Advisory Council.

Recommended procedure

1. Cursory examination of the draft at an early stage to assess whether there will be any impact on the management rules, indicators or goals of the Sustainable Development Strategy.
2. If a relevant impact is identified: more rigorous scrutiny of the areas concerned, with particular attention paid to the long-term prospects.

bb) Subsidy assessment

In order to increase transparency, justification pressure and management possibilities with regard to subsidies, the Federal Government follows subsidy-policy guidelines that bind the policy-makers to the measures they are responsible for. Ahead of the 25th Subsidy Report, the Federal Cabinet adopted the subsidy-policy guidelines on 28 January 2015 and augmented them with a sustainability impact assessment and the regular evaluation of subsidies. With the sustainability impact assessment, the Federal Government underscores its intention to embed the principle of sustainability deeper into subsidy policy. The sustainability impact assessment is guided by the targets of the national Sustainable Development Strategy and focuses on the long-term economic, ecological and social impact.

e) Federal Government’s commitment and leading role: implementing sustainability tangibly in its own area

aa) Programme of sustainability measures

The guiding principle of sustainable development applies not least to administrative action – e.g. when it comes down to climate protection, mobility or the compatibility of work and family life. In addition, the public sector, by virtue of its budget for procurement, has a significant influence on the demand for and development of sustainable products and services.

The Federal Government has therefore adopted the “Programme of sustainability measures – translating sustainability into concrete administrative actions”. The first programme of measures from December 2010 was reviewed in 2014 and approved in its updated form by the State Secretaries’ Committee on Sustainable Development in March 2015. New inclusions were further steps towards climate-neutral federal administration, the development of sustainability criteria for cafeteria services and pilot surveys with regard to the cultural diversification of the administration.

The programme of measures applies to all authorities and institutions of the immediate federal administration. A monitoring report is compiled and published as of 31 December of each year. The last monitoring report was approved in May 2016 by the State Secretaries’ Committee on Sustainable Development and is available at www.nationale-nachhaltigkeitsstrategie.de.
Translating sustainability into concrete administrative actions – programme of measures on sustainability of 30 March 2015

1. Further ensuring that federal properties comply with the specifications of the sustainable construction rating system
2. Climate protection measures as a contribution on the road towards climate-neutral federal administration
3. Increasing the use of renewable energies (heating) in federal buildings
4. Preparing a timetable for the energy-efficient modernisation of federal properties
5. Aligning the use and operation of federal properties with energy/environmental management systems
6. Further aligning public procurement with the guiding principle of sustainable development
7. Adoption of sustainability criteria for cafeteria services
8. Measures to further reduce and offset transport and location-specific CO\(_2\) emissions (especially with regard to journeys to and from work and business trips)
9. Greater consideration of sustainability criteria when organising events for the Federal Ministries and subordinate authorities
10. Measures to improve compatibility for employees with families and care duties and for the equal participation of women and men in management positions
11. Cultural diversification of the administration – pilot immigration background survey
12. Reviewing the programme after four years.

bb) Sustainable procurement

The reform of public procurement law in 2016 aims to improve opportunities to include sustainability criteria in public procurement. In addition, it lays the foundation for recording public procurement in the form of electronic data, on which basis the total volume will be estimable for the first time. In a next step, the collection and analysis of data on alignment to specific sustainability aspects will also be made possible.

2016 public procurement law reform

The 2016 public procurement law reform, which transposes the three new EU procurement directives into German law, allows contracting agencies to make greater use of public procurement to support strategic goals, such as social standards, environmental protection and innovation.

The new Part 4 of the Act against Restraints of Competition enshrines opportunities to include sustainability criteria in the procurement process in law for the first time: In the future, such criteria can be considered in the performance specifications, in the definition of award criteria and as conditions of implementation. Although a factual relationship is still required with the procured service, the sustainability criteria no longer have to directly affect the material properties of the procured item. This considerably expands the contracting authorities’ scope for specifying sustainability criteria.

The Act is complemented by the “Regulation for the Modernisation of Public Procurement Law”, which entered into force together with the Act, and further specifies the opportunities to include sustainability criteria created in the Act, especially with regard to the design of award criteria.

Sharing good practice

Even before the reform, it was possible to incorporate sustainability aspects in many cases. Since 2010, the Federal Government, Länder and local authorities have cooperated in the Alliance for Sustainable Procurement (AfNB) presided over by the Federal Government. The Alliance is intended to help significantly increase the proportion of sustainable products and services in public procurement. It serves the systematic pooling of experience between the major contracting authorities in the field of sustainability and shall contribute to the greater use of unified national and international sustainability standards at all three levels – Federal Government, Länder and local authorities. The Alliance considers particularly relevant procurement issues, such as e-mobility, resource efficiency, sustainable building and the compilation of statistics, in expert groups assembled every year.

In 2012, the Competence Centre for Sustainable Procurement (KNB) (see chapter B. II. 1. b) – Flagship projects) was set up to provide contracting authorities with local assistance and advice. The KNB provides information on all sustainable procurement issues centrally on the web-based platform www.nachhaltige-beschaffung.info. The online information platform was activated by the German Chancellor on 13 May 2013 as part of the Sustainable Development Council’s annual conference. The “Sustainability Compass” (http://www.kompass-nachhaltigkeit.de/) provides contracting authorities in the Federal Government, Länder and local authorities with another tangible tool for integrating sustainability
criteria into the procurement process. The website www.beschaffung-info.de also provides information about opportunities for green public procurement. Sustainable public procurement is a priority of the programme of sustainability measures. In light of their procurement volume, the master agreements of the Federal Government’s electronic order platform, the Kaufhaus des Bundes (KdB), may exert particular leverage for sustainable public procurement. In the future, the creation of new and the renewal of existing master agreements shall comply with appropriate sustainability criteria and guidelines.

3. **Sustainability communication**

Since 2014, sustainability communication by the Federal Press Office has been stepped up. The communication concept included the publication of a booklet on the Strategy (Milestones of Sustainability Policy), a regular newsletter, and in particular the dialogue conferences at national and regional level between October 2015 and February 2016. The objective of the past and future activities (including the publication of a print version of this report in German and English, the publication of a summary translated into all the official languages of the United Nations, the continuation of the sustainability newsletter, the continuous offer of talks with social stakeholders) is to further raise awareness of the Federal Government’s sustainability activities, especially the Strategy, among political stakeholders and in the general public and to increase society’s appreciation of the importance of sustainable development. A continuous, open and transparent exchange of information is simultaneously an essential condition for the targeted intensification of cooperation between the government and social stakeholders with regard to the multi-stakeholder approach of the 2030 Agenda.

4. **Priorities for the enhancement of the sustainability architecture/process**

a) **Strengthening policy coherence**

A central challenge of the 2030 Agenda is to enhance policy coherence for sustainable development (SDG 17.14). This requires continuous, long-term management.

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**Statement from the Dialogue on Sustainability**

“In light of the large number of political processes, ... a consolidated approach on the part of the Federal Government and more coherence in sustainability policy are required. It is right that these efforts are coordinated from the Federal Chancellery.”

Federation of German Industries

**Statement from the Dialogue on Sustainability**

“Measures such as the creation of a Minister of State for Sustainability in the Chancellery or the appointment of Sustainability Officers at Director-General level in all ministries are required in order to achieve more commitment within the Federal Government. In addition, sufficient human and financial resources must be provided at all levels (Federal Government, Länder, local authorities, civil society, specialist bodies such as statistical offices, etc.). Capacity in the Federal Statistical Office must also be increased. In this context, there must also be greater and transparent involvement of civil society, e.g. through structured dialogue processes.”

German League for Nature, Animal and Environment Protection

Calls for improvements in this area – largely in connection with recognition of the achievements so far – were a priority of many statements in the dialogue on the further development of the Strategy. The main focus was on the following points:

- Increasing capacity in the Federal Chancellery, the Federal Ministries and the Federal Statistical Office, potentially appointing a Minister of State for Sustainable Development in the Federal Chancellery
- Supporting the work of the State Secretaries’ Committee for Sustainable Development
- Appointing Sustainability Officers in all ministries

**Statement from the Dialogue on Sustainability**

“Through the appointment of Sustainability Officers equipped with sufficient human resources and budgets in the ministries – preferably at Director-General level – and annual reporting and core-time debate in the German Bundestag, it can be ensured that activities in all policy areas are aligned to the principles of sustainability and the 2030 Agenda.”

VENRO, 29 June 2016

“We appeal to the Federal Government to provide sufficient human and financial resources at all levels (Fed-
eral Government, Länder, local authorities, civil society, specialist bodies such as statistical offices, and especially in the Federal Statistical Office) for the implementation of the 2030 Agenda.”

VENRO et al.

The implementation of the Agenda is a task for the entire Federal Government. A balance is required between the requirement for central priorities and processes on the one hand (under the responsibility of the Federal Chancellery) and the essential engagement of the specialist ministries for the implementation of the 2030 Agenda in their respective policy areas on the other. A duplication of tools should be avoided.

This new version of the Strategy is a first step towards stronger management with a wider thematic scope. However, not all SDG targets can be carried over to the management concept of the revised Sustainable Development Strategy (Chapter C).

In order to further support the work of the State Secretaries’ Committee, topics for the regular meetings will be set in future with greater regard for existing challenges in the implementation of the SDGs and the Sustainable Development Strategy.

In addition, the Federal Government – in implementation of the 2013 Coalition Agreement on “governing effectively and far-sightedly” (chap. 5.2, p. 107) – will establish an interdepartmental working group on the issue of “strategic foresight” in order to better advise the State Secretaries’ Committee on the opportunities and risks of medium- and long-term developments.

New: Coordinators for sustainable development

In the dialogue, many stakeholders called for the appointment of ministry officials for sustainable development.

Demands by the Parliamentary Advisory Council (PBnE)

“The Federal Government recognises quite correctly in the draft that the improvement of policy coherence at institutional level, too, is a central challenge of the 2030 Agenda. Reforms in the institutional framework of the sustainability architecture are therefore desirable, but not yet clearly identifiable in the draft. ... Sustainability also requires high status within the ministries. One of the PBnE’s arguments is that Sustainability Officers at Director-General or Director level should be appointed in all Federal Ministries. It must be ensured above all that their work is coordinated. The

PBnE continues to support the efforts to reinforce the structures for implementing the German Sustainable Development Strategy and the 2030 Agenda in the Federal Government, especially the processes of developing and measuring indicators, including with more personnel. “Business as usual” is not enough for an ambitious implementation of the 2030 Agenda. This must also be reflected in capacity and structures.”

Discussion paper of 26 August 2016

The Federal Government is incorporating this idea.

To increase the importance of sustainability-policy issues and their coherent treatment in the individual ministries, the ministries should appoint a single central contact person (ideally at Director-General level) for issues relating to sustainable development by the end of the legislative period:

Ministry coordinator for sustainable development/envisaged tasks

- Is the central contact person for issues relating to sustainable development;
- is involved at interdepartmental level in the implementation of the German Sustainable Development Strategy and the 2030 Agenda in the policy of their ministry;
- is involved at interdepartmental level in promoting the taking into account of sustainability aspects in the legislative and regulatory process (sustainability impact assessment according to Art. 44 par. 1, fourth sentence of the GGO) and in ministry strategies.

b) Greater involvement of social stakeholders

The comprehensive, coherent implementation of the SDGs depends on a constant overview of measures in all policy areas and by all stakeholders contributing to the implementation. In future, the latter are to be more involved in the work of the Federal Government.

Many stakeholders from civil society, business and science contributed to the successful drafting of the 2030 Agenda with their valuable, constructive work and will play an important role in its implementation. The views of young people will also be consulted more often in future, e.g. by inviting appropriate representatives to talks. Moreover, the specific perspective of artists and cultural institutions, as well as innovative ap-
proaches from the creative sector, will be consid-
ered more closely in order to tap into the potent-
tial here for sustainable development issues.

A new Global Partnership and the multi-stake-
holder approach this entails demands new forms
of cooperation between these stakeholders and
the people politically responsible for the imple-
mentation of the Agenda (see also III. – Joint ef-
fort for sustainable development).

The Federal Government will establish a regular
dialogue format with social stakeholders (work-
ing title “Sustainability Forum”) based on the
Federal Chancellery’s former rounds of consulta-
tion every four years, in which the Federal Gov-
ernment and individual ministries can present
the progress of the implementation of the 2030
Agenda and its work programme, etc. For their
part, the social organisations represented can re-
port on the steps they have taken to implement
the 2030 Agenda and comment on the progress
of implementation by the Federal Government.

In particular, this forum will link up with the re-
results and strategies of other, more specific ways
for civil society, business and science to partici-
pate in the implementation of the 2030 Agenda
as part of the Sustainable Development Strategy:

- Representatives of social groups will be sys-
  tematically and transparently involved in pre-
  paring and following up the meetings of the
  State Secretaries’ Committee on specific is-
  sues. For this purpose, in addition to the coop-
  eration of the SDC, a group of society repre-
  sentatives matched to the respective topics of
  the State Secretaries’ Committee’s meetings
  will be involved in the Committee’s prepara-
  tory work in an advisory capacity.

- The ministries will regularly present their re-
  sults and objectives to the State Secretaries’
  Committee and explain to the PBnE how they
  are contributing to the implementation of the
  2030 Agenda and all SDGs as a whole.

- The dialogue forum hosted regularly by the
  BMUB and the BMZ continues to serve com-
  munication about the international aspects of
  implementing the 2030 Agenda, especially at
  the level of the United Nations.

- The Federal Government offers science a plat-
  form on which the scientific support for the
  implementation of the SDGs will be pooled.
  The platform’s work will be systematically
  linked to the further dialogue and implementa-
  tion processes for the 2030 Agenda (see B
  III.2).

- Communication with social groups is supple-
  mented by the Sustainable Development Coun-
  cil’s annual conference, the conference on the
  German Sustainability Award and other confer-
  ence formats.

III. Joint effort for sustaina-
ble development

1. Significance of Länder and local au-
thorities for sustainable develop-
ment

The Länder and local authorities play a crucial
role in the implementation of the German sus-
tainability targets and the 2030 Agenda. In Ger-
many’s federal structure, the powers to enact
and enforce legislation on important areas of sus-
tainable development lie with them. By virtue of
their proximity to the public, businesses and var-
ied local initiatives, they can targetedly support
sustainable development in various areas of life
according to local conditions. The Bundesrat al-
ready highlighted the significance of the goals for
the Länder in early 2015, before the 2030 Agenda
was adopted, and argued for better communica-
tion between the Federal Government and the
Länder for the purposes of structural dialogue.
Close cooperation is also practical for – while pre-
serving the respective political priorities – achiev-
ing the highest possible compatibility of the indi-
cator systems of the Federal Government and the
Länder regarding sustainable development, as
emphasised by the Länder in their contribution
(Chapter D III.).

a) Pooling of experience between the
Federal Government and the Länder

The Federal-Länder Experience Pool is a format
that offers room for regular communication on
current issues of sustainable development at Fed-
eral and Länder level. This established coopera-
tion, supported by the Länder and chaired by the
Federal Chancellery and the Land chairing the
Minister President Conference, will continue.
In 2015/2016, the work of the Federal-Länder Experience Pool focused primarily on the international negotiations of the 2030 Agenda and its implementation at national level. In light of the overarching, cross-cutting relevance of sustainable development, the Federal Government has proposed the establishment of a Federal-Länder Association for Sustainable Development as part of the Conference of the Heads of the State and Senate Chancelleries of the Länder (CdS) and the Federal Chancellery. In addition, the Federal Government will argue for an annual consultation regarding sustainable development between the Federal Government and the Länder in talks between the Head of the Federal Chancellery and the CdS of the Länder.

b) Sustainable development strategies of the Länder

Eleven Länder have already drawn up or are currently working on their own sustainable development strategies (Brandenburg, Baden-Württemberg, Bavaria, Hesse, Rhineland-Palatinate, Lower Saxony, North Rhine-Westphalia, Saarland, Saxony, Saxony-Anhalt, Thuringia; as of September 2016). The short Länder profiles on the Federal Government’s website (www.nationale-nachhaltigkeitsstrategie.de) provide an overview of the Länder sustainability activities.

The configuration of the sustainability processes, tools and content differs greatly among the Länder. The joint implementation of the 2030 Agenda, which spans all policy areas, and of the National Sustainable Development Strategy requires tools for the necessary policy coherence. The 2030 Agenda highlights the role of national sustainable development strategies here. The Federal Government would therefore welcome it if all Länder were to develop sustainable development strategies and align them more closely to the National Sustainable Development Strategy. This is also why the Federal Government intensively involved the Länder in the creation of this Strategy in response to the Bundesrat’s desire for structured dialogue between the Federal Government and the Länder. At the same time, the Länder should be able to set their own priorities in the interests of federalism.

c) Local authorities

The Federal Government shares the view of the municipal umbrella organisations (Chapter D IV.) that local authorities are essential stakeholders and a driving force behind the achievement of the 2030 Agenda. The Federal Government is therefore arguing that a contribution to the implementation of the 2030 Agenda and the achievement of the SDGs should be made at municipal level. It is helping local authorities to formulate municipal sustainable development strategies, switch their procurement to sustainably produced goods and initiate municipal partnerships as per Goal 17.

So far, sustainability communication with local authorities has occurred largely at the level of the Länder. To implement the targets for sustainable development and the National Sustainable Development Strategy, an interdepartmental working group “Sustainable Urban Development from a National and International Perspective” (IMA Stadt) was set up in 2015 under the aegis of the BMUB following a resolution by the State Secretaries’ Committee for Sustainable Development of March 2015. In cooperation with and with active assistance from representatives of the Association of German Cities, the German Association of Towns and Municipalities and the Association of German Counties, IMA Stadt is intended to create a basis of information and to pool and connect the work of the ministries. Other bodies, such as the Sustainable Development Council (SDC), and scientific and civil-society stakeholders are also involved.

A central tool for supporting global partnerships at Länder level is the Federal-Länder Pilot Programme, which promotes the engagement of German Länder with development policy and integrates it with the development-policy activities of the Federal Government. On behalf of the BMZ, Engagement Global with its Service Agency Communities in One World advises local authorities in terms of development policy on the implementation of the 2030 Agenda and the development of municipal sustainable development strategies. This offer is currently being conducted in NRW with 16 model local authorities. In consultation with the respective Länder ministries, it
will also be implemented in Thuringia, Rhineland-Palatinate, Schleswig Holstein and in the Rhine-Neckar Metropolitan Region from mid-2016. All support programmes include strong incentives to involve stakeholders from business, civil society and other municipal institutions.

Initiatives of the Sustainable Development Council

More than 30 Lord Mayors now discuss their sustainability initiatives as part of the Sustainable Development Council’s Lord Mayor Initiative. In their “Strategic cornerstones for sustainable development in municipalities” published in 2015, they emphasise that sustainable development strategies at all levels must be highly coherent and compatible. They therefore also take account of the 2030 Agenda, the Federal Government’s German Sustainable Development Strategy and the sustainable development strategies of the Länder in their sustainability policies. In the future, the Lord Mayors want to network more effectively on the global stage and collectively represent their positions and interests in political processes at an international level. International cooperation projects and partnerships are afforded a significant role here.

A new project by the Sustainable Development Council is intended to strengthen the connection between the Federal Government, Länder and local authorities (see B. II d). The plan is to establish regional hubs (RENNs). Over a period of five years, they are to link the sustainable development initiatives of the Federal Government, Länder and local authorities (nationally).

2. Social stakeholders

Organised civil society, with its associations, has made a material contribution to embedding the principle of sustainability into society, politics and business since the very beginning of the sustainability movement. Its contributions were extremely helpful in the process of negotiating the 2030 Agenda.

Civil society also plays a vital role in the implementation of global and national goals for sustainable development. With its knowledge, its engagement, its networks and its resources, it is an indispensable partner in the new Global Partnership.

The success of the 2030 Agenda is barely conceivable without the committed and significant contributions of civil society. A wholesale transition to sustainable development needs everyone to be on board. Implementation begins with the everyday decisions of each individual. While policy-makers must provide the right conditions, everyone is individually responsible for contributing to sustainable development with their personal decisions within the given framework.

Business

As central stakeholders, businesses will play a key role in the achievement of the SDGs. The technological progress associated with economic development provides solutions to social and ecological problems.

Voices from the dialogue conferences

The participants in the dialogue on the further development of the Strategy (see Chapter B. VI.) universally called for a greater role of the state in the implementation of the 2030 Agenda for Sustainable Development. There were demands for the further internalisation of external costs, responsibility in the face of long-term risks, the consistent observance of the polluter pays principle and the precautionary principle, and standards that are appropriate, encourage innovation and apply equally to all market participants (“level playing field”).

Entrepreneurial freedom and market competition are not only engines of economic success but also – along with social partnership and responsibility – provide important stimulus for sustainability. The assumption of corporate social responsibility (CSR) can drive innovation and contribute to a social and ecological form of globalisation.

Statement from the Dialogue on Sustainability

“The planetary boundaries are currently also setting limits on growth. In Laudato Si’, Pope Francis calls for the “sustainable development of new forms of growth.” He calls for reasonable limits to the “insatiable and irresponsible growth produced over many decades” and “even retracing our steps before it is too late” (Laudato Si’, no. 193). Commissariat of German Bishops

There are already corresponding activities that support corporate responsibility. At international level, for example, these include the UN Guiding Principles on Business and Human Rights and initiatives such as the UN Global Compact. At national level, there are initiatives such as econ-
sense, Chemie, the German Initiative on Sustainable Cocoa, the Forum for Sustainable Palm Oil and the Partnership for Sustainable Textiles. They can provide stimulus for further activities to ensure increased sustainability in business. In the field of corporate social responsibility, representatives from business – together with representatives from trade unions, non-governmental organisations, science and politics – participate in the Federal Government’s National CSR Forum. On 8 June, the National CSR Forum resolved to work on a “Berlin CSR consensus on corporate responsibility in value and supply chains”, which is to give business more guidance for specific action.

**CSR Award of the Federal Government**

The CSR Award of the Federal Government offers another incentive to companies to make their own business sustainable. It has been awarded since 2013 to honour outstanding examples of social responsibility and motivate others to emulate them. The Award is presented to companies that employ commendable sustainable business practices and an employee-oriented HR policy, use natural resources economically, protect the climate and the environment, are engaged on the ground and also take responsibility in the supply chain. In 2017, two special prizes will be awarded for the first time, one of which honouring exemplary supply chain management and the other highlighting examples of the successful integration of refugees into small and medium-sized enterprises.

Business, as part of society, is woven into its political and legal framework. This framework must be conducive to sustainability. It also includes state regulations if the market mechanisms do not sufficiently ensure sustainability. The state, then, is the custodian for general welfare and for future generations.

**German Sustainability Award Foundation**

In cooperation with the Sustainable Development Council, the German Sustainability Award has been presented in Düsseldorf since 2008. It is presented to companies that combine economic success with social responsibility and environmental protection, and harness sustainable activities to generate further growth. It also recognises consistent sustainability management and sustainability themes in brand management. In addition, a special prize is awarded to individuals who outstandingly promote the concept of sustainable society in Germany and abroad. The Federal Government is represented on the foundation’s board of trustees, and the German Chancellor has often been its patron.

**Statement from the Dialogue on Sustainability**

“The central driver for achieving sustainability targets is cooperation between states, civil society and science with business practice. It is therefore especially important that this contribution from businesses, by way of innovation, investment and new products and services, is recognised nationally and internationally.”

**Science**

The social, ecological and economic challenges arising from the 2030 Agenda cannot be overcome without science. Germany has a powerful scientific system; its capacity for innovation gives it the opportunity to make significant contributions for more sustainability – at both national and international levels. The transition to a sustainable society requires technical and non-technical innovations as well as detailed knowledge of their acceptance and application. The search for sustainable business and wealth-creation models presents science with new challenges. In addition to the analysis and observation of phenomena, it will have to look more closely at the question of which processes of transformation are necessary for a transition to a sustainable way of life and business.

**Statement from the Dialogue on Sustainability**

“The IASS supports the Federal Government’s proposal to establish a scientific platform to provide advice on the implementation of the SDGs. ... The implementation of the Strategy must be understood as a learning process. It can and must draw on the ministries’ mandate-linked implementation structures. As a learning process, it also requires “spaces” where ministry- or sector-spanning data can be systematically collected and analysed and where government stakeholders can enter into a constructive dialogue with all non-government stakeholders. ... Such a platform can serve as an interface between science and politics or society during the implementation of the SDGs. ... The SDGs will be accepted and implemented as political goals only when they are actively adopted and interpreted by stakeholders in science, politics and society and finally become practically relevant.”

**Institute for Advanced Sustainability Studies e. V. (IASS)**

The importance of scientific support for the process of implementing the 2030 Agenda is inherent in the text of the Agenda itself. The follow-up and review of the implementation at the High-
Level Political Forum will be informed by an annual progress report on the development of the global indicators and by the Global Sustainable Development Report. According to Paragraph 83, the latter shall strengthen the science-policy interface and provide a strong evidence-based instrument to support policy-makers in implementing the Agenda.

**Scientific platform for SDG implementation/sustainability policy**

In science, various initiatives have been launched to provide scientific support for the implementation of the SDGs. The Federal Government has embraced these initiatives and offers a platform on which scientific support for the implementation of the SDGs will be pooled.

The platform’s work will be systematically integrated into the further management, dialogue and implementation process of the 2030 Agenda in order, in close cooperation between science, society and policy-makers, to highlight the advances and the shortcomings in the implementation of the SDGs in Germany, by Germany and with Germany and thus to conduct the debate over sustainability policy on a scientific basis. Representatives of social stakeholders will be involved in the platform’s work.

**Art and culture**

With their works and in theory, artists contemplate the tension between culture and nature as well as humanity and its relationship to its environment. Important social processes and developments today can also be monitored and managed with the help of concepts from the creative sector. Their specific perspective and approach can be expected to give new impetus to the sustainability debate. With their creativity and imagination, indispensable requirements for all artistic endeavours, artists and entrepreneurs from the creative sector can reveal new approaches and break down prevailing mindsets. The scrutiny and reconstruction of interrelationships and an interdisciplinary and experimental approach represents a promising strategy in the sustainability debate as well. Creative artists shall be granted a special status as stakeholders in this debate.

**Examples of contributions**

The Haus der Kulturen der Welt in Berlin grants the issue of sustainability high status with special event series at the interface between art and science.

The Humboldt Forum will create a space for equitable dialogue between different world cultures, a space for communication between worlds, with room for the various perceptions of scientific and cultural controversies about issues that concern humanity.

Cultural institutions (museums, libraries, theatres, orchestras, etc.) and their regional roots are also ascribed particular significance in the face of the challenges of demographic change. The German Federal Cultural Foundation has developed the “TRAFO – Models for Culture in Transformation” programme in cooperation with the Länder, districts and municipalities. From 2016 to 2021, up to EUR 13.5 million will be spent to finance a process in which cultural institutions in selected, structurally weak regions will try out new models of cooperation and forms of work.

**IV. European dimension**

At European level, too, sustainability is a guiding principle of common policy-making. Balanced and sustainable development was enshrined as an objective in the Treaty establishing the European Community for the first time in the Treaty of Amsterdam of 1999. The Treaty of Lisbon, which came in December 2009, also defines sustainable development as the guiding principle of European policy.

**European Sustainable Development Strategy**


In the Commission, the “horizontal responsibility” for sustainable development lies with the First Vice-President Frans Timmermans; his role is to ensure that proposals cohere with the principle of sustainable development. Karl Falkenberg, Senior Adviser for Sustainable Development at the European Political Strategy Centre of the European Commission since 1 September 2015, was tasked by Commission President Juncker to compile a report on the implementation of the 2030 Agenda by summer 2016. Borrowing from the
theme of the 7th Environmental Action Programme, Karl Falkenberg proposes the following vision of sustainability for the EU: “Living well and sharing fairly within the limits of the planet”. He identifies five policy areas that need to be adjusted in order to implement the goals of the 2030 Agenda ambitiously at EU level: agriculture, international trade, oceans, sustainable cities and finances. In addition, he presents proposals for institutions and processes.

With a resolution of 12 May 2016, the European Parliament called on the European Commission to present a draft for a new Sustainable Development Strategy.

Since 2010, Germany has campaigned at all levels for the review and the enhancement of the EU Sustainable Development Strategy. This is all the more urgent as the implementation of the 2030 Agenda for Sustainable Development requires a new strategic framework at the European level.

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Statement from the Dialogue on Sustainability

“In order to achieve sustainable development worldwide, a coherent sustainability policy at all institutional levels is essential... Moreover, Germany should live up to its leading role and give targeted impetus at the EU level especially, which is the primary level for action on sustainability policy.”

American Chamber of Commerce in Germany e. V./ Corporate Responsibility Committee

From the start, the EU campaigned relentlessly at UN level for an ambitious 2030 Agenda. Therefore, the Federal Government believes ambitious measures to implement it are also required in the European Union.

Regular Eurobarometer surveys show that sustainability issues are very important to EU citizens. Sustainability is therefore also a significant reference point for more citizen involvement in discussions about the future of the European Union.

European Sustainable Development Network (ESDN and EEAC)

The European Sustainable Development Network (ESDN) is an informal network of public administrators and other experts who are dealing with sustainable development in Europe. Its aim is to exchange experiences, knowledge and model methods with regard to the main features of sustainability processes at the European, national and regional levels. The Steering Committee, which determines the Network’s basic activities and positioning, is presided over by Austria. Germany is a member of the Steering Committee. The Network is supported by an office in Vienna.

Since 1993, the European Environmental Advisory Council (EEAC) has combined policy think tanks in the fields of environmental policy and sustainable development, including the German Sustainable Development Council.

(European) Sustainable Development Week – every year from 30 May to 5 June

France, Austria and Germany initiated the first European Sustainable Development Week (ESDW) in 2015 in order to make the many good initiatives at national level more visible across Europe. With over 4,000 initiatives in 29 European countries, it was already a huge success in its first year.

ESDW 2016 has directed its focus onto the implementation of the SDGs. Compared to 2015, the number of events was raised to 4,212 in 38 European countries, 1,872 of which in Germany.

V. International processes

The Federal Government is campaigning for the implementation of the 2030 Agenda in international organisations. Many of them, such as the World Bank, the OECD and UN organisations, have launched consultation processes on how they can use their programmes and strategies to help their member countries achieve the SDGs. Germany also participates in the “High-Level Support Group” initiated by Sweden, whose nine members – the others being Brazil, Colombia, Tunisia, Liberia, South Africa, Tanzania and Timor-Leste – have undertaken to make theirs an exemplary contribution to the rapid and ambitious implementation of the 2030 Agenda at national and international level.

Report at the HLPF 2016

The “High-level Political Forum on Sustainable Development” (HLPF) established at the 2012 Rio+20 Summit met as the central platform for the review of the SDGs according to the “Follow-up and review” section of the 2030 Agenda for the first time from 11-20 July 2016. Germany is working for a robust and efficient HLPF. This is also why the German Chancellor announced in her Policy Speech (24 September 2015) and at the Sustainable Development Summit in New

50
York (25 September 2015) that Germany would be one of the first countries to report to the HLPF 2016 about its implementation activities. In total, 22 countries voluntarily reported to the HLPF 2016 (China, Colombia, Egypt, Estonia, Finland, France, Georgia, Germany, Korea, Madagascar, Mexico, Montenegro, Morocco, Norway, the Philippines, Samoa, Sierra Leone, Switzerland, Togo, Turkey, Uganda, and Venezuela; the reports are published at www.sustainabledevelopment.un.org).

The German report centred on the adjustment of the Sustainable Development Strategy in the light of the 2030 Agenda and the planned contributions to its implementation. Germany’s next report at the HLPF was scheduled for 2021 (following the next progress report on the Sustainable Development Strategy).

Germany will regularly supply data on the set of global indicators as part of the UN’s international data survey in the future. For Germany, an initial compilation of the data available for all 17 SDGs has been provided by the Federal Statistical Office (www.destatis.de) since July 2016. The development of the global indicators is not yet complete, but the progress can be viewed at http://www.destatis.de/SDGDE.

G7/G20

The G7 is working relentlessly for global sustainable development. Under the German presidency in 2015, the G7 laid important groundwork for the successful negotiation of the Paris Agreement on climate change in December 2015 with its commitment to climate protection and numerous development-policy initiatives: It aims to decarbonise the global economy by replacing fossil fuels by the end of this century in order to meet the two-degree target and to restructure its energy industry by 2050.

The adoption of the 2030 Agenda for Sustainable Development by the member states of the United Nations in New York in September 2015 and the resolution of the Addis Ababa Action Agenda on financing for development is also a success of the G7, which emphatically supported the drafting and adoption of the Agenda.

The G7 states are striving for the better application of internationally accepted labour, social and environmental standards in global supply chains. In its Summit Declaration from Elmau, the G7 heads of state and government agreed specific steps to achieve this. Among other things, the private sector is urged to implement human rights due diligence. The “Vision Zero Fund” was launched at the International Labour Organization (ILO) to prevent workplace accidents due to a lack of safety standards. In particular, it shall help poorer producer countries improve their occupational health and safety. Finally, the G7 heads of state and government spoke in favour of strengthening complaint mechanisms.

Food security and combating hunger and malnutrition are of great concern to the G7. In 2015, the G7 states therefore set themselves the target of lifting 500 million people out of hunger and malnutrition by 2030 in a joint effort with its partners. At the G7 Summit in Ise-Shima in 2016, they adopted the G7 Vision for Action on Food Security and Nutrition. This contains concrete measures for empowering women, improving nutrition and ensuring more sustainable agriculture.

The G7 also stands for an improvement in the protection of the marine environment and for resource efficiency. At the G7 Summit at Schloss Elmau (2015), therefore, an Action Plan to Combat Marine Litter was adopted and a G7 Alliance on Resource Efficiency was founded. In the field of health, the G7 campaigns to offer its help for the strengthening of healthcare systems and the implementation of the International Health Regulations (IHR 2005) in order to prevent and fight epidemics. In addition, the G7 supports the WHO’s Global Action Plan on Antimicrobial Resistance. The G7 is also working for the economic empowerment of women. In 2015, it resolved to increase the number of professionally qualified women and girls by a third by 2030 in order to improve their prospects of employment and economic participation. The G7 states strengthened this commitment in Ise-Shima in 2016 with the aim of qualifying women and girls for STEM careers.

The G20 is also committed to further aligning its work to global sustainable development. For example, the heads of state and government at the 2016 G20 Summit in Hangzhou adopted an Action Plan that describes the G20’s contributions to the implementation of the 2030 Agenda for Sustainable Development and shall continue to be implemented. It refers explicitly to climate change and global health.

Under the German G20 presidency in 2017, the Federal Government plans to continue campaigning for the implementation of the 2030 Agenda,
climate protection, sustainable energy consumption, resource efficiency, global health, sustainable agriculture and the better application of internationally accepted labour, social and environmental standards in global supply chains.

Thanks not least to their increasing engagement for strong, sustainable and balanced growth and the catalysing nature of their summits, both the G7 and the G20 are contributing to sustainable development around the world.
Chapter C. Germany’s Contribution to Achieving the SDGs

I. Structure/overview

The implementation of the 2030 Agenda and its 17 SDGs is a task for the entire Federal Government and affects a large number of policy areas. As the Sustainable Development Strategy is to function as a basic framework for the national implementation of the 2030 Agenda (and is thus not a sole implementation activity undertaken by the Federal Government), this chapter presents comprehensive activities relating to the implementation of the 17 SDGs that have already taken place or are planned.

Selected basic content, political priorities, as well as selected existing and planned implementation measures for each SDG will be explained at the beginning of each sub-chapter. This description is not conclusive, but instead provides a first insight into aspects that the Federal Government considers important. Given the universality of the 2030 Agenda, the Federal Government needs to make appropriate contributions to the achievement of all 17 sustainable development goals as a whole, both with its national policies and on the international level. This affects the ministries and their respective full ranges of concrete political measures (ministry strategies, programmes, projects, legislation, promotion, etc.).

The following chapter describes the involvement of the Federal Government on the basis of suggestions made, for example, by the German Council for Sustainable Development for each of the SDGs on three levels. These levels are closely intertwined and overlap in some cases.

Structure of the German measures presented

Level 1: Measures with effects in Germany.

Level 2: Measures implemented by Germany with global effects, in particular activities for the benefit of the global public good, i.e. the global common good as a whole.

Level 3: Concrete support for other countries; joint implementation of measures with Germany, in particular in the context of international bilateral cooperation.

The descriptions of the measures are each followed by an outline of the indicators specified as part of the Sustainable Development Strategy and their goals. To increase the steering effect of the strategy, each strategy indicator is immediately followed by information on activities undertaken by the Federal Government to implement the set goals.

Goals – synergies and conflicts

The 63 individual objectives of the strategy form an entity. In some cases, individual goals are in conflict with other goals; in other cases, they depend on each other. An analysis of the conflicts between goals in particular can give rise to new approaches, for example increasing residential density instead of consuming new land for development in the context of new housing.

The conflicts of goals must be resolved on the level of measures, where each of the three dimensions of sustainability – business, environment and social affairs – including the international impact, must be examined. However, weighting of the individual aspects is subject to a case-by-case assessment process. This also applies with regard to the relation with the fiscal objectives anchored in the Sustainable Development Strategy. Thus, the inclusion of goals in the strategy does not change the fact that measures planned for the implementation of these goals must fit in with the Federal Government’s budgetary and fiscal requirements.
This review, whose aim is not to selectively optimise individual policy fields, but which requires an altogether coherent alignment of political measures with regard to the requirements of sustainable development, is already based on the three dimensions of sustainable development, i.e. economy, ecology and social affairs; the differentiation between these dimensions reveals dependencies and connections.
II. Key aspects, measures, national indicators and goals

1. End poverty in all its forms everywhere

a) Basic content and political priorities from the point of view of the Federal Government

By resolving the 2030 Agenda, the international community of states has set itself the ambitious aim of overcoming extreme poverty completely by 2030. The 2030 Agenda describes the eradication of all types and dimensions of poverty as “the greatest global challenge and an indispensable requirement for sustainable development”. Goal 1 will send out a strong signal for the global implementation of the agenda’s objectives. According to estimates by the World Bank, 700 million people worldwide lived in extreme poverty in 2015. More than 70% of these people are women. According to the definition by the World Bank, a person who lives on less than USD 1.90 per day lives in extreme poverty.

A holistic understanding of poverty

The 2030 Agenda is based on a holistic understanding of poverty that comprises not only income poverty, but also the missing foundations for a life of human dignity, which are addressed in many of the SDGs. Poverty can be overcome only if progress is made in all relevant areas.

In addition to the goal of eradicating extreme poverty (target 1.1), target 1.2 strives to reduce by half poverty in all its dimensions as specified by the national definition by 2030, is particularly relevant for the national implementation. This ambitious goal is oriented not only towards fighting absolute poverty that affects the mere physical existence (hunger, lack of protection against the weather, lack of basic medical care and the like). Rather, the goal also addresses relative poverty, which is measured on the basis of the distribution of income (and wealth) within a society. Relative poverty refers to the risk of poverty and manifests itself in limited possibilities of material, societal and cultural participation. According to this definition, a person whose income (weighted according to needs) is less than 60% of the median income is “threatened by poverty”. Thus, poverty is a challenge even for a rich nation such as Germany. In each legislative period, the Federal Government reports on the social situation in Germany in its Poverty and Wealth Report.

Adequate employment is the most effective instrument for preventing poverty. With regard to the course of life and circumstances, this applies not only to the middle phase of life, but is also important during childhood and retirement. Children are poor if their parents are unemployed or do not earn sufficient income, and poverty among the elderly affects people who were prevented, for example due to low wages or disabilities, from earning enough money during their course of life to ensure sufficient retirement security.

The Federal Government’s aim is thus to achieve a high employment level and sufficient wages. This goal is closely connected with SDG 8, for example. Relevant measures are not restricted to the employment policy here. For people who cannot achieve sufficient economic and social participation by their own efforts, Germany provides a welfare system with the aim of preventing poverty (see also the description of SDG 10).
guaranteed by the German Basic law, the focus of the Federal Government’s national policy for SDG 1 is mainly on fighting relative poverty.

1. Preventing poverty by ensuring decent wages

Well-paid employment is the most promising way to prevent poverty. Well over 1 million new jobs have been created in Germany since the start of this legislative period. The prerequisite for this was an economic policy that strengthens companies, supports business start-ups and helps to open up foreign markets. The Federal Government also lowered taxes and thereby increased net income. The introduction of a nationwide minimum wage was another important measure for improving the income situation of employees in the low-pay sector. It is constantly reviewed by means of regular evaluations and refined as required. The benefits working women gain from the minimum wage are above average. Before the introduction of the minimum wage, they represented just under two thirds of the approximately four million employees who earned less than EUR 8.50 per hour. In addition to low hourly wages, the (in some cases involuntary) insufficient volume of work and a lack of employment opportunities can constitute a further obstacle to adequate income. Further steps towards improving the income situation, in particular that of women, are therefore to establish a legal claim to temporary part-time work (the right to return to previous working hours) and expand comprehensive childcare.

2. Compatibility of work and family life

Decent wages can protect people against poverty – but only if they can perform a sufficient volume of work. To ensure that parents can find a balance between their jobs and families, it is important to provide adequate and high-quality childcare. To this end, the federal “KitaPlus” (ChildcarePlus) programme promotes childcare services that are tailored to the needs of families. The funds for the programme amount to a total of EUR 100 million and are used to finance personnel expenditures in day-care centres, for childminders as well as investment costs for equipping sleeping areas, material expenses and expenses for qualifications. Single parents, parents who work shifts and those who intend to return to their career in particular benefit from this. The programme was launched at the beginning of 2016 and will run until the end of 2018. “KitaPlus” is supported by the Confederation of German Employers’ Associations, the Federal Employment Agency, the German Trade Union Confederation, the German Association of Towns and Municipalities and the German Association of Cities.

3. Poverty-proof old-age provision

One major task is to make social security poverty-proof for future generations as well. The statutory pension alone is no longer sufficient in the long term for maintaining the standard of living people had during their working life in old age. Additional retirement arrangements are necessary to compensate for the sinking level. Company pension schemes in particular are to be strengthened. Furthermore, the life-time achievement of people who paid into their insurance for many years but were able to accrue only small pension rights due to their low income is to be better appreciated in the statutory old-age pension.

4. Minimum guaranteed income ensured through the socio-cultural minimum subsistence level

Wherever people are unable to earn an adequate income, poverty in Germany is fought by means of income transfer with government support. Germany has created a minimum guaranteed income scheme that protects people against facing ruin by paying benefits for an unlimited amount of time. The standard rates for basic financial security are regularly reviewed on the basis of data gathered in the context of the sample survey of income and expenditure and adapted as required.

5. Access to affordable housing

Affordable and adequate housing in a decent and neighbourly environment is one of the basic needs of all people.

The social safeguarding of adequate housing ensures that households that cannot afford sufficient housing by their own efforts are provided with living space. This includes measures to support individuals, such as housing benefits and the payment of accommodation and heating costs as part of basic financial security, as well as measures for funding property in the form of social housing subsidies provided by the Länder.

Good living conditions and social mixing are essential requirements for social cohesion and peace.

II. Measures by Germany

The fight against poverty is the topmost priority of German development cooperation

Germany is committed to its global responsibility and is contributing to the fight against poverty on a global level and in all its dimensions in all policy areas. The German development cooperation will be reviewed and refined with a view to the 2030 Agenda.
III. Measures with Germany

Structural and cross-sectoral approaches to fighting poverty

The German development cooperation supports partner countries, for example with the promotion of inclusive economic growth and employment, the improvement of access to education and health services and the establishment of social security systems (health insurance, basic financial security, old-age provision). Germany’s provision of support for the implementation of health insurance for the poor in India, which covers roughly 120 million people, is one example. The international agricultural policy and the German development cooperation also place a significant focus on rural regions and the promotion of agriculture to implement the universal right to food. Strengthening the resilience of poor people and countries with regard to the consequences of climate change and environmental destruction is becoming increasingly important.

b) Relevant national sustainability indicators and objectives/measures

1.1.a/b Material deprivation – reducing poverty

<table>
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<th>Severely materially deprived, EU-28</th>
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1 Estimated values for EU-28.

Source: Federal Statistical Office, Eurostat

© Statistisches Bundesamt (Destatis), 2017

Definition of the indicators

Material deprivation describes the lack of specific consumer goods and the involuntary foregoing of discretionary consumption for financial reasons. The two indicators represent the proportion of people out of the total population who are deemed to suffer either material deprivation (1.1.a) or severe material deprivation (1.1.b). The designation of (severe) material deprivation applies to all people whose household meets at least three (severely materially deprived: at least four) of nine defined criteria reflecting the financial restrictions of the household.

Target and intention of the indicators

The indicator “material deprivation” also is part of the extensive reporting on poverty and wealth conducted by the Federal Government. By identifying individual deficiencies, it aims to act as a substitute for illustrating living conditions threatened by poverty. Therefore both, the percentage of persons who are materially as well as severely materially deprived, should stay below the level within the European Union.

Content and progress of the indicators

The data is drawn from the Europe-wide harmonised survey “EU-SILC” (European Union Statistics on Income and Living Conditions), which is in Germany conducted by the Federal Statistical Office in cooperation with the statistical offices of the various Länder and titled “Living in Europe”. This involves about 14,000 private households in Germany which voluntarily provide information on their income and living conditions annually.

The indicators show the respective proportion of the population for which involuntary foregoing or deficiencies in several areas apply for financial reasons. A set of expenditures on lifestyle items considered to be appropriate, desirable or even essential in Europe was...
chosen as classification. The nine criteria used to characterise “material deprivation” are standardised across all countries in which EU-SILC is conducted, thereby allowing for Europe-wide comparisons.

Specifically, the nine criteria cover: the lack of a car, a washing machine, a colour TV or a telephone in the household (in each case because the household is unable to afford one); a financial problem, paying rent, mortgage or utility bills on time; ensuring adequate heating in the residence; eating meat, fish or an equivalent vegetarian meal every second day; spending one week’s holidays per year outside the actual residence; meeting unplanned expenditures of a specific amount (2015: EUR 980) from one’s own financial resources.

Material deprivation is associated with the problem of social exclusion because participation in social life is jeopardised by the lack of financial means. The “severe material deprivation” indicator is also part of the “poverty or social exclusion” indicator, which is used to measure one of the five core objectives of the Europe 2020 strategy (combating poverty and social exclusion).

In 2015, 10.7 % of the population in Germany were classified as materially deprived, while 4.4 % were affected by severe material deprivation. The corresponding values in 2010 were 11.1 % and 4.5 % respectively, sometimes, in subsequent years even slightly higher. Consequently, the figures are slightly decreasing. However, the measured changes are that marginal that a reliable interpretation is not yet possible.

The average values for persons in the European Union are significantly higher than the respective values for Germany. For instance, the proportion of the materially deprived EU population in 2015 was 16.9 % according to the estimates of the Statistical Office of the European Union (Eurostat) and was therefore more than 50 % higher than in Germany. A total of 8.1 % of the EU population were considered as severely materially deprived persons. This quota is 84 % higher than the respective value in Germany.

Federal Government activities

Poverty is multi-faceted and there is no simple and clear way of measuring it. In order to deal with this problem, the Federal Government bases its extensive poverty and wealth reporting on a comprehensive analytical approach that describes the risks of poverty and social exclusion in different circumstances.

Within the topic of “poverty”, the indicator set of the Poverty and Wealth Report currently comprises eleven indicators from different areas, such as income distribution, debt overload, unemployment, minimum guaranteed income, material deprivation, housing, health and social participation (see also www.armuts-und-reichsbericht.de). The “material deprivation” indicator is thus just one of many measures used to map circumstances threatened by poverty and takes on a representative function in the context of the Sustainable Development Strategy. Its purpose is to identify individual deficiencies.

The concept is based on a catalogue of goods and activities that mark the average standard of living in Germany. The quota measures the extent to which persons cannot afford goods and activities that are considered common. Persons are considered “materially deprived” if they suffer from deprivation in at least three of the following nine areas; however, it is important that financial reasons are the cause of deprivation and not, for example, a voluntary decision to abstain.

- Financial problem with paying rent or utility bills on time.
- Financial problem with keeping their home adequately warm.
- Problem with covering unexpected expenses of a specific amount using their own financial means.
- Financial problem with being able to eat meat, fish or an equivalent vegetarian meal every other day.
- Financial problem with spending one week’s worth of holiday per year outside their own home.
- No car in the household
- No washing machine in the household
- No colour television set in the household
- No telephone in the household

If living conditions are restricted significantly in at least four of the nine areas due to a lack of funds, we speak of severe material deprivation.

As with poverty in general, there are various reasons for material deprivation. The measures im-
implemented by the Federal Government to improve the education level (cf. Federal Government measures for SDG 4 and activities for indicator 5a/b), increase employment and raise the wage level (cf. Federal Government measures and activities for SDG 8 and indicator 16a/b as well as SDG 10 and indicator 20) contribute to reducing the percentage of people affected by material deprivation.
2. **End hunger, achieve food security and improved nutrition, and promote sustainable agriculture**

a) **Basic content and political priorities from the point of view of the Federal Government**

Around 800 million people around the globe still go hungry, and two billion people suffer from micronutrient deficiency, also known as “hidden hunger”. 165 million children worldwide are affected by delayed growth, which restricts their physical and mental development. Sustainable and resilient agriculture that is innovative and productive at the same time is the key to global food security. This is why Germany campaigned for combining the aspects of food security and agriculture in one SDG.

**The associated targets in detail**

While the Millennium Development Goal (MDG) that was previously aimed at reducing hunger was designed merely to halve the proportion of people who suffer from hunger by 2015 as compared to 1990, the new SDG 2 now aims to end hunger (2.1) and all forms of malnutrition (2.2) entirely. To this end, agricultural productivity and the income of small-scale food producers are to be doubled. The latter are also to be guaranteed safe access to productive resources (2.3). In particular, the sustainability of food production systems is to be ensured, and resilient agricultural practices are to be applied that help maintain ecosystems, resist climate changes, gradually improve soil quality (2.4), maintain genetic diversity, secure access to these resources and allow benefit sharing (2.5). Investments in rural infrastructure and the exchange of knowledge and technology are to help increase food production, in particular in less developed countries (2.a). It is necessary to correct trade restrictions and distortions on the agricultural markets and eliminate all forms of agricultural export subsidies with equivalent effect (2.b) and to limit food price volatility (2.c).

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**Adequate nutrition – a human right**

The Federal Government supports the international human rights-based approach to the right to food. It considers nutrition to be a basic human claim and right and thus sees hunger as a possible human rights violation.

**The human right to food**

The right to food is rooted under international law in Article 25 of the Universal Declaration of Human Rights and in Article 11 of the UN International Covenant on Economic, Social and Cultural Rights Every person is to have physical and economic access at all times to adequate, safe and nutritionally balanced food in order to satisfy their dietary needs and food preferences and lead an active and healthy life.

The Federal Government provides political and financial support to rights-based approaches in the form of standards and guidelines under international law, such as the “Voluntary Guidelines on the Right to Food”. They are to form the framework of reference for national governmental action in the field of nutrition.

**Global importance**

Agriculture and the food industry as well as national and global agricultural and food policies are facing enormous challenges all over the world. Hunger and malnutrition are often a consequence of poverty, a lack of rights as well as insufficient production and distribution: 98% of people suffering from hunger live in developing countries. By 2050, the world’s population will have increased to well over nine billion people. Referring to a base period from 2005 to 2007, the UN’s Food and Agricultural Organisation (FAO) estimates that the demand for food will increase by up to 70%. At the same time, the consequences of climate change and the increasing demand for both animal-based food and for energy and other products made from renewable resources represent special challenges for food security worldwide. Securing food for the local population must be prioritised here. Furthermore, compliance with human rights, social and environmental standards and the protection of biodiversity must be ensured.

Regarding the question of how to secure food for more than nine billion people, the sustainable increase of agricultural production and productivity...
plays a central role. The sustainable use and protection of natural resources are crucial here. As specified in SDG 2.3, the development potential of small family farms in particular must be used to increase productivity in a sustainable fashion. It is important to improve their basic conditions for investments in sustainable and productive agriculture. In this context, access to land, markets, knowledge and loans plays an equally important role as the expansion of rural infrastructure. The reduction of food waste and losses at all levels, from production to transport and all the way to the consumer, must also make a contribution. This makes up roughly a third of the global production volume today. Choice of food also plays an important role. For example, plant-based food usually causes considerably less environmental harm (e.g. greenhouse gases, soil contamination, water consumption, groundwater pollution) than food of animal origin.

Statement from the Dialogue on Sustainability

“Studies have shown (...) that small family farmers in developing countries can even operate more productively than large landowners, as less land remains unused, they achieve a higher rate of planting, use sustainable cultivation methods and, in some cases or with the appropriate support, they even achieve higher yields with individual crops. More recent investigations have also revealed that small family farmers can react better to climate change than large farms. They can implement locally negotiated and adapted solutions in a quicker and more flexible way and thereby contribute to food security for themselves and their countries as a whole.”

Commissariat of German Bishops

The establishment of a competitive agricultural and food industry in developing countries provides great opportunities for better satisfying the growing demand for food, especially in these countries themselves, and creating work and income in rural areas at the same time. The special rights granted to developing countries as part of the WTO or EU trade agreements, for example with regard to market access, external protection and subsidies, are important measures for promoting inclusive agricultural development.

In addition to the availability of and access to food, correct use and physical processing of food must also be ensured. If the body is weak, for example due to disease, or if food is not prepared properly, important nutrients cannot be absorbed, and this can result in malnutrition. In addition to the agricultural measures, it is thus also important to promote health, education and social security.

According to forecasts by the UN’s Food and Agricultural Organisation (FAO), sub-Saharan Africa and parts of Asia will remain hot spots of hunger and malnutrition. The regional focal points of the Federal Government’s activities in the context of developmental and agricultural policies to establish sustainable and resilient agriculture and food security are derived from this.

National importance

For Germany, the focus with regard to national implementation of the SDG 2 objectives is not only on promoting sustainable agriculture, but above all on a healthy and nutritionally balanced diet. The aim is to improve knowledge on nutrition and different diets in order to make it easier for consumers to choose a healthier dietary behaviour. An unhealthy diet and, with that, the lack or excess amount of nutrients can have extensive short-term and long-term consequences to health, which confront the persons affected with complex limitations. In Germany, the consumption of meat in particular is above the values recommended by the German Nutrition Society (DGE).

The Federal Government’s guiding principle for its agricultural policy comprises the preservation and creation of liveable and vital rural areas as well as sustainable, environmentally compatible, economically efficient and multi-functional farming, forestry and fishing industries. In this context, food security takes precedence over the generation of raw materials for material and energy-related applications. The Federal Government believes that family farms and farming companies fulfil this guiding principle in an exceptional manner. They are of great importance for the positive development of rural regions and for social cohesion.

More and more people in Germany are deciding the buy organic food. In 2015, German households spent 11% more on organic products than the year before. However, organically managed farmland in Germany increased by only 2.9% in 2015 and cannot satisfy the domestic demand. Organic farming is a particularly resource-efficient and environmentally compatible form of agriculture. Independently of the fact that organic
and conventional farming are treated as equal under the law, the aim of the Federal Government is to increase the amount of organically farmed land.

Given that agriculture is the basis for food security, it is more dependent on natural resources than any other sector of the economy and therefore has a special responsibility to cultivate these resources in a sustainable way. In view of the existing challenges (e.g. improvement of animal protection, protection and utilisation of ecosystems, preservation and sustainable utilisation of biodiversity, reduction of any excess of nutrients, implementation of the National Action Plan on the Sustainable Use of Plant Protection Products), more steps need to be taken in the direction of comprehensive sustainability.

Common Agricultural Policy (CAP)

The purpose of the EU’s CAP is to ensure food security and provide the population with high-quality food. Further, the CAP is to promote the sustainable management of natural resources, climate protection, the preservation of cultivated landscape as well as balanced spatial development that is tailored to the local conditions, especially in rural regions. For the period from 2014 to 2020, Germany has a total of roughly EUR 6.2 billion per year in EU funds at its disposal for this purpose.

Federal Government activities

I. Measures in Germany

1. Nutrition

The Federal Government’s national action plan “IN FORM – Germany’s national initiative to promote healthy diets and physical activity” offers a variety of initiatives and information on healthy diets.

2. Organic farming as a strategy for the future

The Federal Ministry of Food and Agriculture (BMEL) will present organic farming as a strategy for the future, including a roadmap, for immediate implementation by the beginning of 2017. The aim is to strengthen organic farming in Germany and expand the land share of organically farmed land. Representatives from the organic food industry, the Länder, relevant associations and science will be involved in the strategy process.

3. Federal Organic Farming Scheme and other forms of sustainable agriculture (BÖLN)

The programme was originally focused on organic farming, but was opened up to other forms of sustainable agriculture in 2010. The aim is to improve the basic conditions for sustainable farming in Germany. The programme supports information, research and development projects that can affect all parts of the production chain: from agricultural production to recording and processing, trade, marketing, and all the way to the consumers. The Federal Government provides EUR 17 million per year for this programme.

4. Agri-environmental, climate and animal protection measures

The purpose of promoting agri-environmental and climate measures (AUKM) and animal protection measures in conventional agriculture is also to support climate protection, the preservation and increase of biological diversity, the improvement of the soil structure as a building block of soil fertility and the reduction of fertiliser and pesticide deposits, especially near sensitive waters. A total of 19% of the public funds provided for rural development in Germany within the EU programme period from 2014 to 2020 are intended for AUKM.

5. The protein crops strategy of the BMEL

The expansion of crop rotation in Germany and Europe to include plants, and legumes in particular, is an important building block for more sustainable agriculture. The root nodules of the legumes form a symbiosis with bacteria (rhizobia) that fix the nitrogen taken from the air. The legumes can then use this nitrogen to produce protein, and subsequent crops can use it as a plant nutrient. The protein crops strategy pursues the following aims in particular:

- Improvement of ecosystem services and resource protection (e.g. improvement of environmental and climate protection, increase in species diversity in farming areas, improvement of soil fertility, reduction of the consumption of mineral nitrogen fertilisers) and

- Market-compliant increase of protein supply from domestic production.

The Federal Government is aware that the cultivation of domestic legumes in Germany and the EU requires a market that can compete with protein products that can be imported.

II. Measures by Germany

1. Correct and prevent trade restrictions and distortions

In the context of the European coordination processes, the Federal Government is campaigning for the reduction of trade restrictions and distortions in world agricultural markets that violate the rules of the World Trade Organization (WTO). The abolition of direct agricultural export subsidies was achieved at the 10th WTO Ministerial Conference. The use of export credits and food aid for the purpose of disposing of excess production was disciplined. Customs-free access to the
market granted by the EU to the least-developed countries (LDC) opened up additional export opportunities for these countries to generate income. In the WTO context, the Federal Government is also striving to reduce subsidies that distort trade in the agricultural sector.

2. Ensure the proper functioning of food commodity markets

The Federal Government is campaigning for the limitation of extreme price volatility that has a negative effect on producers and consumers in developing countries in particular. This is why the Federal Government is supporting the efforts undertaken by the WTO to also regulate export restrictions that can reinforce price increases on agricultural markets more rigorously, and the “Agricultural Market Information System” (AMIS) initiated following the adoption of the “Action Plan on Food Price Volatility and Agriculture” by the G20 states in 2011. AMIS has set itself the aim to reduce the extent of price volatility by improving market transparency with regard to the plant products that are considered most important in the global context. Commodity futures markets are another instrument for managing price risks that is becoming increasingly important. The Federal Government's aim is to secure and, where necessary, strengthen the functionality of the agricultural futures markets. The new EU financial market regulation ensures greater transparency on the markets while preventing manipulation and market abuse at the same time.

3. Preserve genetic diversity and use it sustainably

In recent years, the Federal Government has established a national network for the preservation of genetic resources and operates a central federal gene bank for crops, an institution of international importance. Furthermore, it supports the establishment of European and international networks and global initiatives, for example in the context of the work of the CBD, the FAO, the “International Treaty on Plant Genetic Resources for Food and Agriculture” (ITPGRFA) and the Global Crop Diversity Trust. It also promotes investments in the establishment and expansion of regional and international gene banks in developing countries. On 24 March 2016, the German Gene Bank for farm animals was officially opened at the Institute of Farm Animal Genetics of the Friedrich-Loeffler-Institut.

III. Measures with Germany

1. End hunger: the focus of the international agricultural policy and the German development cooperation

The fight against hunger and malnutrition is one of the core aspects of the international agricultural policy and the German development cooperation. The Federal Government provides roughly EUR 1.5 billion a year for development policy measures to fight hunger and malnutrition. Under Germany’s presidency, the G7 agreed to lift 500 million people out of hunger and malnutrition; to this end, they agreed on a “Broad Food Security and Nutrition Development Approach”.

2. Improve nutrition with a particular focus on gender equality

One of the Federal Government’s priorities is to improve the quality of nutrition worldwide. The focus here lies on family-operated farms and rural regions where malnutrition in the form of vitamin and mineral deficiencies occurs most frequently. Gender equality, for example with regard to access to or the inheritance of land, and the strengthening of women are particularly important when it comes to eradicating hunger and malnutrition. Women not only represent more than half of the workforce in agricultural production in developing countries, they also bear the main responsibility for feeding their families. As part of the special initiative “One World, No Hunger” established by the Federal Ministry for Economic Cooperation and Development (BMZ), the Federal Government is providing around EUR 70 million to eleven countries to fight malnutrition among women and infants and improve resilience against hunger crises in fragile contexts.

3. Increase production and secure food by rule of law

Secured ownership structures and secured access to resources, especially for small farmers and family-operated farms, as well as the rule of law are key functions in this context. The Federal Government is therefore campaigning for the preparation, implementation and observation of standards and guidelines under international law, such as those laid down in the RAI principles, the VGGT guidelines and the Guidance for Responsible Agricultural Supply Chains by the OECD and FAO.

4. Increase sustainable agricultural productivity

The Federal Government is supporting the sustainable increase in production in developing countries, for example by setting up 14 green innovation centres for the agriculture and food sector in Africa and India and promoting agricultural research in developing countries.

5. Increase yields sustainably to ensure food security

The Federal Government is also supporting the international Wheat Initiative founded as part of the G20 action plan; this initiative bundles international research activities on wheat and coordinates them more strongly. For example, the Federal Government is promoting research on the wheat genome in order to significantly accelerate progress with regard to the cultivation of wheat as well as to secure and increase future yields in a sustainable manner.
6. Secure sustainability and resilience of food production systems

Lasting food security requires agriculture to be sustainable, innovative, efficient, tailored to local conditions, as well as environment-, nature- and climate-friendly. The prudent and sustainable use of resources and the protection of natural resources are core elements of sustainable agricultural production. The “Securing the Global Food Supply – Globe” funding initiative is a shining example. The Federal Ministry of Education and Research (BMBF) and the BMZ are providing up to EUR 45 million within a period of five years to support research projects that are adapted to local conditions and are deemed necessary and sustainable by the respective regional partners in Africa. The aim is to build new bridges between African countries and Germany as well as between traditional cultivation practices and highly developed cultivation technologies. The exchange of knowledge on suitable approaches, the development of possible strategies and the transfer of practices and technology are essential elements of the bilateral project work of the BMEL to promote sustainable food production systems. The Federal Government is supporting climate-smart agriculture with the aim to promote food security, support the adaptation to climate change and contribute to climate protection wherever possible. In addition, the Federal Government is supporting an integrative approach to using synergies and negotiating trade-offs in the fields of water, energy and food security.

7. Maintain and increase soil fertility

As a member of the FAO, Germany is campaigning for sustainable soil management to protect the soil and use it in a sustainable way, and is providing roughly EUR 90 million to finance measures for the rehabilitation of 200,000 hectares of soil in five countries as part of the special initiative “One World, No Hunger”. The BMBF launched the funding activity “Soil as a sustainable resource for the bioeconomy – BonaRes” in 2015 to improve the scientific understanding of soil ecosystems in connection with soil productivity. Over the next three years, it will support ten organisations and the BonaRes Centre by providing a total of EUR 33 million.

8. Develop rural infrastructure

Rural areas can secure the nourishment of a growing population in the long term only if the living conditions in these rural areas in particular are improved, and future prospects are created for adolescents and those withdrawing from agriculture as part of the transformation process. The Federal Government’s agricultural and development policy therefore promotes a socially compatible rural structural transformation by investing in the establishment of on-site agricultural value chains downstream from the agricultural sector and in sustainable rural services and infrastructures that provide employment and income opportunities.

b) Relevant national sustainability indicators and objectives/measures

2.1.a Nitrogen surplus

Farming – Environmentally sound production in our cultivated landscapes

![Nitrogen surplus in land used for agriculture](image)

Source: Institute for Crop and Soil Science, Julius Kühn Institute (JKI) and Institute for Landscape Ecology and Resources Management, University of Giessen

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Definition of indicators

The indicator represents the annual nitrogen surplus for the agriculture sector, calculated as nitrogen input minus removal of nitrogen, in kilograms per hectare of utilised agricultural land.

Aim and intention of the indicator
Excess nitrogen input into the environment causes pollution of ground-water and surface water, the oversupply of nutrients (eutrophication) in inland waters, lakes and terrestrial ecosystems, and the formation of greenhouse gases and acidifying air pollutants with negative consequences for the climate, species diversity and landscape quality. Overall nitrogen surpluses for Germany to be reduced to 70 kilograms per hectare of utilised agricultural land in the annual average from 2028 to 2032.

Content and development of the indicator

The calculation of the indicator takes account of nitrogen inputs from fertilisers, atmospheric inputs not emitted by agriculture, from biological nitrogen fixation, seed and plant material along with feedstuffs from domestic production and from imports. Nitrogen output takes place via plant and animal market products.

The total balance is calculated based on the farm-gate model, meaning that nitrogen flows as part of the operation of the farm are not taken into account. The relevant time series for the indicator is the moving five-year average. This is calculated from the total balance of the relevant year as well as the two preceding and year average. This is calculated from the total balance of nitrogen surplus in agriculture for the relevant year as well as the two preceding and following years. This balances out factors such as yearly fluctuations in the weather and the markets that cannot be influenced by farmers. The indicator makes no statement regarding the regional distribution of nitrogen surpluses. Even if the average value defined as a target for Germany is achieved, regional nitrogen surpluses can be significantly higher than 70 kg per hectare and year. The indicator is calculated by the Institute for Crop and Soil Science at the Julius Kühn Institute and the Institute of Landscape Ecology.

Federal Government activities

Over the last two decades, the nitrogen surplus in agriculture has been mainly on the decrease, albeit only a slight decrease. The target value for 2010 (80 kg agricultural nitrogen surplus per ha and year) has still not been achieved. No substantial progress is being made at the moment. Some regions, especially in areas with a large number of livestock and biogas plants, have even experienced a deterioration in their values. As a result, action must be taken by both the Federal Government, e.g. by refining the requirements for fertilisation and specifying them in more detail, and the Länder with regard to implementation and monitoring of the specifications.

Previous measures

The Federal Government expects that the intended changes to the fertiliser regulations will lead to a significant reduction of nitrogen input in water in the medium term. The precise determination of the amount of fertilisation required, the inclusion of organic fertiliser made from plants in the upper application limit of 170 kg of total nitrogen per hectare and year, the extension of periods in which the application of fertiliser is pro-
hibited during autumn and winter, and the lowering of the check values for nitrogen and phosphorus in particular are to contribute to the reduction of nutrient input. In the context of the amendment of the fertiliser regulations, the Länder are also to be authorised to stipulate additional fertilisation measures in areas with heavy nitrate pollution.

**Planned measures**

The executive draft for changing the law on fertilisation includes the authorisation to issue a new decree for the more detailed determination of the best practice requirements for handling nutrients on farms (in addition to the fertiliser regulations); in particular, regulations regarding the identification and recording of the amount of nutrients in the form of an overall corporate balance sheet can be stipulated. The Federal Government intends to introduce the decree by the beginning of 2018. The regulation is to be introduced for larger farms with a large stocking density at first.

The overall corporate balance sheet records all essential processes performed on farms that involve the use, cycling or release of nutrients. Precise knowledge of the flow of nutrients is an important prerequisite for initiating the necessary measures for reducing losses and improving processes on farms.
2.1.b Organic farming

Farming – Environmentally sound production in our cultivated landscapes

Definition of the indicator

The indicator shows the share of total utilised agricultural land in Germany that is cultivated by organically managed farms subject to the inspection system prescribed by the EU legislation on organic farming (Regulation (EC) No. 834/2007 and the implementing rules). It includes land that has been fully converted to organic management as well as areas still undergoing conversion.

Target and intention of the indicator

Organic farming preserves and protects natural resources to a particularly high degree. It has a range of positive effects upon nature, climate and the environment, and provides for the production of high quality food. For this reason, the proportion of organically farmed agricultural land should be 20 % in future.

Content and progress of the indicator

Data on organic farming is collected by the Federal Office for Agriculture and Food (BLE) on behalf of the Federal Ministry of Food and Agriculture (BMEL) and by the Federal Statistical Office.

The Federal Statistical Office uses various surveys to determine the amount of organically farmed land. The reference value for the proportional computation is the amount of agricultural land determined annually as part of the main survey of land use. The agricultural land includes all areas and sub-areas used for agricultural or horticultural purposes. Building and farmyard areas of agricultural businesses are therefore not included in the reference value.

The data collected by the BMEL includes details of the amount of organically farmed land reported annually by the organic regulatory authorities at the Länder. The reporting date is 31 December of each year. All reports for a current year are accumulated no later than this reporting date. For a variety of reasons that include the fact that land without a cut-off threshold is referred to all land with a cut-off threshold, the data from the BMEL contains slightly higher values. According to data from the Federal Statistical Office, the share of organically farmed land increased from 2.9 % to 6.3 % of agricultural land between 1999 and 2015. As a result, the figure for organically farmed land in 2015 was 1.06 million hectares. The data from the BMEL indicates a slightly higher share of organic farming land from total agricultural land due to the methodology employed. Consequently, the value for 2015 was 6.5 % or 1.09 million hectares.

The last few years have seen the amount of organically farmed land increase further, but the annual percentage increase has eased. Most recently, it was 3.2 %, compared with 11.9 % between 1999 and 2000. Should this trend continue at the level recorded during recent years, it would take many decades to achieve the target value.

Germany’s organic farming land was used as follows in 2015: 56.4 % as permanent pasture, 42.0 % for farmland and 1.6 % for other land. In contrast, the main focus of agriculture as a whole was with 70.8 % on farmland, while the share of permanent pasture was 28 % and other land accounted for 1.2 % of total utilised agricultural land.
According to the results of the 2013 agricultural structure survey, Bavaria held the largest share of organically farmed land among all Länder with around 21%, followed by Brandenburg with 13% and Baden-Württemberg with just under 12%. The conversion to organic farming is promoted to varying degrees by the individual Länder.

According to Eurostat statistics, a total area of 11.14 million hectares was organically farmed in the states of the EU 28 in 2015. With reference to the total of all agriculturally utilised land in individual EU countries, the highest shares of organic farming land was recorded in Austria with 20.3%, followed by Sweden with 17.1%, Estonia with 16.3% and the Czech Republic with 13.7%.

Federal Government activities

The Federal Government regards organic farming as an essential contribution to achieving the guiding principle of agricultural policy. Organic farming is a particularly resource-efficient and environmentally compatible form of agriculture, the products of which are appreciated by a growing number of consumers who accept the higher consumer prices. Due to the principles of organic farming (e.g. recycling management, area-based and particularly humane husbandry), the conversion to this form of agriculture opens up development prospects for the future, especially for small and medium-sized family farms. The declared goal of the Federal Government is thus for 20% of agricultural land to be organically farmed.

Previous measures

Between 1994 and 2014, the land share of organic farming increased from 1.6% of agricultural land to just 6.3%. In order to increase the growth rates and achieve a land share of 20% in the near future and not decades from now, the Federal Government initiated the development of organic farming as a strategy for the future in 2015. Representatives of the organic food industry are working together with the Länder, the relevant associations and science to develop concepts and recommendations for central areas of action. Such a strategy for the future is to be presented at the beginning of 2017, at which point its implementation can commence. The new indicator “Market share of goods and services certified by independently verified sustainability labelling schemes” in SDG 12 also includes food produced according to the criteria of organic farming and therefore also promotes organic farming.

Planned additional measures

Against this backdrop, the basic political conditions are analysed and strategies for improving the relative superior quality of particularly sustainable production methods such as organic farming are developed as part of the strategy development process. As the cause-and-effect relationships are rather complex, the strategy for the future is to bundle and link selected central areas of action. These areas of action are to be selected in a pragmatic fashion, based on the guiding question “What can be done on the national level in particular?”

Statement from the Dialogue on Sustainability

“The main problems in industrialised countries are (...) the (side) effects of modern agriculture (nitrate, cleared landscapes, clean crop land, residual pesticides); thus, a better regulation of conventional agriculture in the European context would be a stronger measure. Further, organic farming should be promoted as the engine of sustainable agriculture.”

German Development Institute

The main focus is to be on suggestions that help organic farming to grow and improve the sustainability performance of organic farming. In this respect, the strategy for the future is to provide additional and efficient support to other approaches from a national level. These include in particular measures implemented by the Länder to strengthen domestic organic farming, such as action programmes or ecological model regions.

The suggestions and measures for the food sector specified in the National Programme for Sustainable Consumption are also suitable for strengthening organic farming. The Federal Government will thus campaign for the ambitious implementation of the project. Given that there is still a long way to go to reach the target, the Federal Government will also check which additional measures can be implemented to promote organic farming. This also includes the coherence of measures, in particular the extent to which other policy areas impair organic farming.
3. Ensure healthy lives and promote well-being for all at all ages

a) Basic content and political priorities from the point of view of the Federal Government

Improving the health of all people on Earth is a central concern of the 2030 Agenda. In this context, health represents not only an important asset by itself. It is also the goal, prerequisite and result of sustainable development at the same time. Health is a human right that acknowledges the right for all to an achievable maximum of physical and mental health. It includes the availability of a sufficient number of public healthcare facilities that provide adequate care as well as non-discriminatory access to the available healthcare facilities.

The associated targets in detail

Taking up the “unfinished business” of the Millennium Development Goals, SDG 3 continues with the endeavour to reduce maternal mortality (3.1) and the deaths of newborns and children under five years of age (3.2) and to end AIDS, tuberculosis, malaria, neglected tropical diseases, hepatitis and other communicable diseases (3.3). In addition, it addresses premature mortality from non-communicable diseases as well as mental health (3.4), substance abuse (3.5), deaths and injuries from road traffic accidents (3.6), universal access to sexual and reproductive healthcare services (including for family planning and education, 3.7) and deaths and illnesses from chemicals and air, water and soil pollution and contamination (3.9). Target 3.8, which envisages universal health coverage and access to quality essential health-care services and affordable essential medicines, is particularly noteworthy. In order to implement SDG 3, the implementation of the World Health Organization Framework Convention on Tobacco Control is to be strengthened (3.a), research and development of vaccines and medicines for developing countries is to be supported (3.b). Health financing and the qualification of the health workforce in developing countries is to be increased substantially (3.c) and the capacity of all countries for early warning and management of health risks is to be strengthened (3.d). The Ebola epidemic in West Africa emphasised in a dramatic way just how necessary these measures are.

National importance

The German healthcare system is regarded internationally as a model for universal coverage in the event of illness. Nonetheless, its effectiveness must be reviewed and refined continuously in Germany, too. This affects, for example, the reduction of waiting times for appointments with medical specialists and psychotherapeutic care. Roughly 87% of the German population have statutory health insurance; the remaining citizens either have private health insurance or are covered by special forms of healthcare, for example free healthcare provided by the German armed forces. Germany’s healthcare policy places a special emphasis on prevention, i.e. measures intended to prevent diseases or reduce the risk of illness. This includes health-related education, for example on healthy diets, the risks of tobacco, alcohol and drug abuse as well as exercise as important elements of healthcare. Sporting activities promote mental health and self-confidence and help to cope with stress. Healthy environmental conditions and accessible natural spaces provide a variety of leisure time activities as well as recreation and experiences with nature which, in turn, contribute to physical and mental well-being.

Demographic change represents a particular challenge when it comes to achieving the targets of SDG 3: While the number of elderly people is rising, the workforce is smaller as compared to previous ratios. To cope with this challenge, the Sustainability Report by the Federal Ministry of Finance (BMF) determines the development of public finances (currently until 2060) and thus serves as an early warning system for predictive financial policy. In order to confront poverty, isolation and heteronomy in old age, homes and accommodation must be designed to be age-appropriate, decentralised and outpatient medical care must be provided, and home care in a familiar environment must be guaranteed for as long as possible and must remain affordable.

Federal Government activities

I. Measures in Germany

The concept of prevention anchored in SDG 3 is the focus of the German healthcare policy: The Preventive...
Health Care Act adopted in mid-2015 strengthens health promotion and prevention in citizens’ environments, i.e. in schools, daycare centres and companies, refines services for the early detection of illnesses provided by health insurance companies, and improves cooperation between company-based health promotion and occupational safety. For example, doctors are to inform their patients about recommended vaccinations as part of preventive medical counselling in future. Before children are accepted into a daycare centre, parents are to participate in obligatory medical counselling on the topic of “vaccine protection”.

The “Act to strengthen assistance for pregnant women and to regulate confidentiality of childbirth” that took effect on 1 May 2014 also takes this concept of prevention into account. The procedure introduced with the act supports women who are in a situation of conflict and wish to keep their pregnancy and motherhood a secret for various different reasons. The act establishes comprehensive counselling services for these women and provides the possibility of delivering a child with professional medical aid. The aim of this service is to prevent deliveries performed without medical support as well as infanticide and abandonment of children.

II. Measures by Germany

1. The concept of the Federal Government

The Federal Government has established a framework for cross-departmental global healthcare policy with the concept “Global Health Policy – Taking Joint Action – Embracing Responsibility”. This constitutes an important contribution to solving global health-related challenges, such as the worldwide fight against the spreading of cross-border health risks.

2. Improvement of international crisis management in the event of an epidemic

Effective global health crisis management, in particular the preparation for and overcoming of pandemics, is a central concern of the German Federal Government. In January 2015, Chancellor Angela Merkel presented a six-point plan for improving international crisis management in the event of an epidemic. This plan aims to create a comprehensive concept that links the personal, logistical, financial, as well as institutional (WHO) and medical aspects of crisis management. Together with Ghana and Norway, the German Chancellor launched an initiative in the United Nations to elaborate this comprehensive approach. UN Secretary General Ban Ki-moon then established a high-level commission that submitted a report entitled “Strengthening the Global Health Architecture”, which contains 27 concrete proposals for improving global health architecture, at the beginning of 2016. Implementation of these recommendations has been followed up since mid-2016 by the new “Global Health Crises” Task Force appointed by the UN Secretary General.

Germany supports the Pandemic Emergency Financing Facility of the World Bank, which represents an innovative solution for the first global coverage of the risk of a pandemic. The aim is to prevent pandemics from spreading in future by promptly providing sufficient financial resources. In addition, Germany is paying into the new WHO emergency fund. Quick response forces for the better detection of and response to health risks have already started working in Germany and the EU.

To strengthen the research into and development of vaccines against pathogens that can trigger dangerous epidemics, Germany is participating in the international initiative “Coalition for Epidemic Preparedness Innovations” (CEPI). The objective of CEPI is to halt epidemics before large-scale health risks arise and lead to humanitarian catastrophes.

3. Strengthening healthcare systems

The strengthening of national healthcare systems is a fundamental element of global crisis management. Taking the six-point plan as a basis, Germany has initiated the roadmap “Healthy Systems – Healthy Lives” in cooperation with the WHO. It identifies key topics (e.g. sustainable financing, connection to questions of good governance, training of skilled workers), defines key areas for measures and specifies concrete steps for strengthening the healthcare system.

Over the next four years, Germany will support the strengthening of healthcare systems in Africa in particular by providing EUR 600 million as part of a special programme which is financed by the BMZ.

4. Strengthening the World Health Organization

As a UN specialised agency for global health, the World Health Organization takes on a superordinate coordinating role in the global health architecture. Among the 194 member states, Germany is the third largest regular contributor behind the USA and Japan. The Federal Government is campaigning for strengthening the World Health Organization and using its membership in the administrative bodies to actively shape the reform of the World Health Organization and align it with the 2030 Agenda.

5. Health and environmental protection

In its bilateral and multilateral cooperation, the Federal Government addresses the enormous health-related consequences of environmental pollution and calls attention to their consequences for the economic development of these countries. From an economic perspective, preventive environmental protection is less costly than the subsequent battle against environmental pollution and health-related risks.
III. Measures with Germany

1. The “unfinished business” of the Millennium Development Goals

With regard to cooperation with developing countries, the targets that build on the Millennium Development Goals still represent priority areas of action: improvement of mother-child health, access to sexual and reproductive health services and the realisation of sexual and reproductive rights as well as the fight against and eradication of communicable diseases. The “Initiative on Rights-Based Family Planning and Maternal Health” aims to help ensure that every birth in the partner countries is wanted and supervised by a medical professional. On the multilateral level, Germany makes financial contributions to the Global Alliance for Vaccines and Immunization (GAVI), the Global Fund to Fight AIDS, Tuberculosis and Malaria and the United Nations Population Fund.

2. Research and development

The Federal Ministry for Education and Research’s research funding concept for neglected and poverty-related diseases, “Global health in the focus of research”, bundles research activities for the benefit of the health of people in poorer countries and coordinates German research efforts in this area. As a result of the G7 process, the BMBF will coordinate research and development efforts and provide the necessary data in cooperation with G7 partners and other stakeholders.

b) Relevant national sustainability indicators and objectives/measures

3.1.a/b Premature mortality

Health and nutrition – Living healthy longer

**Premature mortality**

Deaths per 100,000 population below the age of 70 (excluding those under 1 year of age)

<table>
<thead>
<tr>
<th>Year</th>
<th>Women</th>
<th>Men</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>492</td>
<td>315</td>
<td>100</td>
</tr>
<tr>
<td>2000</td>
<td>450</td>
<td>294</td>
<td>100</td>
</tr>
<tr>
<td>2030</td>
<td>150</td>
<td>149</td>
<td>190</td>
</tr>
</tbody>
</table>

**Definition of the indicators**

The indicator includes fatalities among females (3.1 a) and males (3.1 b) in the population below 70 years of age with reference to 100,000 inhabitants of the “old” standardised European population below 70 years (excluding those less than 1 year old).

**Target and intention of the indicators**

By 2030, premature mortality among women (3.1.a) should not exceed 100, and for men (3.1.b), it should not exceed 190 fatalities per 100,000 inhabitants.

**Content and progress of the indicators**

The data sources are the causes of death statistics and the population statistics issued by the Federal Statistical Office. As part of the causes of death statistics issued by the Federal Statistical Office, all official death certificates are recorded and evaluated. The population statistics specify the current population based on the results of the most recent census. The data refers to the “old” standardised European population of 1976. Those under 1 year of age and therefore the infant mortality rate are excluded from the assessment, in contrast to the...
Premature mortality has steadily decreased between 1991 and 2014, for women (−36 %) and for men (−43 %). As a result of this decrease, the gender difference in premature mortality has also reduced. In 2014, for example, 149 women and 281 men per 100,000 inhabitants died before they reached the age of 70. If this trend continues unchanged, the gender-specific targets for 2030 would not be achieved, although only by a slim margin in the case of men. The computational adjustment does not constitute a forecast and the target realisation is therefore generally possible.

In accordance with the steady decrease in premature mortality, the trend for life expectancy in Germany continued developing in a positive direction. 70-year-old women today can expect, statistically, to live another 16.8 years and 60-year-old men another 14.1.

Between 2012 and 2014, the average life expectancy for new-born girls was 83.1 years of age and for boys 78.1 years of age, which was 0.4 years higher for both genders than the average for the years 2009 to 2011. Differences in life expectancy between the western Länder and the eastern Länder (each excluding Berlin) are to be seen only among new-born boys. In this case, a difference of 1.3 years continues to apply.

The largest share of all causes of premature mortality in 2014 was malignant neoplasms with 38.9 %, followed by cardiovascular diseases with 21.2 %. Fatalities due to external causes (such as accidents, poisoning, suicide) made up a significant share of 9.0 %. Diseases of the digestive and respiratory tracts contributed with figures of 6.9 % and 4.9 % respectively. Since 1991, the share of malignant neoplasms and diseases of the respiratory tract among all causes of death increased (by 17.2 % and 22.5 % respectively). In contrast, causes such as cardiovascular diseases (−31.7 %), external causes (−18.2 %) and diseases of the digestive tract (−9.2 %) have declined.

Besides factors such as health behaviour (see also indicators for the smoker rate or for obesity), medical care also plays an important role in the mortality rate. Expenditure on health care rose to EUR 328 billion in 2014 – corresponding to an increase of EUR 13.3 billion or 4.2 % compared with 2013. This level of spending represented 11.2 % of the gross domestic product (similar to the previous year) or EUR 4,050 per capita (2013: EUR 3,902).

Federal Government activities

Previous measures

The “Premature mortality” indicator is a superior, complex indicator whose favourable influence depends on numerous measures that extend beyond the basic field of health. As regards the area of healthcare policy, particular mention should be made of the continuous measures for improving medical care. Most recently, these included the Act to Further Improve the Financial Structure and Quality of Statutory Health Insurance (GKV), the Statutory Health Insurance Care Provision Strengthening Act, both of which took effect in 2015, and the Hospital Reform Act that has been in force since 2016. These reforms of the healthcare system ensure that easily accessible and high-quality medical care is available now and in the future. In addition, there are various measures that aim to improve the care available to specific groups of diseases. For the area of cancer, these include, for example, the National Cancer Plan, the law for the development of early cancer detection and quality assurance by clinical cancer registries. There are also measures for strengthening prevention and health promotion, most importantly the Preventive Health Care Act that took effect in July 2015. One central focus of the law is to strengthen health promotion in the people’s environments, such as daycare centres, schools, companies and care facilities. Measures that promote a healthy lifestyle with sufficient exercise and a balanced diet and measures for reducing the consumption of tobacco, which are listed under the two indicators “obesity” and “smoking rate”, are particularly important here. The environment-related approach of intervention was selected because it is suited for allowing low-threshold access to health-promoting offers for everyone. Moreover, it can contribute to reducing socially induced inequality in terms of healthcare opportunities. This aim is strongly highlighted in the Preventive Health Care Act.

Planned additional measures

The previous measures in the areas mentioned above are continued, refined and expanded.
3.1.c/d Smoking rate

Health and nutrition – Living healthy longer

Definition of indicators

The smoking rate among adolescents (3.1.c) reflects the share of 12 to 17-year-olds who indicate that they smoke regularly or occasionally.

The smoking rate among adults (3.1.d) indicates the share of those surveyed aged 15 and above who answered the questions in the microcensus regarding smoking behaviour and who smoke regularly or occasionally.

Target and intention of the indicators

Smoking poses a risk of serious health impairment and premature death. And this risk is not confined to smokers themselves. Non-smokers exposed to tobacco smoke do not just suffer annoyance but can also fall ill from it. The Federal Government is pursuing the goal of reducing the percentage of juvenile and adolescent smokers to under 7% by 2030, and that of all smokers aged 15 years and older to 19%.

Content and progress of indicators

The data for young people is compiled by the Federal Centre for Health Education as part of telephone interviews. The survey has been conducted almost annually since 2000. In 2015, the random sample used included 4,903 interviewees. In contrast to previous studies, this study also took the education of those surveyed into account in order to weight the data. Without this weighting, people of lower education are under-represented while those of higher education are over-represented. In the case of survey features, such as smoking, that are linked to education levels, the education weighting compensates for these types of distortions in the survey results.

The data for adults is surveyed every four years as part of the microcensus conducted by the Federal Statistical Office. The intermediate years in the data series are interpolated. The microcensus is the largest household survey in Germany and Europe. The sample survey includes 1% of the total population. Since the microcensus is a representative survey, the data recorded is not weighted according to education level. The responses to the questions regarding smoking habits are voluntary and were provided by 80% of those surveyed in 2013.

In the group of adolescents between 12 and 17 years of age, the proportion of smokers initially increased from 24% (1995) to 28% (1997 and 2001), but then declined steadily to 8% by 2015. In this context, there appears to be no difference in smoking behaviour between the genders. If the trend seen in recent years continues, the target value set for 2030 will be achieved in the near future.

In 2013, a total of 24% of the overall population above the age of 15 indicated that they smoked occasionally or regularly. This compares with a figure of 28% in the years from 1995 to 1999. This meant that the rate for adult smokers had declined only slightly. If the trend remains unchanged in accordance with the previous five-year average, the target for this sub-indicator will also be fulfilled.
In 2013, 21% of all adults aged 15 years or older considered themselves regular smokers, while 4% smoked occasionally (the deviation in the total is due to rounding). The rate among women (20%) was significantly lower than for men (29%). While the proportion of women remained virtually unchanged since 1995, the proportion of male smokers decreased by 7 percentage points.

In 2013, 97% of the smokers surveyed preferred cigarettes. The level of tobacco consumption is important when considering the individual threat to health. Twelve per cent of regular cigarette smokers were in the category of heavy smokers (1995: 17%) with a consumption of more than 20 cigarettes a day, whereas 81% smoked 5 to 20 cigarettes a day. In this case, there were differences between the genders. Almost one in six of male regular cigarette smokers was a heavy smoker, but only one in twelve of the female smokers.

Smoking poses a high and at the same time avoidable risk to health. In 2014, 5.4% of all fatalities (3.5% among women, 7.3% among men) could be attributed to symptomatic diseases for smokers (lung, bronchial, laryngeal and tracheal cancer). In 2014, the average age of those who died of lung, bronchial, and tracheal cancers was 71.1 years and therefore seven years below the average age of all fatalities (78.1 years). A reduction in the number of smokers would therefore help reduce premature mortality.

Federal Government activities

Previous measures

The Federal Government is conducting numerous measures with the aim of reducing the smoking rate both among children and adolescents and among adults significantly. The measures have already been very successful among children and adolescents. The prevalence figures among adults also indicate a positive trend that needs to be reinforced. The further reduction of tobacco consumption is also an important goal with regard to the costs of roughly EUR 79 billion per year that are caused by the consumption of tobacco.

In order to further stabilise this encouraging development, a revised health target, “Reduce tobacco consumption”, was adopted on the basis of previous experience and current scientific insights. The new aims that were specified are: 1. Adolescents and young adults remain non-smokers; 2. The number of people who quit smoking is increased in all age groups; 3. Comprehensive protection against passive smoking is ensured.

The German Tobacco Products Act and Tobacco Products Ordinance, which took effect when the EU Tobacco Products Directive was implemented on 20 May 2016, are to contribute to the reduction of the smoking rate. One of the measures envisaged by the regulations is to print large-scale health-related warning notices in the form of texts and images on the packaging for cigarettes, tobacco for hand-rolled cigarettes and water pipe tobacco.

Planned additional measures

Ongoing and future measures relating to behavioural and structural prevention are based on these aims and form the basis for achieving the new ambitious aims. Clear no-smoking rules were also added to youth protection with the Act to Protect Children and Adolescents from the Dangers Resulting from the Consumption of Electronic Cigarettes and Electronic Shishas. The Federal Government regards the positive development as an encouragement to pursue its various measures, for example the “rauchfrei” (smoke-free) campaigns initiated by the Federal Centre for Health Education, and to thereby continue on its course to reduce tobacco consumption.
3.1.e/f Obesity rate among adults and adolescents

Health and nutrition – Living healthy longer

**Definition of the indicator**

The indicator shows the proportion of 11- to 17-year-old adolescents suffering from excess weight and obesity.

**Target and intention of the indicator**

Obesity among adolescents poses a danger to normal development in that age group. Exclusion and withdrawal from society are the consequences and lead to additional health and social problems. A majority of adolescents already classified as obese will continue to suffer from obesity as adults. For this reason, the proportion of obese adolescents in Germany should not be allowed to increase any further.

**Content and progress of the indicator**

The Body Mass Index (BMI) is a benchmark that is used to measure excess weight and obesity. It is calculated by dividing the body weight in kilograms by the square of an individual’s height in metres. This calculation does not take age-specific and gender-specific differences into account. Nor does it indicate the individual body mass composition. Obesity and excess weight among children and adolescents are defined by taking age and gender into account and comparing them with a defined comparison group (reference population). The percentile reference values according to Kro-meyer-Hauschild as recommended by the “Arbeitsgemeinschaft Adipositas im Kinder- und Jugendalter” (AGA) are used as a comparative benchmark. According to these values, children and adolescents are considered to be overweight if their BMI value is above the 90th age- and gender-specific percentile of the reference population. This means that they fall within the range of those 10 % of the reference group with the highest BMI values. A BMI value above the 97th percentile of the reference population (that is, as high as the 3 % of adolescents with the highest BMI values) is classified as obesity. These reference values are based on details of body size and weight that were recorded between 1985 and 1998 in various regions of Germany using different methods.

The data for the indicator are gathered by the Robert Koch Institute. The German Health Interview and Examination Survey for Children and Adolescents (KiGGS, – referred to as the KiGGS baseline study) for the period 2003 to 2006 delivered the first nationwide representative results. In 2015, new results for the reporting ears 2009 to 2012 were published (KiGGS Wave 1).

In the years 2009–2012, 10.0 % of adolescents were classified as obese. The proportion of girls was 10.3 % and of boys 9.6 %. In the years 2003–2006, the proportion of adolescents suffering from obesity was 8.9 %. This equated to 9.6 % of girls and 8.4 % of boys. The
obesity rate among adolescents has therefore increased slightly.

In contrast, the prevalence of excess weight has fallen slightly (by 1 percentage point to 8.9%) over the same period. Here, the proportion of overweight girls has decreased, while the proportion of overweight boys has increased slightly. As a result, in total the proportion of overweight and obese adolescents has remained roughly the same.

The widely discussed factors influencing excess weight and obesity include social status, parental education and migrant backgrounds. The lower the social status, the more frequent the incidence of excess weight and obesity. This correlation is more pronounced among girls than boys.

An opposite phenomenon to excess weight is underweight. A BMI value below the 10th percentile of the reference population is deemed to indicate underweight. The proportion of underweight adolescents has developed in a positive direction over the last few years, falling from 7.1% to 6.4%. In this context, a decrease can be seen in particular among girls (from 6.5% to 5.2%), while the proportion of boys (7.7%) has remained unchanged. Overall, more boys than girls are affected by underweight.

Definition of the indicator

The indicator shows the proportion of adults (aged 18 years and older) suffering from obesity in the total adult population.

Target and intention of the indicator

Excess weight plays a crucial role in the emergence of diseases of civilisation, such as cardiovascular diseases, diabetes and joint injuries. Besides the consequences to health, excess weight is also a burden on the national economy and has a negative impact on social life. Consequently, the proportion of the population with obesity in Germany should not to increase any further.

Content and progress of the indicator

Obesity is calculated with the help of the Body Mass Index (BMI), which is calculated by dividing the body weight in kilograms by the square of an individual’s height in metres. People with a BMI of 25 and above are classified according to the WHO as “overweight” and those with a BMI of 30 as “obese”. The BMI is a benchmark that does not take into account the physique, age- and gender-specific differences as well as the individual body mass composition.

The data used for the indicator is based on the microcensus conducted by the Federal Statistical Office. The sample survey is conducted for 1% of the total population and responses to the health questions, which are generally conducted every four years, are provided on a voluntary basis. Consequently, the indicator is based on the proportion of the population with a BMI of 30 and higher that also answered the questions concerning body weight and body size in the microcensus. The corresponding data was standardised relative

Data for interim years was interpolated. Age-standardised results based on the new European population.

Source: Federal Statistical Office

© Statistisches Bundesamt (Destatis), 2017
to the European population of 1990 to enable comparisons of data from different years and regions without distortions due to different age structures. Since the questions on health in the microcensus are not asked annually, the intermediate years in the chart were interpolated.

In 2013, 14.1 % of the population in Germany over the age of 18 was classified as obese. Here, the share of obese women (12.8 %) was lower than that of obese men (15.4 %). Before, in 1999, the percentage of obese persons was only 10.7 % of the population. At that time, the proportion of women (10.2 %) affected by obesity was slightly lower than that of men (11.1 %), too. The obesity rate among adults has therefore increased and has developed contrary to the goal envisioned by the German Sustainable Development Strategy.

The proportion of adults suffering from obesity increases with age, and the trend reverses only among people of very advanced age. In 2013, 2.8 % of 18- to 20-year-old women were obese. By the age of 30 to 35, 9.5 % of women were obese, and 15.0 % had become obese by the time they were between 50 and 55. The highest proportion of obese women (20.8 %) was found in the age group between 60 and 65 years of age. After this age, the figures fell slightly. The obesity rate among men of the same age was higher in each case, reaching its highest proportion of 24.7 % in the age group of 60- to 65-year-olds.

In 2013, 34.0 % of the population over the age of 18 was classified as overweight (BMI between 25 and below 30). Again, the proportion of women (26.2 %) was lower than that of men (41.5 %). Being underweight, i.e. having a BMI lower than 18.5, is the opposite phenomenon to that of obesity. In 2013, the share of women who were underweight (4.0 %) was considerably greater than the share found in men (0.9 %). In fact, 13.0 % of young women between 18 and 19 years of age were underweight, and 8.9 % were still underweight at age between 20 and 24.

Federal Government activities

Previous measures

Given that excess weight and obesity can be prevented by a healthy lifestyle with a sufficient amount of exercise and balanced diet, the Federal Government has taken numerous measures that are to promote a healthy lifestyle:

For example, the “Act to Strengthen Health Promotion and Preventive Health Care” (Preventive Health Care Act – “PrävG”) is to prevent or delay chronic, lifestyle-dependent illnesses. The prevention of excess weight and obesity is a multidisciplinary issue of the Preventive Health Care Act whose behavioural and structural measures can be applied to several diseases.

The Federal Government places a special focus on the prevention of excess weight and obesity among children and adolescents. The success factors for permanently successful measures are determined and distributed, the quality of projects is improved, their effectiveness is identified and needs- and target group-oriented information material is prepared and distributed on the basis of existing structures. Furthermore, there is a plan to establish a Federal Centre for Nutrition (BZfE), where the BMEL will bundle the previous activities of the Federal Office for Agriculture and Food (BLE) and the “aid” info service for education, information and communication on nutrition and the improvement of the nutrition and provisions situation in Germany in future. The new national quality centre for healthy diets in daycare centres and schools is also to be part of the BZfE. One of the centre’s tasks will be to coordinate the work of the networking offices for catering in schools and some daycare centres that are funded by the Federal Government and the Länder on a national level and to distribute information on the topic of healthy diets in daycare centres and schools. Accompanying initiatives for the improvement of education on nutrition in Germany will also be implemented.

The Federal Centre for Health Education and the “aid” info service have also been involved in the prevention of excess weight among children and adults for many years. Guidelines for the people involved were developed to help ensure the quality of their work. Parents are given useful and true-to-life information on how to implement a health-promoting lifestyle in everyday life. Teachers, child care workers and consultants are given target group- and age-appropriate materials, sometimes in combination with suitable training opportunities, for scientifically secured and practical education and advice.

Planned additional measures

The previous measures mentioned above are continued and refined. For example, the national action plan “IN FORM – Germany’s national initia-
tive to promote healthy diets and physical activity”, which is implemented jointly by the BMEL and the Federal Ministry for Health (BMG), is being refined. Standards, guidelines for the quality assurance of projects as well as offers of education and information have been developed in the context of around 170 measures so far, and supporting structures and networks have been created. The offers are addressed primarily to multipliers, but citizens are also approached directly.

### 3.2.a Emissions of air pollutants

**Air pollution – Keeping the environment healthy**

#### Definition of the indicator

The indicator presents the mean value of the index of national emissions of the five air pollutants sulphur dioxide (SO\(_2\)), nitrogen oxides (NO\(_x\)), ammonia (NH\(_3\)), volatile organic compounds (NMVOC) and particulate matter (PM\(_{2.5}\)).

#### Target and intention of the indicator

Air pollutants not only impair human health, but also ecosystems and biodiversity. Therefore, emissions of air pollutants should be reduced by 45 % by 2030 compared to 2005. To represent the development of health-relevant as well as ecosystem pollution, German emissions of SO\(_2\), NO\(_x\), NH\(_3\), NMVOC and PM\(_{2.5}\) have been summarised into a single indicator.

#### Content and progress of the indicator

In accordance with the “National Emission Reduction Commitments” negotiated at European level (NERC Directive), Germany is required to reduce emissions of individual air pollutants as follows by 2030: SO\(_2\) by 58 %, NO\(_x\) by 65 %, NH\(_3\) by 29 %, NMVOC by 28 % and PM\(_{2.5}\) by 43 %. On this basis, the German Environment Agency calculated a non-weighted, arithmetic mean of the individual reductions in the specified air pollutants cumulated in one target. The rates of change of the individual air pollutants are offset equally against one another. Independent of the individual reduction targets arising from the NERC Directive, this means that increasing emissions of single pollutants of this indicator may be offset by higher reductions of emissions of other pollutants.

The data is computed annually by the German Environment Agency using various sources. It serves as a basis for the reporting obligation pursuant with the Geneva Convention on Long-Range Transboundary Air Pollution and the NERC Directive. The data undergoes further editing as part of the Environmental-Economic Accounting reports issued by the Federal Statistical Office. As a result, emissions are divided according to various production areas and private households along with other emitters.

Emissions of air pollutants overall fell by 16.1 % up to 2014 in comparison to 2005. In so doing, the indicator...
has moved in the desired direction, but the trend must be accelerated if the goal is to be achieved by 2030. Emissions of individual pollutants changed to varying degrees in the period from 2005 to 2014.

Emissions of volatile organic compounds (NMVOC), which arise primarily due to the industrial use of solvents, were significantly reduced during the specified period by 26.8%. Consequently, the targeted reduction of 28% by 2030 has almost been achieved.

Emissions of particulate matter ($\text{PM}_{2.5}$) have been reduced by 20.1% in the specified period. If this annual trend continues, the set reduction target will be missed by just under 20%. The largest proportion of $\text{PM}_{2.5}$ emissions, at 28.6%, originated from households and small consumers and arose in particular from the generation of heat. The transport sector accounted for 22.9% of $\text{PM}_{2.5}$ emissions in the same year.

Emissions of nitrogen oxides ($\text{NO}_x$) decreased by 24.5% up to 2014, and those of sulphur dioxide ($\text{SO}_2$) by 18.1%. Although these emissions developed in the targeted direction, the average reduction achieved in recent years will not be sufficient to achieve the set goals. The majority of nitrogen oxides and sulphur dioxide emitted in 2014 came from the transport sector and the energy industry.

Following a prolonged period of stagnation, emissions of ammonia increased by a total of 9.1% between 2005 and 2014 and are therefore moving contrary to the desired direction. The increase can be attributed primarily to the production of digestate from the fermentation of fuel crops. According to calculations by the German Environment Agency, 95.1% of all domestic ammonia emissions in 2014 originated from agricultural production, and from livestock farming in particular.

**Federal Government activities**

Emissions of air pollutants have damaging effects on human health, ecosystems and materials and cause considerable economic damage. Air quality control is therefore a priority area of the environmental policy that exhibits strong synergies with other environmental policy-related fields and other policies, in particular transport, agricultural and healthcare policies.

This indicator is an update of an indicator that mapped the period from 1990–2010 and has existed since the strategy was first issued. It provides information on targets 3.9, 11.6, 15.1 and 15.2.

**Previous measures**

Thanks to an effective set of regulations on the EU and national levels, the emissions of most air pollutants in Germany and Europe have decreased significantly over the last decades. As a significant part of long-range pollution with harmful substances is caused by transboundary emissions, emission reductions must be coordinated on the EU level and the international (UNECE) level. The potential for reducing emissions varies strongly in different countries and sectors. The EU’s Environmental Action Programme, for example, aims “to achieve levels of air quality that do not give rise to significant negative impacts on, and risks to, human health and the environment”. The programme states that this requires efforts to ensure comprehensive compliance with the air quality regulations of the Union and the determination of strategic targets and campaigns for the time after 2020 in particular.

The aim of the new EU Directive on the national obligation to reduce emissions (NERC Directive) is to achieve an EU-wide reduction of premature deaths caused by particulate matter by 50% and, at the same time, to reduce the effects of nitrogen and acid inputs into ecosystems and lower the ozone levels considerably. Following the approval of the Council and in accordance with Annex II of this Directive, Germany will have to significantly reduce the emission of the following air pollutants by the following percentages as compared to the base year of 2005 by 2030. $\text{SO}_2$: 58%, $\text{NO}_x$: 65%, $\text{PM}_{2.5}$: 43%, NMVOC: 28% and $\text{NH}_3$: 29% in due consideration of the agreed exceptions and flexibility regulations.

**Planned additional measures**

National air quality control programmes must be developed in order to implement these obligations. The measures specified by the member states on all levels (international, EU, Federal Government, Länder, local authorities) are to ensure that the reduction obligations are achieved.
**3.2.b Share of the population with increased exposure to PM10 in Germany**

**Air pollution – Keeping the environment healthy**

**Definition of the indicator**

The indicator shows the number of persons who are exposed at their place of residence to an annual average of more than 20 micrograms (µg) of PM$_{10}$ particulate matter (dust particles with a diameter less than 10 µm) per m$^3$ of air.

**Target and intention of the indicator**

The inhalation of particulate matter has been shown to be harmful to health. The particles are absorbed via the respiratory system and lead to respiratory diseases. Therefore, the World Health Organisation’s recommended guideline value for particulate matter of an average of 20 µg per m$^3$ air annually should be achieved, if possible, nationwide in Germany by 2030.

**Content and progress of the indicator**

The particulate matter (PM$_{10}$) contained in the air is recorded at a total of more than 370 air measurement stations both in metropolitan and rural areas for all of Germany. However, the computation of this indicator only takes account of those measuring stations that record no direct particulate matter emissions from transport, as these regularly map only elevated peak values rather than general pollution levels. This recorded data which is called background pollution is used in a model to determine the number of persons who are exposed to average annual particulate matter pollution of more than 20 µg per m$^3$ air in their place of residence.

Rather than mapping comprehensive adherence to the guideline value, the indicator maps adherence with reference to the population’s places of residence. Neither does it shed any light on the level of exposure or its variation throughout the year. In addition, this indicator makes no provision for the separate analysis of pollution caused by finer dust particles (PM$_{2.5}$).

The last few years have seen a significant reduction in background pollution caused by PM$_{10}$. Whereas the average pollution exposure of the population was 20.7 µg per m$^3$ air in 2007, it was just 17.3 µg per m$^3$ in 2014. During the same period, the number of people exposed to an annual average of more than 20 µg PM$_{10}$ per m$^3$ air has also fallen significantly – from around 50 million people in 2007 to around only 12 million people in 2014.

If the average trend over the past few years continues, the goal of a nationwide reduction of particulate matter to below 20 µg per m$^3$ air on average can be achieved.

**Federal Government activities**

In Germany and in the EU, a majority of the population is exposed to a level of air pollution that lies above the standards recommended by the World Health Organization. Particulate matter pollution has a significant impact on human health, especially respiratory and cardiovascular...
diseases. Calculations by the German Environment Agency reveal that approximately 43,500 premature deaths in Germany in 2013 were caused by air pollution with particulate matter. Particulate matter pollution is caused not only by primary emissions, but also by emissions of harmful gases that react in the air to form particulate matter (secondary particulate matter).

**Previous measures**

Over the past decades, the concentration of particulate matter has been reduced significantly thanks in particular to measures taken for power plants, industrial facilities, vehicles including mobile machines and small-scale furnaces. In view of the considerable problems caused by the effect particulate matter has on health, which remain nonetheless, the EU Environmental Action Programme aims to approximate the values recommended by the WHO. This requires in particular the implementation of an updated policy on air quality control that takes into account the latest scientific insights and the development and implementation of measures to combat air pollution at the source.

**Planned additional measures**

In order to approximate the WHO recommendations more closely, additional measures for reducing the emission of primary particulate matter and the precursors of secondary particulate matter must be checked. The test results are compiled, for example, as part of national action plans of the future NERC Directive.
4. **Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

a) **Basic content and political priorities from the point of view of the Federal Government**

Education is a crucial factor that decides on people’s opportunities to develop their individual skills, realise their professional aims, participate in and shape their society. Thus, education is a human right. SDG 4 aims to achieve inclusive, equitable, high quality and lifelong education.

**A comprehensive understanding of education as a lesson from the MDGs**

While Millennium Development Goal 2 was focused on primary education, SDG 4 is based on a broad understanding of education and a comprehensive sustainability approach. In this context, the target to achieve universal secondary education by 2030 was set for the first time.

**Structure of the SDG**

The SDG is based on the concept of lifelong learning and thus covers the entire spectrum from early childhood education, schooling and care, primary education, university and vocational education (4.1–4.4). Gender equality and inclusion (4.5) as well as fighting illiteracy (4.6) are also items in the catalogue of goals. Target 4.7 marks the first time that education for sustainable development is listed explicitly as a separate important area of action. The UN member states have committed in particular to building educational facilities (4.a), substantially expanding the number of university scholarships for people from developing countries (4.b) and to substantially increasing the supply of qualified teachers (4.c) as means of implementation.

**National importance**

The level of and participation in education in Germany have increased in all educational areas over the last years. Despite the improvements with regard to equal opportunities, social background still has a major effect on the educational opportunities and future prospects of young people. Increasing the opportunities for all children and adolescents to obtain an education and participate therein is therefore a central aim of the Federal Government. According to the constitutional allocation of competencies, the responsibility for education lies with the Länder in Germany. The Federal Government has relieved the Länder significantly to allow them to better handle their tasks of financing nurseries, daycare centres, schools and universities. It also supports the Länder by providing research funding, helping to expand student capacities at universities, with national projects and projects under the European Social Fund in the areas from early childhood education to school education and all the way to vocational education, and projects to help balance work and family life.

In view of the constantly changing labour market, it is necessary to create realistic (i.e. compensated) opportunities for working men and women to change their career. An increasing number of people are taking advantage of training opportunities and have recognised the value of targeted training for their professional biography. State funding is available for many training courses. Further, experience has shown that this can also help to reduce gender segregation on the labour market because it is easier to choose a career that is not based on gender stereotypes later in life. Such training paths that are suitable for adults can also make an important contribution to the integration of immigrants into the labour market.

A further important step is to anchor education for sustainable development (ESD) in the structure of all educational areas in a targeted fashion. The importance of ESD was also emphasised by the Länder in their joint contribution (cf. Chapter D III.).

ESD gives each individual the opportunity to understand how their own actions affect the world and to make responsible decisions. ESD imparts comprehensive competence that enables people to get actively involved in processes of participation and to shape their future, both for themselves and for the community. ESD conveys a holistic understanding of global development and an open-minded outlook. By taking a holistic approach, ESD promotes innovation, an understanding of democracy and the ability to participate in particular, thereby making an important
contribution to securing a better and more sustainable future. ESD is the key to strengthening the citizens’ personal responsibility for more sustainability. Networking between the various stakeholders in administration, civil society, business, culture, as well as educational and extracurricular places of learning is a key factor for the success of ESD.

**Federal Government activities**

1. **Measures in Germany**

   1. **Education for sustainable development**

      The Federal Government has assigned a special role to education for sustainable development (ESD). ESD must be made accessible as a necessary and overarching concept that allows people to acquire social, cognitive and emotional skills. The National ESD Platform, which consists of 37 decision-makers from all relevant areas (high-level representatives of the Federal Government and the Länder, the parliament, science, business and civil society), was initiated especially for the purpose of implementing the international specifications. On the international stage, Germany is thus taking on a pioneering role with regard to the implementation of the UNESCO Global Action Programme on Education for Sustainable Development. With support in the form of expertise from six expert panels, the National Platform will adapt a national action plan with short-term and long-term goals and concrete measures for all formal, non-formal and informal educational areas in the spring of 2017 in order to systematically anchor ESD in its structure. For example, commercial professions will be taken into account for the first time in the context of professional education to promote sustainable development in practical vocational education. With its “Haus der kleinen Forscher” (Little Scientists’ House) foundation and in addition to the early implementation of STEM in the elementary area, the BMBF is now also promoting the impartation of ESD as a useful addition to and comprehensive concept for the foundation’s offer to the currently more than 26,500 daycare centres, after school care centres and primary schools in Germany. Children and adolescents are to be encouraged to become agents of change in order to implement the Global Action Programme’s priority to achieve greater participation among adolescents.

      To accompany the National Platform, the Federal Government launched a broad participatory agenda process (including an annual agenda congress) in 2015 in order to expand the successful ESD approaches and develop ESD from a project into a structure. The aim is to anchor ESD in the syllabi and educational plans, curricula, guiding principles and examination regulations of all educational facilities. ESD is also to become a structural element of training and advanced education opportunities for teachers and in higher education.

   In cooperation with the Standing Conference of the Ministers of Education and Cultural Affairs and the Länder, the BMZ is promoting work with the framework for the learning field of global development in schools and teacher training. The cooperation with the Länder will also be expanded to include a joint curriculum as from 2016.

2. **Early childhood education**

   By providing research funding and a broad spectrum of measures, the Federal Government is supporting the Länder, sponsors and local authorities in their efforts to improve educational opportunities and realise equal opportunities for children through quality early childhood education, schooling and care.

   In November 2014, the Federal Government and the Länder agreed on a quality process for daycare, laid down in the communiqué entitled “Frühe Bildung weiterentwickeln und finanziell sichern” (Refining and ensuring financial security for early education). When the Federal Government, the Länder, local authorities, employers and trade unions signed the declaration entitled “Investitionen in frühe Bildung lohnen sich” (Investments in early education pay off) in November 2015, they agreed to support the initiated quality process.

   The quality process is accompanied by the federal programme “Chatter Matters: Because Language is Your Key to the World”. Up to 4,000 additional jobs for skilled employees in daycare centres for children and specialist counselling can be created between 2016 and 2019. The programme is addressed to daycare centres with an above-average share of children with special needs in terms of language learning and support, for example facilities that already care for children from refugee families. Establishing contact with families in order to convince parents to get consciously involved in their children’s education and promote cooperative parenthood is also a central focus of the ESF programme “Opportunities for parents II – getting families involved in education early on”. This is the goal in pursuit of which skilled workers in early education all over Germany acquire further qualifications to work as parent counsellors as part of the programme that was launched in 2015.

   In addition, the Federal Government promotes educational research projects designed to gain an insight into institutional and personal prerequisites in early education.

3. **Non-formal and informal education**

   Skills that promote social, cultural and political participation are also acquired outside the classroom and thus beyond formal performance requirements. Against the backdrop of lifelong learning to promote the transformation of society towards sustainability and the special innovation potential for the implemen-
Art and culture shape our social coexistence and our future, too. It is important that this knowledge be maintained and preserved.

Art and culture shape our social coexistence and our values. Artists and cultural institutions jointly form a one-of-a-kind cultural infrastructure in Germany, thereby contributing to conveying traditions, knowledge and values. Cultural education thus has the important role of developing our potential as a heterogeneous and ethnically diverse society in a productive manner. Participation in cultural life is an important prerequisite for actively and creatively shaping both one’s own life and that of society. One major aim of the activities of the Federal Government Commissioner for Culture and the Media (BKM) is thus to reach out to those people who did not participate very much in art and culture previously. Everybody is to have the opportunity to access diverse forms of culture, irrespective of their individual abilities, ethnic and social background, as well as gender and age. Cultural education is an essential element of personality development, in particular that of young people and their social competence, and for social participation. With its programme entitled “Culture Empowers. Alliances for Education”, the Federal Ministry of Education and Research promotes extracurricular measures for the cultural education of educationally disadvantaged children and adolescents.

The measures are implemented all over Germany by local alliances.

5. Vocational education

With its initiative entitled “Graduation and continuation – Education chains up to the vocational training qualification”, the Federal Government is providing support to adolescents at an early stage to help them better handle the transition from school to the world of work and, ideally, the vocational training that follows. This initiative is promoted by support programmes, for example “The right candidate for the job”. The inclusion of people with disabilities plays an important role in this context. To this end, agreements are reached between the Federal Government (BMBF, BMAS), the Federal Employment Agency and the individual Länder. The first agreements have been concluded with Hamburg, Hesse and the Rhineland-Palatinate. In addition, nationwide youth employment agencies that support young people in the transition between school and work are to be established. With the ESF model programme “Encouraging Youth in the Neighbourhood”, the Federal Government is also supporting 178 model local authorities in an initial funding phase between 2015 and 2018 with the establishment of socio-pedagogical counselling and support services for young people who require special assistance with the transition between school and work (Art. 13 of SGB VIII (German Social Code), youth social work). The programme focuses on areas that are part of the “Socially Integrated City” urban development assistance programme and other areas with social disadvantages. Micro-projects in particular are to create added value not only for the young people, but also for the neighbourhoods in which they live. Two topic workshops for the model local authorities will focus explicitly on the neighbourhood aspect in November/December 2016.
The programme entitled “Promoting vocational education for sustainable development. Enabling green skills for climate-friendly, resource-efficient action at work (BBNE)” promotes practice-oriented projects as part of the European Social Fund (ESF). These projects raise people’s awareness for new production processes, workflows and skills that are needed on the road to a climate-friendly and resource-efficient way of doing business in the context of work camps, exhibitions and model construction sites.

The federal pilot programme “Career Change – Men and Women in Early Childhood Education and Care” provides support to pilot projects for men and women training to become state recognised educators. It is tailored specially to the target group of career changers and is combined with paid employment subject to social security contribution in child day-care centres. The aim is to give men and women the opportunity of lifelong learning while at the same time earning their livelihood – regardless of their previous employment status.

6. Comprehensive literacy development

With its National Strategy for Literacy and the Basic Education of Adults and its transfer into a decade for literacy development in 2015, Germany is continuing its efforts in society as a whole to motivate adults with lower skill levels to keep learning. All levels of the federal system, the Federal Government, Länder and local authorities, but also trade unions, churches and other partners are involved. This strategy enables people to better participate in social life and transition to a more secure or better employment situation.

7. Improving equal opportunities in the education system

Increasing the opportunities in all areas of education for all children and adolescents to obtain an education and participate therein is a central aim of the Federal Government. Social background needs to be further decoupled from educational success. Children and adolescents from situations prone to risk must be provided with special support, and all children must have the best educational opportunities right from the start. The following aspects in particular are taken into account here: the expansion and further improvement of the quality of early childhood education, the promotion of language and reading skills including support for parents in how to read to children, the promotion of children’s enthusiasm for scientific topics, but also the (extracurricular) cultural education of children who would otherwise have only limited access to cultural education. However, systematic educational support for families is required in addition to these primarily school-focused activities in order to resolve inequalities in the education system.

8. Inclusive education

Taking the National Action Plan (NAP) to implement the UN Convention on the Rights of Persons with Disabilities (UN CRPD) resolved by the Federal Cabinet in 2011 as a basis, the Federal Government will continue to campaign for inclusive education to become a matter of course. In addition to measures for inclusive early childhood education, measures in the areas of schools, universities and educational research are planned for NAP 2.0. Schools, universities and training institutions are to include and support people in their uniqueness and with their individual needs right from the start.

To promote inclusive learning, the annual Jakob Muth Award is presented to schools to honour exemplary joint learning of disabled and non-disabled children upon the initiative of the Federal Government Commissioner for Matters relating to Disabled Persons in cooperation with the Bertelsmann Foundation and the German UNESCO Commission.

II. Measures by Germany

Implementation of the UNESCO Global Action Programme on Education for Sustainable Development

The Federal Government is a key partner of the UNESCO for the implementation of the Global Action Programme on Education for Sustainable Development (GAP ESD) on a global level, which aims for political support as its first area of action. Further priorities of the GAP include the holistic transformation of the learning and teaching environment, competency development of teachers and multipliers, strengthening and mobilisation of youth and the promotion of sustainable development on a local level.

III. Measures with Germany

1. Education strategy for German development cooperation

The implementation of the education strategy of the BMZ, “Creating equitable opportunities for quality education”, published in July 2015, provides support to partner countries in the areas of basic, vocational and higher education. Vocational education is particularly important: As regards cross-national cooperation in this area, Germany is the largest donor in the world. While the regional focus is on Africa, there is also a special focus on areas that are heavily affected by fragility and conflict. This includes in particular regions from which refugees are fleeing. The education strategy matches the contents of SDG 4 and takes up fundamental approaches of the “Education 2030 Framework for Action” adopted by the Global Education Community in November 2015.

In the area of basic education, the BMZ is thus supporting its partners with the training and further education of teachers, with the creation of curricula and materi-
The Federal Government is also promoting education with equal opportunities through its commitment to gender equality and the targeted support of girls and women. As part of the initiative “New Partnership for Africa’s Development/Comprehensive Africa Agriculture Development Programme”, for example, the BMZ is supporting the vocational qualification of women in agriculture in rural areas of Africa in order to improve their employability.

The Federal Government also sees potential for the promotion of education with equal opportunities in the progress that is being made in the field of digital technology. To increase equal opportunities in education through digitalisation, the BMZ is pursuing a three-pillar strategy: 1) expansion of the ICT infrastructure; 2) promotion of digital educational opportunities; 3) development of skills for the digital shift. For example, the BMZ uses ICT in the education sector to train teachers, establish innovative learning formats and enable a more efficient, data-supported educational policy.

3. Foreign cultural and educational policy

The Federal Foreign Office (AA) coordinates German policy-making in various UNESCO bodies whose work is geared to achieving the educational goal. Germany was involved in the development of the “Education 2030 Framework for Action”. Since the framework for action was adopted in the context of the 38th UNESCO General Conference on 4 November 2015, there is already a guideline for the educational goal that contains implementation, coordination, financing and monitoring options. Germany is working together with 27 other nations in the Technical Cooperation Group to develop internationally comparable indicators for SDG 4.

The Federal Foreign Office also supports the UNESCO Institute for Lifelong Learning, which advises countries that are re-forming their education systems. It has posted a representative in the core group of the Global Alliance for Literacy, which contributes to achieving the targets in the area of basic education. Further measures, for example to eradicate gender-specific disparities in the area of education and raise awareness in society for the importance of SDG 4, are in the planning phase.

The Federal Government is promoting educational biographies together with its intermediary organisations. The networks of German schools abroad, twinned schools and the UNESCO Associated Schools Project Network, the comprehensive scholarship programmes of the German Academic Exchange Service, the language and cultural work of the Goethe Institutes and the training opportunities in the area of vocational training are fundamental pillars of a foreign cultural and educational policy that is geared to sustainability.
3. Global cooperation with schools

The “Schools: Partners for the Future” (PASCH) initiative was launched by the AA in 2008 and creates an international network of schools, pupils and teachers through language training. This initiative reaches more than 600,000 pupils in almost 2,000 schools in 120 partner countries all over the world. Beyond the acquisition of German language skills, PASCH as an international learning community also strengthens intercultural dialogue and promotes an understanding of and for one another. Taking the guiding principles of the Global Action Programme with the theme “Fit for global citizenship” as a basis, the roughly 200 German schools in the UNESCO Associated Schools Project Network also consider themselves an innovative network that endeavours to spark adolescents’ interest in global topics and encourage involvement in civil society through participatory approaches. Their spectrum ranges from diverse stimuli in local educational landscapes to the implementation of intercontinental youth academies.

4. University support for refugees and threatened scientists

With its commitment to enabling refugees to pursue higher education, Germany is taking on a pioneering role on the international stage. Since 1992, the AA has enabled more than 8,000 refugees all over the world to study at a university or equivalent institution in cooperation with the Albert Einstein German Academic Refugee Initiative Fund (DAFI) at the UNHCR. To this day, a DAFI scholarship represents the only possibility for refugees to study at a university in many countries. 4,800 young people who are sponsored for an average of three to four years are studying in 42 countries in 2016.

In 2015, the AA founded the Philipp Schwartz Initiative, which is realised by the Alexander von Humboldt Foundation in the role of intermediary. This initiative has made the first special programme for the acceptance and integration of threatened scientists into German universities and research facilities possible.

5. Funding

The annual funding gap in developing and emerging countries that arises from the available national resources and the resources required for achieving universal quality pre-school, primary and secondary education is estimated at an average annual amount of USD 39 billion in the period from 2015 to 2030. The BMZ will invest at least EUR 400 million annually from its budget in educational measures in future.

The AA provides roughly EUR 47 million in funds to the PASCH initiative. This global network gives it great leverage, for example through laying the foundations for international educational biographies. Other partners that are funded by the AA are also involved in the further expansion of the bridge between school and higher education or a career: The Goethe Institute spends roughly EUR 147.8 million of its budget on its global cultural and educational cooperation. The German Academic Exchange Service receives around EUR 186 million per year for the promotion of science; this also includes measures to support scientists and students from areas of conflict, both in Germany and in neighbouring countries.
b) Relevant national sustainability indicators and objectives/Measures

4.1.a Early school leavers (18- to 24-year-olds without a school leaving certificate)

**Education – Continuously improving education and vocational training**

**Definition of the indicator**

The indicator specifies the proportion of 18- to 24-year-olds from all people of the same age group who currently do not attend any school or institution of higher education, who are not attending any further education programmes and who have not completed second-stage secondary school (ISCED level 3-university entrance level or completed course of vocational training).

**Target and intention of the indicator**

The state educational system and the dual system of vocational training are the cornerstones of future-orientated qualifications for young people in Germany. Failure to complete school or vocational training poses a risk of poverty and places a strain on the social welfare systems. Moving in line with the European Union’s “Europe 2020” strategy, the Federal Government has set itself the goal for 2020 to reduce the proportion of early school leavers among all people of the same age group to below 10 %.

**Content and progress of the indicator**

The term “early school leavers” does not refer to the young “high-flyers”, who achieve a school leaving certificate before the end of the regular school period. Nor should the term be confused with school dropouts. On the contrary, it refers to people between 18 and 24 years of age who possess neither a university entrance qualification, such as an “Abitur” or “Fachhochschulreife” (entrance qualification for general or applied sciences universities), nor have completed a course of vocational training and who are also not attending training and further education programmes. This means that even those young people who, for example, have successfully completed the Hauptschule or the Realschule (lower secondary education, ISCED level 2) but are no longer participating in the education process are also counted as early school leavers. Therefore, the indicator records people with and without Hauptschule or Realschule certificates who are not undergoing further education. The indicator does not specify the age at which the people under review last attended school, nor does it specify the type of educational facility involved.

The information originates from the microcensus, whose annual sample survey covers 1 % of the population. Annual school statistics and coordinated Länder statistics provide supplementary information. Both statistics are published by the Federal Statistical Office.

In 2015, the indicator stood at 9.8 %, which means that there were a total of 581 000 young people who did not complete second-stage secondary school and who were not or no longer receiving training, education or further education. Therefore, the goal set for 2020 has already been achieved. Compared with 1999, the value fell by 5.1 percentage points.
Between 1999 and 2005, the gender-specific figures for the indicator have deviated from the total values to varying degrees and in different directions. Since 2006, there have been fewer young women than young men leaving school early without a certificate of completion. For instance, the values in 2015 were 9.5 % for women and 10.1 % for men.

Data provided by school statistics show that a total of around 47,435 young people (6 % of the resident population of the same age) left school without a Hauptschule certificate in 2015. Compared with 1999, this equates to a reduction by more than a third. In the case of young women, the proportion continues to be markedly lower (4.7 %) than that of young men (7.1 %).

Among early school leavers with a school leaving certificate, 17.6 % (139,952) of the resident population of the same age achieved a Hauptschulabschluss (general school leaving certificate), 46.5 % (370,201) a Realschulabschluss (intermediate school leaving certificate), 34.8 % (287,862) an allgemeine Hochschulreife (general higher education entrance qualification) and 0.1 % (973) a Fachhochschulreife – all data for 2015. Over the course of time since 1999, two types of certificates have seen particularly large changes. Thus, the share of people with a Hauptschulabschluss fell by 8.5 percentage points, while the share of people with a general Hochschulreife rose by 10.0 percentage points (with reference to the population of the same age in each case).

Another indicator that matches this context is 10.1 “Foreign school graduates”.

Federal Government activities

Previous measures

In the course of this legislative period, the Federal Government has gone to great lengths to increase individual opportunities to obtain a school leaving certificate. This includes, for example, expanding the promotion of reading skills, supporting the content configuration for all-day schools through the programme “Ideas for more! Learn all day” and promoting extracurricular measures in cultural education. In cooperation with the Länder, universities are receiving support for improving their teacher training as part of the “Quality Offensive in Teacher Training”.

In addition, numerous measures have been taken to help adolescents choose a career path and make the transition from school to work easier. In the “Alliance for Initial and Further Training” that was founded at the end of 2014, the Federal Government, business representatives, trade unions, the Federal Employment Agency and the Länder are working together to strengthen vocational training and make it even more attractive to young people. The Alliance also implements the training guarantee addressed in the Coalition agreement: In future, each individual who is interested in undergoing vocational training is to be shown a path that can lead him as quickly as possible to formal vocational qualification. The Federal Government also initiated the funding instrument of Assisted Vocational Training in 2015. Assisted Vocational Training is to offer new company-based prospects to young people who have not been able to undergo in-company training so far.

The umbrella initiative “Chance Beruf” (Job opportunity) is to further strengthen general and vocational education in particular. The objective of the initiative is that every adolescent graduates, that each graduation is followed by a promising continuation and that every man and woman considers it a matter of course to keep learning. The Federal Government has initiated numerous measures and funding projects to pursue these objectives. These include, for example, the initiative “Education chains up to the vocational training qualification”, including the “Initiative zur Gewinnung von Studienabbrecherinnen und -abbrechern für die berufliche Bildung” (Initiative to get university drop-outs involved in vocational education), the creation of a validation procedure for non-formally/informally acquired skills, opening up the Career Advancement Promotion Act to include Bachelor’s degree graduates and testing a uniform nationwide telephone service for advice on further training.

With the “Encouraging Youth” initiative, the Federal Government is also campaigning all over Germany for the better integration into society, schools and the work environment of young people with less favourable starting opportunities on a local level.

Planned additional measures

There is an ongoing exchange between the Federal Government and the Länder to coordinate and implement necessary measures for further improvements in the respective areas of responsibility.
4.1.b 30- to 34-year-olds with a tertiary or post-secondary non-tertiary level of education

**Education – Continuously improving education and vocational training**

**Definition of the indicator**

The indicator specifies the proportion of 30- to 34-year-olds who hold a certificate from the tertiary education sector (levels 5 to 8 of the ISCED 2011) or a post-secondary non-tertiary certificate (level 4 of the ISCED).

**Target and intention of the indicator**

Advanced economies like Germany’s, in which the service and knowledge/expertise sectors are becoming increasingly important, need a highly skilled and qualified labour force. For this reason, the value of this indicator should increase to 42% by 2020. This objective is in line with the goal of the European Union’s “Europe 2020” strategy to ensure that 40% of 30- to 34-year-olds in the European Union hold a tertiary certificate by 2020.

**Content and progress of the indicator**

The “International Standard Classification of Education” (ISCED) enables international comparisons of statistics and indicators regarding certificates of education. To maximise the extent of international comparability, certificates that are regarded as equivalent are assigned to the same ISCED levels as part of the classification.

The data for the indicator originates from the micro-census, where the annual sample survey covers 1 % of the population. The university statistics provide supplementary information. Both sets of statistics are compiled by the Federal Statistical Office.

The name of the indicator is linked to the tradition of dual education system in Germany. Therefore, the indicator includes both the tertiary degrees corresponding to levels 5 to 8 of the ISCED as well as the degrees corresponding to level 4 of the ISCED.

The following tertiary degrees are available in Germany: degrees from universities, universities of applied sciences and universities of applied administrative sciences, professional and vocational academies, master’s and technician’s certificates, other certificates from technical schools and from training establishments for child care workers. The post-secondary non-tertiary certificates are distinguished by the fact that two certificates of second-stage secondary school are obtained either consecutively or simultaneously. Possible combinations include, for example, an Abitur from an evening school or vocational/technical school (this presupposes that a vocational certificate has already been attained) or a vocational training certificate following Abitur two consecutive vocational training certificates. In addition, the post-secondary non-tertiary certificates also include certificates from educational establishments for healthcare professions.

Starting at 33.4 % in 1999, the indicator rose 13.4 percentage points to 46.8 % up in 2015 and is therefore already above the target value set for 2020. This applies both to women (50.5 %) and to men (43.1 %). The
ratio of gender-specific proportions has changed over time: In 1999, the value of the indicator for men was still 3.8 percentage points higher than for women. In 2006, the values for both genders were the same. Since 2007, the share of women who have completed a programme of tertiary or post-secondary non-tertiary education is now higher than that of men. Many other countries do not offer post-secondary non-tertiary education programmes. Therefore, the indicator for the European Union’s “Europe 2020” strategy is more concisely defined and takes only tertiary degrees (ISCED levels 5-8) into account.

Following a steady increase since 2005, it reached a total of 38.7 % across the EU-28 states in 2015. If one also selects this narrowly defined indicator for Germany, the value of 32.3 % in 2015 will stay more than 6 percentage points below the EU value. In 2015, the proportions of women and men are virtually identical (32.3 % and 32.2 %; not shown on the chart).

The number of university graduates in 2015 totaled 481,588, or 117 % more than in 1999. These included 100,401 engineering graduates (137 % more than in 1999) and 80,473 graduates of mathematics and the natural sciences (147 % more than in 1999).

**Federal Government activities**

**Previous measures**

The Federal Government and the Länder have joined hands in their campaign to increase the number of young people with a tertiary or post-secondary non-tertiary level of education. For example, the Higher Education Pact 2020 ensures that the range of studies meets requirements even in the face of the rising number of first-year students and ensures top quality higher education. Between the adoption of the Higher Education Pact and 2014, more than 750,000 additional first-year students were accepted. In addition, the programme for improved conditions for studying and more quality in teaching (Quality Pact for Teaching) agreed by the Federal Government and the Länder in 2010 provides financial support to 186 universities in all 16 Länder. Furthermore, the Federal Government provided financial support to the Länder for constructing new student housing. The Federal Government also introduced the Deutschlandstipendium (Scholarship for Germany) and expanded its support for outstanding and high-achieving students in general.

The Federal Government assumed full responsibility for the provision of funding under the Federal Training Assistance Act (BAföG) as of 2015. This permanently reduces the burden on the Länder and gives them additional leeway for funding education, especially for universities. Starting in the winter semester of 2016/2017, BAföG entitlement and the allowance for income from other sources were raised by 7%, and the structure and content of BAföG were also improved.

**Planned additional measures**

There is an ongoing exchange between the Federal Government and the Länder to coordinate and implement further measures for increasing the number of students who graduate in the respective areas of responsibility. The administrative agreement between the Federal Government and the Länder on the third phase of the Higher Education Pact (2016–2020) stipulates that, between 2016 and 2023, the Länder must dedicate 10% of the federal funds they receive and the corresponding additional state funds per year to targeted measures that aim to secure the quality of education and lead more students to successful graduation.
4.2.a.b All-day care provision for children

Prospects for families – Improving the compatibility of work and family life

Definition of the indicator

The indicator shows the proportion of children in all-day care among all children of the same age group. In this context, all-day care refers to a duration of more than seven hours. Day care in private homes is not taken into account. Indicator 4.2.a refers to the group of 0- to 2-year-olds. Indicator 4.2.b refers to 3- to 5-year-old children.

Target and intention of the indicators

The proportion of 0- to 2-year-old children attending all-day care is set to reach at least 35 % (4.2.a) by 2030. For 3- to 5-year-olds (4.2.b), the proportion is set to increase to at least 60 % by 2020 and at least 70 % by 2030. An increase in the proportion of children attending all-day care is desirable because the availability of childcare options to meet the demands of today’s families improves the balance between family life and work. They also make an important contribution to equal opportunities, gender equality and integration.

Content and progress of indicators

The information is provided by the annual statistics on children and people employed at child care facilities. The data is collected by the Federal Statistical Office in cooperation with the statistical offices of the Länder as part of a decentralised survey of all children that attend day care facilities. Here, information about the duration and scope of weekly childcare time is surveyed for each individual child in addition to their age and gender. As indicator values have been calculated since 2015 based on the updated 2011 census, comparisons with values from previous years are possible only to a limited degree.

The indicator shows the proportion of children for whom a daily childcare time of more than seven hours has been arranged. This length of time may deviate from the actual time spent on childcare. Contractually agreed childcare provision of seven hours and less, which can also make work and family life more compatible, along with additional types of care such as day care in private homes, are not included in the indicator. Furthermore, information on childcare services aimed at children aged six and older is also relevant to this topic. Suitable supplementary information is provided, for example, by data from the The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (see the last section).

In 2016, parents of 44.5 % of the 3- to 5-year-olds (kindergarten age) made use of institutional all-day care, while for children under 3 years of age (nursery age) this figure was 16.2 %. As a result, the proportion of children receiving all-day care among 3- to 5-year-olds has increased by 22.5 percentage points since 2006 and has therefore more than doubled. The full-day care of children below the age of three rose from 2006 to 2016 by 10.3 percentage points, thus by more than 2.5 times the value compared to 2006.

The absolute number of children receiving full-time care in daycare centres in 2016 was around 1.3 million. The figure for children in part-time care was also
around 1.3 million. In addition, some 53,600 children under six years of age are cared for in publicly subsidised day care in private homes. More than a quarter of the children receiving full-time or part-time care in daycare centres had a migration background, meaning that at least one of the parents was of foreign origin. The care rate for these children in 2015 was just under 56%, while the rate for children with no migration background was around 67% in 2015.

With regard to availability of all-day care facilities, there is a clear gap between the Länder in the east and the Länder in the west of Germany. The highest full-time care rates for 0- to 2-year-olds are recorded in the eastern Länder and in Berlin. The figures range from 46.3% in Thuringia to 9.6% in Baden-Württemberg and Bavaria. For 3- to 5-year-olds, the highest percentage of all-day care was also found in Thuringia at 90.8%; the lowest in Baden-Württemberg at 22.7% (both 2016).

Federal Government activities

The first progress report on the Sustainable Development Strategy from 2004 emphasised that an offer of childcare opportunities that covers the demand is an essential element for improving the balance between work and family life. The German Youth Institute has repeatedly surveyed requests for childcare opportunities of parents with children under the age of three for years. The surveys reveal that these parents request increasingly longer hours for childcare provision. Roughly 25% of these parents would currently like an all-day care slot of more than seven hours. Based on these surveys, the targets for daycare provision for children were adapted in the indicator set as from 2016. With regard to the indicator for children between the ages of 0 and 2, the target mark for 2030 is at 35%. For the indicator for 3- to 5-year-olds, the target mark was raised to 70% (as compared to 60% by 2020). The increase in the number of primary schools with all-day care provision is a visible result of the EUR 4 billion the Federal Government provided to support the expansion of all-day schools and also of the considerable efforts undertaken by the Länder and local authorities. All-day care provision for primary school children is an important measure for the promotion of equal opportunities among children and of compatibility of work and family life for parents. The current study on the development of all-day schools reveals that the demand for all-day care provision for primary school children in particular is not covered so far.

In terms of childcare opportunities, after-school care programmes and all-day schools also play a significant role. In 2016, 21,400 children between 6 and 13 years of age were cared for on an all-day basis in after-school care programmes while 458,200 children received part-time care (teaching time is excluded from the calculation of childcare time here). The proportion of pupils attending all-day schools out of all pupils in general education schools during the 2014/2015 school year was 37.7%. However, this figure includes pupils from all school types, including pupils who are older than 13. In Grundschulen (primary schools) in the same school year, 33.1% of the children received all-day care. In comparison to 2006, the number of all-day school pupils has risen markedly, from almost 1.5 million to 2.7 million (in all general education schools) and from 400,000 to around 892,000 in the primary schools.

An expansion of the all-day care provision opportunities to include children up to the age of twelve is therefore desirable.

Previous measures

With the Day-Care Expansion Act (Tagesbetreuungsausbaugesetz, TAG) adopted in 2004, the Federal Government gave the go-ahead for the expansion of child care and furthered its efforts with the Child Support Act (Kinderförderungsgesetz, KiföG) in 2008. As of 1 August 2013, every child that has completed its first year of life has the right to a spot in a daycare facility. For years, the Federal Government has actively supported the Länder with the special “child care fund” to help finance the expansion of daycare facility spots for children aged 0–2. Thanks to this support, 433,000 spots in daycare centres and for daycare in private homes were created for children under the age of three between 2006 and 2016. The care rate among children under the age of three increased from 16.1% to 32.9%.

Planned additional measures

The expansion of daycare provision for children must be continued. This is one of the reasons why the Federal Government has left the funds that will become available up to and including 2017 due to the discontinuation of child care subsidies to the Länder to be invested in daycare provision for children. Increasing attention is also being paid to the quality of care provision for children, as good basic conditions are an important prerequisite for opening up promising
opportunities to children for their later educational and professional careers and for promoting educational equality right from the start. In November 2014, the Federal Government, the Länder and the local authorities thus identified central areas for which concrete quality targets are to be agreed in their communiqué entitled “Frühe Bildung weiterentwickeln und finanziell sichern” (Refining and ensuring financial security for early education). At the second conference of the Federal Government and the Länder held at the end of 2015, the decision was also made to take up the current developments and challenges in the context of the integration and support of refugee children and their families in the quality development process. A first interim report will be submitted at the end of 2016.

This quality process is accompanied in the context of daycare provision for children, for example by the federal programmes “Chatter Matters: Because Language is Your Key to the World”, “KitaPlus”, “Kindertagespflege” (Child daycare) and “Qualität vor Ort” (Quality on site). The “Kita-Plus” programme is dedicated specifically to the expansion of opening hours and has received EUR 100 million in funding for the period from 2016–2018.
5. Achieve gender equality and empower all women and girls

a) Basic content and political priorities from the point of view of the Federal Government

Gender equality and the enforcement of women’s and girls’ rights all over the world are key factors for sustainable development.

Gender equality as a separate target and a multidisciplinary issue of the 2030 Agenda

During the negotiations on the 2030 Agenda, the Federal Government supported the idea to firmly anchor gender equality and the empowerment of all women and girls as a separate SDG and also as a multidisciplinary issue of the entire agenda. This and the commitment of the 2030 Agenda to realise the human rights of all and of women and girls in particular (Preamble, paragraphs 18–20) represents crucial progress.

The associated targets in detail

The focus of SDG 5 lies on ending all forms of discrimination (5.1), violence against all women and girls (5.2) and harmful practices such as child marriage and female genital mutilation (5.3). Other targets include recognising unpaid care and domestic work (5.4), ensuring women’s full participation and equal opportunities for leadership (5.5), and ensuring universal access to sexual and reproductive health and reproductive rights (5.6). Reforms to give women equal rights to economic resources as well as access to ownership and other forms of property (5.a), enhanced use of information and communications technology (5.b), and enforceable legislation (5.c) for the promotion of the empowerment of all women and girls are the means of implementation that are aimed for in this context. Other SDGs also contain important gender-specific targets (for example SDGs 1, 3, 4, 8).

National importance

The priorities of the German equal opportunities policy are to achieve women’s equal participation in the labour market and the compatibility of work and family life for men and women with the aim of achieving a balanced division of family-related tasks. The Federal Government will continue to work closely together with international partners, the Länder, the commissioners for women’s affairs and equal opportunities of the local authorities, as well as representatives of social partners, women’s and men’s associations and science.

Statement from the Dialogue on Sustainability

“The fact that there is a separate target for gender equality in the SDGs is a great success. It must remain visible as a separate target in the course of the implementation. At the same time, consistent gender mainstreaming must be ensured. Mainstreaming aspects are included explicitly in some targets (...). Unfortunately, this is not the case with other important targets, e.g. the areas of water, urban development, infrastructure and energy.”

“BROT für die Welt” (Bread for the World)

Even twenty-one years after the Fourth UN World Conference on Women and the adoption of the Beijing Platform for Action, violence against women and girls, the uneven distribution of income and wealth, as well as limited control over material assets, inadequate participation in private and public decisions, unevenly distributed care work and gender stereotypes can prevent women and girls from leading a self-determined life and contributing to society with their potential. Gender-specific violence against women also has a negative impact on the development of their children. Violence against women and girls is a violation of human rights; it results in high direct and indirect costs for society and occurs in all social classes. Roughly 25% of women in Germany between the ages of 16 and 85 have experienced physical and/or sexual violence at the hands of their intimate partners at least once in their lifetime. The Federal Government therefore attaches great importance to combating gender-specific violence against women and girls and fighting human trafficking.

Federal Government activities

1. Measures in Germany

The Federal Government has focused the priorities for its equal opportunities policy on basic conditions that are conducive to the equal participation of women in the labour market, on achieving a greater balance with regard to the compatibility of work and family life and on developing a law to achieve greater income equality between women and men. The Act for the Equal Participation of Women and Men in Management Positions in the private sector and public service came into force on 1 May 2015. This law is to significantly improve the
share of women in management positions in the medium term and, ultimately, to achieve equal participation of women and men. Every year, the Federal Government releases information on the development of the share of women and men in management positions, both in the private sector and in public service, and evaluates the effectiveness of the law after three years.

There is also a significant focus on the equal participation of women and girls in shaping society and political decision-making. To this end, it is important to fill more political leadership positions with women and to create better conditions for the compatibility of work, family life and political offices in the form of flexible working hours and parliament sessions as well as mentoring programmes for the empowerment of women.

2. Consistently combating violence against women and girls

In order to better protect women and girls against all forms of violence, Germany intends to fully implement and ratify the Council of Europe Convention on preventing and combating violence against women and domestic violence of 2011 (Istanbul Convention) by the end of 2017.

The Federal Government is currently implementing a comprehensive protection concept for women and children in refugee accommodation, which comprises numerous differing measures. A programme sponsored by the KfW (German Development Bank) is supporting structural protective measures for women, children and other groups of people in need of protection in refugee accommodation. The programme provides local authorities with investment loans at special rates with a total volume of up to EUR 200 million.

The initiative to protect women and children in refugee accommodation, which was founded in cooperation between the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and UNICEF, the Associations of Non-statutory Welfare, PLAN and Save the Children, has set up offices in 25 refugee accommodation facilities across Germany that are responsible for implementing effective minimum standards to protect women and children in the respective facility.

The Federal Government is lending even stronger support in the form of funds to the services provided by the centre for torture victims, in particular the accompanying counselling for matters relating to social law. It is important to ensure that special consideration can be given to the needs of women who have experienced sexualised violence and that special offers are created for them. Support is also being provided for measures for training volunteer and full-time helpers and for the coordinating tasks of the charities and Islamic associations.

Multi-language information material helps to make refugee women who are affected by violence aware of existing aid services in an even more targeted way. The “Violence against women” support hotline (08000 116 016) that offers free confidential advice in 15 languages every day of the year and around the clock plays an important role here. Since 2015, the government-funded coordination offices of the Association of Women’s Shelters (Frauenhauskoordinierung, FHK), the Federal Association for Women against Violence (Bundesverband der Frauenberatungsstellen und Frauennotrufe, bff) and the German Network and Coordination Office Against Trafficking in Human Beings (KOK) have increased their measures to support counselling for refugee women.

3. Equal educational opportunities

To reinforce equal participation in top positions in the education system, the programme to support female professors launched by the Federal Government and the Länder, for example, is receiving a total of EUR 300 million between 2013 and 2017 to promote the inclusion of female excellence in the scientific system. In addition, the National Pact for Women in STEM Careers (science, technology, engineering and mathematics) networks over 200 partners from the fields of politics, business, science and the media in order to increase the share of young women in scientific and technical careers. Girls’ Day (1.6 million participants since 2001) and Boys’ Day (160,000 participants since 2011) give girls and boys insights into careers that are dominated by the respective other sex. To take advantage of the innovative potential of gender studies and to realise equal opportunities in professional life and society, the Federal Government is providing a total of EUR 6 million in funding for networks and transfer measures to enforce equal opportunities for women in education and research by 2017.

II. Measures by Germany

International equal opportunities policy with strong partners

The Federal Government is continuing to implement UN Security Council resolution 1325 on “Women, peace and security”. The resolution demands that women get more involved in foreign and security policies as well as the prevention and resolution of conflicts, and that the protection of women in armed conflicts be improved. Germany also intends to advance women, peace and the security agenda while it holds the OSCE chairmanship.

Within the United Nations, the Federal Government is contributing to the clarification of the international set of regulations with the initiative for the human rights of human trafficking victims. In a resolution on the human right to water and sanitation, special consideration is given to the needs of women and girls as ad-
dressed in the associated targets. Thanks to active involvement in UN institutions such as UN Women, the Human Rights Council and the Commission on the Status of Women, the development of a normative set of regulations is being promoted, and the active exchange between nations as well as concrete project ideas are being developed and supported.

In the Council of Europe, Germany is promoting the realisation of its aims and standards with regard to supporting the rights of women and girls. In 2012, Germany joined the Council of Europe Convention on Action against Trafficking in Human Beings, where it is involved in the monitoring and implementation mechanism.

The UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) is the most important international instrument for the protection of the human rights of women. To comply with the request by the CEDAW committee, Germany prepared its seventh and eighth country reports as a combined report and submitted it to the Committee. The presentation and review of the combined report by the responsible expert committee of the United Nations in Geneva is scheduled for the spring of 2017.

III. Measures with Germany

1. Equality as the basic principle of German development cooperation

The realisation of equal rights, obligations and opportunities for women and men is an explicit goal, a consistent design principle and a quality characteristic of German development cooperation. German development cooperation is taking a three-pronged approach with the cross-sector concept “Gender equality in development policy”:

- Integration of a gender perspective in all development policy-related strategies and projects (gender mainstreaming);
- Empowerment of women and girls;
- Systematic embedding of women’s rights and equal rights in dialogues on development policy with our partner countries.

The equal rights concept is a binding requirement for the design of German governmental development cooperation and is implemented by the new Development Policy Action Plan on Gender Equality 2016–2020 and annual roadmaps.

2. Project priorities

The central concern of development policy projects whose main objective is to achieve gender equality is to ensure that women have access to justice and jurisdiction as well as their political involvement, participation and representation in all areas. German development cooperation also supports gender equality in the areas of economic development, rural development and food security, armed conflicts and peacekeeping, as well as education, health and climate change, and campaigns for the overcoming and prevention of gender-specific violence.

3. Implementation of the G7 agreement under Germany’s presidency in 2015

The initiative for strengthening women’s economic empowerment agreed under Germany’s G7 presidency in 2015 is to increase the number of women and girls with professional qualifications in developing countries by one third by 2030.
5.1.a Gender pay gap

Equality – Promoting equal opportunities in society

**Definition of the indicator**

The indicator shows the difference between the average gross hourly wages for women and men expressed as a percentage of the average gross hourly wage of men.

**Target and intention of the indicator**

Differences in pay between men and women in a modern business-oriented society are a sign of social inequality. A narrowing of pay disparities indicates progress on the road to equality. The Federal Government is therefore pursuing the goal of reducing the pay gap to 10% by 2030.

**Content and progress of the indicator**

The indicator presented here shows the unadjusted gender pay gap. It merely expresses the relative average gross hourly wages as a ratio without taking their causes into account. As a result, it also records the pay gap that arises due to different factors such as the choice of job and career paths of the respective cohorts.

The data for the indicator is based on the four-yearly structure of earnings survey conducted by the statistical offices of the Länder as a representative sample survey with a disclosure obligation covering a maximum total of 60,000 businesses. This survey is supplemented by administrative data that is available for the public sector. Based on this data, results are published according to age, education level, performance groups, activity, collective agreement, company size classes and economic sectors and the adjusted gender pay gap is calculated. For the interim years, the unadjusted gender pay gap is updated using the rates of change from the quarterly wage survey.

In 2015, the unadjusted gender pay gap was 21% on average, which means that the average gross hourly wage for women was around one fifth lower than that of men. Since 1995 the gender pay gap has scarcely changed. If the trend recorded over the last five years continues, the goal set for 2030 will not be achieved.

The unadjusted gender pay gap varies markedly between the Länder: from 26% in Baden-Württemberg in 2015 to 4% in Mecklenburg-Western Pomerania, although in the context of significantly lower overall wage levels.

Investigations into the causal factors behind the gender pay gap can be conducted every four years based on the detailed results of the wage structure survey. The results for 2010 are currently available. Since the factors that determine the wage differences are subject to long-term change processes, the results currently available are likely to be valid. Accordingly, the measurable key reasons for the unadjusted pay gap are the different sectors and jobs in which women and men are employed and the performance group, that is, the specific workplace requirements in terms of leadership and qualification. There are additional factors such as a shorter period of service and a lower scope of employment. By the reasons mentioned, around two thirds of the difference of the hourly wages can be
Statistically explained. The remaining third of the difference in earnings corresponds to the adjusted pay gap. This remaining 7% of wage difference between men and women cannot be explained using the above-mentioned variables.

Federal Government activities

Previous measures

Over the past years, numerous measures have been initiated and continued to fight the causes of the pay gap between men and women. In order to better combine job, family and child rearing and to avoid breaks in mothers’ professional careers, the Federal Government is continuing to expand daycare provision for children, ElterngeldPlus was added to the Elterngeld (Paid parental leave) introduced in 2007; caregiver and family caregiver leave were further improved, and caregiver support benefit was introduced. The introduction of the minimum wage is particularly beneficial for women; before the minimum wage was introduced, they constituted two thirds of the 3.7 million employees who earned less than EUR 8.50.

Planned additional measures

The proposition of a law for nursing professions is an important step towards revaluing work in the social area. The law for more income equality between women and men agreed in the 2013 coalition agreement will follow. Its purpose is to better emphasise the principle of “equal pay for equal or equivalent work”. The Federal Government also intends to introduce a legal entitlement to temporary part-time work (right to return to previous working hours).

5.1.b Women in management positions in business

Equality – Promoting equal opportunities in society

**Women on supervisory boards**

Share in listed and fully co-determined companies, in %

<table>
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<th>September 2016</th>
<th>Target: 30</th>
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<tr>
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<td>22.9</td>
<td>27.3</td>
<td>30</td>
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Source: Frauen in Aufsichtsräten e.V.
© Statistisches Bundesamt (Destatis), 2017

Definition of the indicator

The indicator shows the share of women on supervisory boards of listed and fully co-determined companies.

Target and intention of the indicator

Although women are just as likely as men to complete a programme of study and are as highly qualified as men, they are still under-represented in management positions in the German economy, particularly at senior management level. For this reason, the share of
women on supervisory boards of listed and fully co-determined companies is to be increased to 30% by 2030.

**Content and progress of the indicator**

The data for the indicator is based on the publications of results of votes at the general meetings of listed and fully co-determined companies. Pursuant to the law on equal opportunities of women and men in management positions in the private and public sectors, these are listed companies and joint-stock companies with generally more than 2,000 employees as well as European companies (SE) that are subject to equal co-determination by agreement or by the application of the standard provision under the SE Participation Act (SEBG). The same applies to listed companies that result from cross-border mergers and in which equal co-determination is enshrined by the Act on Employee Participation in the Event of Cross-Border Mergers (MgVG).

The concept of a management position is not universally defined. It is generally understood to include all those who hold responsibility at least for personnel or budget to a certain extent. The indicator presented here examines management positions of women on supervisory boards in listed companies and fully co-determined companies. Consequently, the majority of management positions in the economy and their allocation between genders are not recorded by this indicator.

In mid-September 2016, 27.3% of those on the supervisory boards of listed and fully co-determined companies were women. In almost half of the companies (44.8%), 30% or more of those on supervisory boards were women. The share of women on the supervisory boards of the corresponding companies has recently increased significantly. In January 2015, the figure was just 22.9% in the 100 relevant companies at the time.

Since 2016, all listed and fully co-determined companies are legally required to allocate at least 30% of all new supervisory board appointments to women. A large number of elections to supervisory boards are due in 2018 and will involve electing new members to just under one third of the oversight bodies. As a result of gradual new appointments, it can be assumed that the indicator will achieve the goal by 2030.

The German Institute for Economic Research (DIW) not only records the share of women on supervisory boards, but also the representation of women on the management boards of the thirty companies in the German Share Index (DAX). In June 2016, 30.2% of all supervisory board positions in these companies were occupied by women, but only 9.4% of all management board positions.

**Federal Government activities**

The principle of equality between women and men is not yet a reality when it comes to managers in German business. The small share of women contradicts equal participation for both genders in responsible positions in German business. Moreover, this small share can today no longer be justified by their lack of skills, as the number of qualified women in Germany has been on a steady rise over the past years. According to Article 3 of Germany’s Basic Law, the state has the duty to promote actual equal rights for women and men and take steps to eliminate existing disadvantages.

**Previous measures**

The voluntary commitments of companies have not yielded the desired effect of increasing the share of women on supervisory boards to a sufficient degree in the past. The recommendations of the German Corporate Governance Code (DCGK) for listed companies, according to which a stronger focus must be placed on diversity when filling executive and supervisory board positions and on adequate participation of women when filling management positions, yielded only a minor increase in the share of women. The Act for the Equal Participation of Women and Men in Management Positions in the private sector and public service, which took effect on 1 May 2015, thus constitutes the first time that a binding gender quota for business has been legally defined.

**Planned additional measures**

Due to the sanction imposed for the selection of supervisory board members in business that is contrary to the quota and the fact that this results in an “empty chair”, the Federal Government expects the share of women to increase gradually to at least 30% over the coming years.
5.1.c Vocational qualification of women and girls through German development cooperation

Equality – Strengthening the economic participation of women globally

**Definition of the indicator**

The indicator specifies the number of girls and women in developing and emerging countries who were reached by the vocational qualification programmes of German development cooperation.

**Target and intention of the indicator**

The economic participation of girls and women in developing and emerging countries is to be strengthened. To this end, the number of girls and women in development and emerging countries who obtain vocational qualifications through German development cooperation is to be gradually increased by one third by 2030 compared with 2015.

**Content and progress of the indicator**

Information provided by the Federal Ministry for Economic Cooperation and Development (BMZ) on supported projects in implementation in 2015 served as a data source. These measures include all short-, medium- and long-term formal and non-formal vocational training programmes in developing and emerging countries. The measures are financed entirely by funds from the federal budget and market funds from the government-owned development bank. The data was collected for the first time in 2015 on behalf of the BMZ by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH and the Centrum für Evaluation GmbH and is to be conducted every three years in the future.

Girls and women are reached at different levels of German development cooperation, which is why the data was queried at three levels. For measures at individual level, the number of girls and women who received vocational training and further education or who participated in suitably organised consulting programmes can be recorded directly. When it comes to the funding of institutions or funding at policy area level, the number in the funded training and further education facilities has to be estimated. In this case, the total number of female trainees in the respective funded training and further education facilities are included at institutional level along with all female trainees in the partner countries at policy area level. Consequently, this can lead to overestimates and multiple counting – especially at policy area level. Furthermore, the possibility of duplication of the number of girls and women reached in the case of follow-on projects or where multiple projects are implemented simultaneously in the same region cannot be excluded.

The value of the indicator is closely related to the funded level, as the funding of institutions or policy areas generally reaches more girls and women than individual measures. The indicator does not make any statement regarding the success, scope and quality of
the qualification programmes, which can vary quite significantly.

The programmes for promoting the vocational qualification of girls and women are part of the overall official development assistance. These are presented in indicator 17.1.

In 2015, 354,841 girls and women accessed vocational qualification programmes. 3.6 % of these could be accessed by direct vocational training programmes. A total of 14.1 % of girls and women were reached by institutional funding and 29.9 % by programmes at policy area level. Additionally, 50.7 % of girls and women were reached through financial cooperation. These measures did not involve allocations to one of the three levels mentioned above, and another 1.7 % of the girls and women reached could not be assigned.

Looking at the number of programmes, a total of 151 vocational qualification programmes for girls and women were conducted through German development cooperation in 2015. Of these, 44.6 % were at individual level, 12.0 % at institutional level and 8.7 % at policy level. Another 28.0 % were conducted in the context of financial cooperation, while 6.7 % of measures could not be assigned to individual levels.

The data was recorded for the first time for the reporting year 2015, which means that the development so far and possible target realisation cannot be evaluated yet.

Federal Government activities

Women and girls all over the world are still confronted with numerous legal obstacles and social prejudices. According to the World Bank, restrictive requirements currently limit women’s access to economic and social participation in 155 countries. This discrimination results in high social and economic costs. If women are given the opportunity to develop their economic potential, everyone benefits: Not only is the economy strengthened, but education of women and girls is beneficial to them and also to their families and the entire society. Education demonstrably reduces child mortality and the number of unwanted pregnancies.

High-quality education and vocational education are essential for reducing poverty worldwide. They promote democracy, social and economic participation and the reinforcement of human rights and personal development. They are essential prerequisites for sustainable economic growth. A society can develop and exploit its full potential only if men and women alike are granted equal opportunities to access education and vocational education.

At the G7 summit under Germany’s presidency held in Elmau in June 2015, the G7 states thus committed to increasing the number of women and girls in developing countries who receive vocational education through G7 measures by one third by 2030.

Equality 2016–2020” (GAP II). Equal access to education is an essential aspect of the “BMZ education strategy: Creating equitable opportunities for quality education” and the BMZ position paper entitled “Vocational education and training in German development policy”.

Planned additional measures

The Federal Government intends to continue the G7 Deauville Partnership process with its approach to the “Economic Empowerment of Women”. The international obligations of the Federal Government to further promote gender equality also have a concrete impact on the design of (vocational) education projects in development cooperation: Proven measures are to be continued, and new measures with a focus on the economic empowerment of women and girls are to be designed. One of the measures to be taken as part of GAP II is the regional flagship project “Vocational support for women in rural Africa”.

Previous measures

Germany further reinforced its commitment to implementing the 2030 Agenda with the second “Development Policy Action Plan on Gender
6. **Ensure availability and sustainable management of water and sanitation for all**

a) **Basic content and political priorities from the point of view of the Federal Government**

Safe access to safe water and adequate sanitation are human rights and essential factors for a healthy and dignified life. The availability of water for other uses – in particular for producing and processing food – can decide on wealth or impoverishment. Global trends such as population growth, urbanisation and climate change and the associated rising demand for water are increasing the already high pressure on global water resources and aquatic ecosystems. Consumption behaviour and the attitude on handling the scarce resource of water also affect its availability, which varies strongly from region to region. Thus, water can be the starting point for social conflicts or even war.

**The SDG in detail**

SDG 6 represents the first time that a comprehensive water target was adopted on a global level. It comprises six areas for action: access to clean drinking water (6.1) and adequate sanitation, paying special attention to the needs of women and girls (6.2), improving water quality (6.3), efficient water-use and sustainable withdrawal of water across all sectors (6.4), implementing integrated water resources management (6.5) and protecting and restoring water and water-related ecosystems (6.6). The achievement of these targets is also very important for other SDGs, especially health (SDG 3), gender equality (SDG 5), energy (SDG 7), economy and industry (SDGs 8, 9), as well as agriculture and forestry (SDGs 2, 15).

**Global importance**

Although access to safe drinking water and basic sanitation was addressed in Millennium Development Goal 7, there are still 663 million people without access to improved drinking water supplies. 1.8 billion people use drinking water that is contaminated with bacteria. 2.4 billion people do not have access to improved sanitation. Inadequate access to a reliable water supply and sanitation and the lack of sanitary facilities and adequate sewage treatment are still the core causes of poverty, malnutrition, disease and refugeeism in many places. The increase in the demand for clean fresh water was twice that of the increase in the global population over the last years. Overuse of water resources and the accompanying water shortage is a reality in many places even today. The pressure on the ecosystem of water will further increase, for example due to the higher demand in the energy and food sectors, and the loss of ecosystems that provide water will increase this pressure at the same time.

**National importance**

In Germany, SDG 6 and its target to ensure the supply of drinking water and sanitation is secured now and in the future by public services. However, there is a need for improvement with regard to water quality (6.3). Considerable efforts are still necessary here. The EU Water Framework Directive (WFD) has already specified the targets for the good chemical and ecological water status for surface water and the good chemical and quantitative groundwater status on the European level. In Germany, these targets must be implemented accordingly by 2027 at the latest.

Despite considerable progress in water protection, almost all of the 9,900 bodies of surface water and 36% of the 1,000 bodies of groundwater had not reached the good status or the good potential specified in the WFD by 2015. The main reasons why the bodies of surface water are not achieving a good ecological status are overbuilding, straightening and the interrupted continuity of flowing waters due to transverse structures. Further reasons why the target of a good chemical status has not been met include high nutrient contamination, particularly with phosphate in flowing waters, and contamination with ubiquitous substances such as mercury, whose threshold value in bodies of water is exceeded nationwide. The threshold value of 50 mg/l for nitrate in groundwater is exceeded at around 18% of all monitoring points of the representative monitoring network for reporting to the European Environment Agency. From this, it can be deduced (with regard to the WFD requirements) that the poor chemical status of approximately 25% of the bodies of groundwater in Germany is a result of high nitrate values. All bodies of transitional and
coastal waters also fail to meet the requirements for good ecological status due to excessive nutrient inputs.

**Federal Government activities**

I. Measures in Germany

The comprehensive quality and management targets of the EU Water Framework Directive and its Daughter Directives are implemented on a national level in the Federal Water Act (WHG) and other regulations. They are enforced by the Länder.

In keeping with the guiding principle of the Federal Government on sustainable development as per the Sustainable Development Strategy, the Federal Government is making an essential contribution to the preventative protection of groundwater, surface waters and coastal waters against the damaging influence of nutrient inputs with the amendment to the law on fertilisation.

II. Measures by Germany

For the Federal Government, the focus of the global implementation of SDG 6 is on improving the supply of water and sanitation, improving water quality and efficiency, and implementing the principles of integrated water resource management in the developing countries. The Federal Government is committing itself to these priorities by participating in processes and initiatives of the United Nations, on the regional level and by entering into strategic partnerships with individual countries. Its activities include:

- Support of the UN coordination committee for the reinforcement of global monitoring and the review of water-related targets
- Participation in the development of a global indicator-based monitoring system for water quality and water resource management
- Management and further development of a global database for water quality data as part of the UNEP programme “GEMS Water”
- Support of the Global Water Partnership (GWP) to reinforce worldwide implementation of the principle of integrated water resource management
- Promotion of the integrative approach of the SDG as part of the water, energy and food security nexus
- Presentation of resolutions in the context of the UN (Human Rights Council and the Third Committee of the General Assembly) on the human rights to safe drinking water and adequate sanitation
- Development and testing of pioneering technologies and viable concepts for the sustainable use of the resource of water through the research support programmes “Globale Ressource Wasser” (The global resource of water, GROW) and “Zukunftsfähige Technologien und Konzepte zur Erhöhung der Wasserverfügbarkeit durch Wasserwiederverwendung und Entsalzung” (Sustainable technologies and concepts to increase the availability of water through water reuse and desalination, WavE)
- Active involvement in and support with the implementation of the “Protocol on Water and Health” in the context of the “UNECE Water Convention”.

III. Measures with Germany

As regards development cooperation, the Federal Government is the second largest bilateral donor in the water sector in the world. The water sector is a priority of bilateral development cooperation in more than 20 partner countries.
b) Relevant national sustainability indicators and objectives/measures

6.1.a Total phosphorous/phosphate input in flowing waters

Water quality – Reducing the pollution of water with substances

**Definition of the indicator**

The indicator specifies the share of those monitoring points at which the benchmark values for phosphorous in flowing waters for a good ecological status in specific types of bodies of water are observed.

**Target and intention of the indicator**

Roughly half of the phosphorous entering flowing water in Germany today comes from agriculture, and the other half originates from cities (municipal water treatment plants and rainwater run-offs). In addition to nitrate pollution, it is one of the causes of an oversupply of nutrients (eutrophication) in rivers, lakes and seas. The consequences of this are algae growth, oxygen depletion all the way to fish kills or the growth of poisonous blue-green algae. For this reason, adherence to benchmark values for specific types of bodies of water, as specified in the Ordinance on the Protection of Surface Waters, at all monitoring points was defined as a goal for 2030.

**Content and progress of the indicator**

Since the different bodies of water react with differing levels of sensitivity to nutrients such as phosphorous, the precise benchmark values vary. The vast majority of flowing water uses the benchmark value of 0.1 mg/l of phosphorous. In organic substrate-dominated rivers, the benchmark value is 0.15 mg/l, for marshland streams 0.3 mg/l and for transitional waters influenced by tidal movement 0.045 mg/l.

The indicator shows whether a particular monitoring point adhered to or fell below the annual average of the benchmark value. However, it does not show by how far the target was surpassed if it was exceeded. The information about the individual monitoring points is summarised. Accordingly, the value of the indicator is strongly dependent on the number and representative status of the distribution of monitoring points. Lakes and other standing waters are not covered by the indicator. However, they are affected to the same degree by excessive phosphorous pollution, and their benchmark values are exceeded with similar frequency.
The indicators of phosphorous and nitrate content (6.1.a and 6.1.b) cover two key aspects of water quality. However, there are other, additional components such as the provision of natural habitats around bodies of water, their stock of organisms (biodiversity), the exposure to pollutants (such as pesticides, metals, medicines) and salts (such as chloride, sulphate) and changes to groundwater levels, all of which are relevant to water quality. Phosphorous generally enters a body of water through the input of phosphates.

In 2014, the annual average at 35 % of the monitoring points at rivers was below the benchmark value. 56 % of monitoring points showed average concentrations extending up to double the benchmark value, while 7 % of monitoring points were in the range of up to four times the benchmark value (not shown in the chart). The remaining 2 % showed even higher concentrations.

When viewed over time, the proportion of monitoring points adhering to the benchmark value has continuously increased and has doubled since 1990. However, the percentage rate of monitoring points with concentrations of up to double the benchmark value tripled during the same period and therefore increased even more sharply. Conversely, the share of monitoring points with even higher values has fallen significantly since the early 1990s. The level of pollution has been reduced significantly thanks in particular to the introduction of phosphate-free detergents and phosphate precipitation in water treatment plants following the specification of threshold values for the introduction of treated wastewater.

If one examines the average trend of the last five years, the indicator has changed only to an insignificant degree. The goal of adhering to the respective specified threshold value at all monitoring points is still a long way off.

### Federal Government activities

The phosphorus concentration in water is the main deciding factor for the consequences of an oversupply of nutrients (eutrophication) in rivers and lakes, such as algae growth, oxygen depletion and fish kill or the growth of poisonous blue-green algae. Total phosphorous emissions decreased by 70% between the 1980s and 2010. Nevertheless, many bodies of water still exhibit considerable pollution. The Federal Government is therefore aiming to further reduce the phosphorus concentration in rivers and lakes.

### Previous and planned measures

The level of pollution has been reduced significantly thanks to the introduction of phosphate-free detergents and phosphate precipitation in water treatment plants following the specification of threshold values.

The Länder’s agri-environmental programmes and programmes for the implementation of the WFD envisage further measures. The obligation regulation on agricultural payments for the protection against erosion in agriculture and measures taken as part of the greening programme of the CAP and the planned specifications in the context of the amendment of the fertiliser regulations can contribute to a further reduction of phosphorus inputs from agricultural sources in the coming years.

Many advanced technologies for wastewater treatment reduce the phosphorus content in wastewater, especially if they include a filtering stage. State-of-the-art technology for phosphate removal in small water treatment plants enables lower discharge values than those currently prescribed. Overall, there is also a potential to conserve scarce resources by means of recovery, for example in the case of phosphorus.

As part of an amendment of the Sewage Sludge Ordinance to be implemented before the end of the 18th legislative period, the agricultural use of sewage sludge is also to be restricted as far as possible. In this context, the recovery of the resource of phosphorus from sewage sludge with the necessary transition periods is also to be made a binding regulation. Phosphorus can already be recovered at earlier stages of wastewater treatment. The targeted recovery of phosphorus from wastewater is to help conserve global phosphorus resources, which are scarce in the long term.
6.1.a.b Nitrate in groundwater

Water quality – Reducing the pollution of water with substances

**Definition of the indicator**

The indicator shows the share of monitoring points at which the threshold\(^1\) is observed, in %

**Target and intention of the indicator**

Groundwater is a key element of the ecosystem. It is part of the water cycle and performs important ecological functions. Groundwater is also Germany’s most important drinking water resource. However, elevated nitrate contents impair the ecology of bodies of water. The threshold value of 50 mg/l of nitrate in groundwater, as specified in the Ground Water Ordinance and in the Ordinance on the Protection of Surface Waters, should therefore be adhered to at all monitoring points.

**Content and progress of the indicator**

The pollution of groundwater with nitrate, a natural nitrogen compound, is caused primarily by washing nitrate out from various fertilisers that are rich in nitrogen. In addition to farm fertilisers such as liquid manure or slurry that are produced in regions of intensive livestock farming, this also includes the mineral fertilisers used for intensive agriculture. The last few years have also seen an increase in the volume of digestate, which is produced as a by-product of biogas power plants and is likewise used as a fertiliser in agriculture. This form of fertilisation also leads to an increased nitrogen content in the soil and therefore to higher nitrate values in groundwater.

The natural background values for nitrate, which means the natural pre-loading, are between zero and a maximum of 10 mg/l. Contents between 10 and 25 mg/l are signs of minor to medium pollution. Concentrations of between 25 and 50 mg/l indicate a high level of groundwater pollution. If the threshold value of the Ground Water Ordinance of 50 mg/l, on which this indicator is based, is exceeded, the groundwater is deemed to be in a poor chemical state. This threshold value also applies to drinking water.

The indicator examined here offers no insight regarding by how much a threshold value was exceeded or undercut. As with the indicator on phosphate in flowing waters, it summarises information from many individual monitoring points and shows at how many of these monitoring points the specified threshold value was adhered to. In this context, the number and the
The representative nature of the distribution, as well as the regional concentration of monitoring points have a major influence on the result of this indicator. Over the last three years, however, EEA groundwater monitoring has been fundamentally revised, adapted and expanded in order to make the results more representative.

The values of the indicator do not exclude the possibility of significant reductions in pollution by nitrate at some monitoring points. For instance, if nitrate content fell sharply at a specific point, but remained above the threshold value of 50 mg/l, this is not reflected by the indicator. The interpretation must also take into account the fact that measures to reduce nitrate pollution may show an effect only after a delay, for instance, because the percolation time from surface to groundwater can take several years.

In 2014, the threshold value of 50 mg/l of nitrate was exceeded at 18.2% of groundwater monitoring points in the EEA monitoring network. This means that the groundwater there must not be used without treatment for drinking water supplies. Since 2008, the share of monitoring points at which this threshold value is exceeded is unchanged. Consequently, the goal of adhering to the threshold value at all monitoring points has not been achieved nor is any movement of the indicator in this direction to be seen.

The value of 25 mg/l, which still indicates a high level of pollution, was exceeded at more than one third (36.1%) of all monitoring points. This percentage rate also remained virtually unchanged over the years.

Federal Government activities

The groundwater in Germany is polluted with nitrate. High nitrate content is an important cause of the eutrophication of surface and coastal waters. Given that a considerable proportion of drinking water in Germany is produced from groundwater, nitrate pollution ultimately threatens the resources for drinking water production.

The current measured data from the representative monitoring network for reporting to the European Environment Agency (EEA monitoring network) reveal that between 2012 and 2014, 18.1% of all groundwater monitoring points were above the quality standard of 50 mg/l specified in the Ground Water Ordinance. The natural background values for nitrate are between zero and a maximum of 10 mg/l. Contents between 10 and 25 mg/l are signs of minor to medium pollution. Nitrate concentrations between 25 and 50 mg/l (or above) indicate major groundwater pollution. In these cases, the chemical status of the groundwater is poor and measures to reduce the level of pollution need to be taken, as is the case when a trend towards deterioration is observed.

Groundwater pollution is caused in particular by nitrogen fertiliser that is not tailored to the needs of plants. High levels of nitrate pollution are often found in regions with large numbers of livestock where groundwater recharge is low and farming is intensive. In regions with large numbers of livestock, it is the large proportion of farm fertiliser (liquid manure, slurry) in particular that causes high nitrogen inputs when used improperly and which can thus lead to nitrate pollution of the groundwater. In regions with intensive agriculture – and with specialised crops in particular – it can also be excessive use of mineral fertiliser that is responsible for high nitrate concentrations. Besides, the amount of digestate from biogas plants used in agriculture has also increased significantly over the last ten years. This digestate is also a significant source of nitrogen input on the local level.

Previous and planned measures

In order to reduce groundwater pollution through nitrate, the specifications on fertilisation that is tailored to plant needs and the location must be consistently observed, the efficiency of use of farm fertiliser of animal and plant origin must be improved, and regional nitrogen surplus, which is caused, for example, by the use of farm fertiliser in regions with nitrogen deficiency, must be significantly reduced. A special focus should be placed on areas that are polluted with nitrate in particular. An important step is the current amendment of the law on fertilisation (see also SDG 2 and SDG 15), which can be expected to yield a more efficient and resource-efficient use of nitrogen, as well as consistent enforcement and monitoring are important steps. The continuous provision of advice and training to farmers, both in organic and conventional farming, is another important measure.
6.2. **Number of people gaining access to drinking water and sanitation through support from Germany**

**Drinking water and sanitation – Better access to drinking water and sanitation worldwide, higher (sofer) quality**

**Definition of the indicator**

The indicator shows the number of people in the respective reporting year who received new or improved access to drinking water and sanitation as a result of German support.

**Target and intention of the indicator**

Inadequate provision of drinking water and sanitary facilities has far-reaching consequences for human nutrition and health. The goal of the Federal Government is therefore to give 10 million people worldwide access to drinking water and sanitation each year up to 2030 with German support.

**Content and progress of the indicator**

This indicator is based on information provided by the Kreditanstalt für Wiederaufbau (KfW). In this case, it is based exclusively on the planned scope of new financing commitments for projects in the area of drinking water and sanitation at the time of submission of the programme proposal to the Federal Ministry for Economic Cooperation and Development. On this basis, the KfW estimates the number of people who will in future (i.e. after the implementation of these planned projects) receive new or improved access to drinking water and sanitation. The funding announced by the KfW includes subsidies and loans, refinanced from the Federal Budget and internal market funds.

Concrete estimates of the extent to which the planned figures are achieved, that is, whether the goal was exceeded or the number of people reached is less than envisaged, can be made only after the relevant infrastructures have been put into operation.

Follow-on projects are evaluated as independent projects. However, if the target group of the follow-on project is identical to that of the original project, it is taken into account only once to avoid duplicate counting. Only in duly substantiated exceptional cases it is permitted to count the target group twice, for example, in scenarios following military confrontations and the destruction of infrastructure where installations previously funded by the KfW are being repaired.

The share of German participation in the projects over the last five years is between 98% and 85%. The recipients are generally developing and emerging countries, which means that this indicator is related to indicator 17.1.

There is a range of additional stakeholders in Germany (e.g. Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, the Länder, private stakeholders), who support access to drinking water and sanitation in developing and emerging countries. The indicator therefore includes only a part of the German development cooperation in the drinking water and sanitation sector. In the reporting year of 2015, the KfW’s share of the water sector was 82.5% of all German development cooperation in this sector.
In previous years, the planned numbers of people who were to receive access to drinking water and sanitation with German support were always just above the set goal of ten million people. The year 2014 was an exception. Here, the planned scope – despite a funding volume of just under EUR 409 million, which was only half that of 2012 – was significantly higher than the goal that applies from 2016 onwards. The reason for this is a nationwide programme in Mexico, which according to KfW estimates was able to reach significantly more people. If the trend recorded over the last four years is maintained, the goal will continue to be met. However, the possibility of major fluctuations due to the diverse nature of the projects cannot be ruled out in the future.

**Federal Government activities**

**Previous measures**

Together with its partner countries, the Federal Government is campaigning for supplying the populace with drinking water and sanitation that are of sufficient quality, affordable and acceptable both socially and culturally. Between 2003 and 2013, the BMZ invested more than EUR 3.3 billion in the water sector in the context of financial and technical development cooperation. This helped to provide 25 million people in sub-Saharan Africa with improved drinking water and 5 million people with sanitation.

**Planned additional measures**

The German development cooperation will intensify the support for its partner countries to help connect households to the water network and to secure the operation, maintenance and management of the distribution network. Economically sustainable and socially compatible financing is a key topic in this context. To this end, further measures are being performed to increase the cost effectiveness of public utilities, for example by reducing water loss, adapting the supply and disposal infrastructures and improving the efficiency of use and energy efficiency. In the context of the implementation of the 2030 Agenda, the Federal Government will further increase its focus on good governance and management in terms of transparency, accountability and participatory structures in its partner countries.

Despite these efforts, solutions that can be implemented quickly are necessary on the path to achieving comprehensive supply with household connections. This includes, for example, shared lines and water kiosks as well as the implementation of poverty-oriented financing mechanisms and strengthening of the communal level, which enables institutions (water companies) and individuals to keep learning.

Successful approaches, for example the cooperation with the education and health sectors at schools, are to be further expanded. In those countries affected by refugeeism in the MENA region and in sub-Saharan Africa in particular, Germany will implement measures to improve the water and sanitation infrastructure and thereby help to prevent crises in refugee camps and communities that are taking in refugees.
7. Ensure access to affordable, reliable, sustainable and modern energy for all

a) Basic content and political priorities from the point of view of the Federal Government

SDG 7 addresses the essential requirements for the development of a global sustainable energy supply that is based to a great extent on the three objectives of the Sustainable Energy for All initiative (SE4All) established by the Secretary General of the United Nations. SDG 7 is closely connected with the topics of poverty (SDG 1), health (SDG 3), water (SDG 6), economy (SDG 8), cities (SDG 11) and climate change (SDG 13).

Structure of the SDG

SDG 7 addresses universal access to affordable, reliable and modern energy services (7.1), the substantial increase of the share of renewable energy in the global energy mix (SE4All initiative: double the share of renewable energy in the global energy mix) (7.2) and doubling of the global rate of improvement in energy efficiency (7.3).

SDG 7.a aims to enhance international cooperation to facilitate access to research and technology as well as investments in the energy infrastructure and clean energy technology. SDG 7.b addresses the expansion of infrastructure and the upgrade of technology with a focus on those countries in greatest need.

National importance

Over the last decades, Germany has succeeded in reducing energy consumption while increasing economic output and also considerably increasing the share of renewable energy in gross final energy consumption. Thanks to the increasing supply with renewable energy and greater efficiency, the net dependency on fossil energy imported from abroad has also decreased. As a result of this transformation of the energy system, domestic value creation remains at a high level, and the availability of energy sources in Germany has increased. The goal of almost completely decarbonising the energy systems with renewable energy in particular, by saving energy and achieving the greatest possible energy efficiency by 2050 at the latest is an important guiding principle of the national climate and energy policies as well as the foreign energy and energy development policies.

The success achieved with the climate and energy policies is based on an adapted mix of instruments and the fact that a focus was placed on sustainable energy technologies at an early stage. The promotion of renewable energy in Germany has contributed to learning-curve effects and cost reductions in regards to energy technologies, even on a global level. Other countries can now also benefit from this.

The national implementation of SDG 7 coincides with the energy transition, which sets the framework for a sustainable energy policy with long-term goals in Germany. The energy transition is also a central element of the German climate protection policy (cf. SDG 13). With the energy transition, Germany is embarking on a journey towards a sustainable energy supply that is based on the cornerstones of efficient energy use, a reduction of energy consumption and the further expansion of energy generated from renewable sources.

By 2050, the transport system in Germany will be virtually independent of fuels containing fossil carbon (“decarbonised”) and will therefore be largely greenhouse-gas-neutral. In addition to increasing energy efficiency and expanding renewable energy, this also requires the development of alternative mobility concepts. In addition, the Federal Government is campaigning on the national and international levels for the reduction of subsidies for fossil fuels in order to create a fair competitive environment for all energy sources and promote the goal of decarbonisation.

Efficient energy use – promoting renewable energy

Efficient energy use

Energy efficiency and energy saving are essential factors for the success of the energy transition. Energy efficiency is the foundation upon which renewable energy is expanded. This is why Germany has set ambitious goals in the area of energy efficiency and has already achieved a great deal. Nevertheless, there is still great potential for reduction, e.g. in the buildings sector. The Federal Government has implemented a coordinated mix of instruments to raise the energy potential (advice and information, support and other financial incentives, regulatory law, research and innovation). This mix of instruments is to be refined in a targeted manner, for example with the National Action
Increasing energy efficiency
By 2020, overall primary energy consumption in Germany is to be reduced by 20% as compared to 2008; the goal for 2050 is to reduce it by 50%. The Federal Government’s aim is to reduce gross electricity consumption by around 10% as compared to 2008 by 2020, and by 25% by 2050. In the transport sector, final energy consumption is to be cut back by roughly 10% by 2020 and by around 40% by 2050 as compared to 2005. In the buildings sector, the non-renewable share of the primary energy demand is to be lowered by a magnitude of 80% by 2050 through a combination of energy savings and the use of renewable energies. The goal here is to achieve a virtually climate-neutral building stock. The introduction of the nearly zero energy building standard for new buildings by 2019 / 2021, which was resolved by the Federal Government in accordance with EU regulations, is contributing to the achievement of this goal.

Increasing the share of renewable energies
Germany has set itself the goal to increase the share of renewable energies in gross final energy consumption to 60% by 2050. The intermediate targets are to achieve an increase of 18% by 2020, 30% by 2030 and 45% by 2040. These targets are consistent with target 7.2. In 2015, the share of renewable energies in gross final energy consumption was 14.9%.

Further efforts need to be made in the transport sector to promote the use of renewable energies. In 2015, the share of renewable energies in the transport sector was 5.2%.

Energy research and development
Germany is consistently focusing its energy research on renewable energies and efficient energy technologies. Around EUR 3.4 billion were provided for the promotion of research into and the development of modern energy technologies as part of the Energy Research Programme of the Federal Government between 2013 and 2016.

As regards the promotion of energy research, the Federal Government is increasing its focus on a systemic approach in order to create the technological prerequisites and innovations for an energy supply that is secured for the long term, affordable and environmentally compatible, and that is supported by society.

II. Measures by Germany
The Federal Government is involved in numerous multilateral organisations, forums and initiatives in order to help shape the international dialogue on a future-oriented energy policy:

1. G7/G20

Resolutions on the intensification of this cooperation are being made as part of the G7 and G20 Energy Ministers’ Meetings and the G7 Science and Technology Ministers’ Meetings. Under Germany’s G7 presidency, the heads of state and government resolved in the summer of 2015 to decarbonise the global economy in the course of the century and convert their energy systems by 2050. The Africa Renewable Energy Initiative (AREI) of the African Union, for example, which aims for a large-scale expansion of renewable energy in Africa (ten gigawatts by 2020, 300 gigawatts by 2030), was also politically reaffirmed at the G7 summit in Elmau. At the climate summit in Paris, the G7 states and other donors agreed to provide over USD 10 billion for the implementation of AREI. Germany is giving EUR 3 billion.

2. Active membership in international energy organisations
The Federal Government is a member of numerous international organisations in the energy sector. It takes advantage of the International Energy Agency (IEA) and its 29 member states to exchange experiences, obtain and contribute policy advice and enter into technological cooperations. Furthermore, the Federal Government provides substantial support to the International Renewable Energy Agency (IRENA), which was founded in Bonn in 2009 on Germany’s initiative and aims to promote the global expansion of renewable energy (146 member states, 30 other states signed the statute). By conducting analyses on financing, political conditions and cost developments of renewable energies and providing concrete policy advice, IRENA makes important contributions to securing energy supply, economic development and climate protection all over the world.
The Energy Export Initiative was founded for the purpose of opening up new markets for German companies abroad.

3. Regional and international networks and forums

The Federal Government is involved in regional and international energy policy-related networks and forums such as the SE4All initiative, the Africa-EU Energy Partnership (AEEP), the International Renewable Energy Conferences (IRECs) and the Renewable Energy Policy Network for the 21st Century (REN21). Furthermore, the Federal Government supports the Energy Sector Management Assistance Program (ESMAP) of the World Bank.

III. Measures with Germany

In the context of development policy, the Federal Government is aiming to provide an additional 100 million people with access to sustainable energy by 2030. Access to sustainable energy was provided to roughly 12 million people between 2012 and 2015.

1. Energy partnerships

The Federal Government intends to reinforce the comprehension of an energy transition on the international level in order to achieve a sustainable global energy supply. Formalised energy partnerships with strategically important partner countries are the central element of bilateral cooperation on energy policy. These partnerships involve top-level government dialogues on energy policy that address concrete challenges, serve as a platform for an international exchange of experiences on matters relating to the energy transition, and provide German companies with a platform for cooperation with companies and institutions in the partner countries that promotes acceptance.

3. Financial resources

At the international donor conference of the Global Alliance for Clean Cookstoves (GACC) in November 2014, the Federal Government declared its intention to provide up to USD 40 million for the improvement of the global cooking energy situation by 2017. One of the partnership programmes supported in this connection is Energising Development (EnDev). The Federal Government has joined Mission Innovation and is planning to double the funds for research, development, demonstration and innovation in the area of energy transition technologies by 2020 as compared to the average expenses between the years of 2013 and 2015. The 20 states that are supporting this initiative announced at the Climate Change Conference in Paris that they were aiming to double their research spending.

The Federal Government is campaigning for the promotion of energy efficiency, e.g. by forming energy partnerships and bilateral development cooperation and by promoting modern technologies, for example at international trade fairs supervised by the Federal Government that help to make sustainable technology from Germany available on the target markets.

The Federal Government is supporting the establishment of sustainable energy systems in 35 partner countries through technical and financial cooperation. Energy is a focus of the bilateral cooperation in 23 of these countries. With a volume of around EUR 3 billion in 2014, energy is the area that receives the most funding from the BMZ. In this context, the Federal Government is supporting the expansion of infrastructure for energy access and the establishment of modern energy systems through technical and financial cooperation.

As part of its development policy, the Federal Government is also supporting projects in the energy sector in least-developed countries (LDCs), e.g. by developing sustainable energy concepts on the basis of biomass in the context of the Bilateral Trust Fund (BTF). The Federal Government is supporting the fight against energy poverty in LDCs on the African continent through multilateral initiatives such as the African Renewable Energy Initiative (AREI) and projects such as Energising Development and the Renewable Energy Cooperation Programme (RECP).

The Federal Government is using a number of different tailored funding instruments to support the mobilisation of private capital (e.g. the GET FiT programme, geothermal energy risk facilities and RECP; RE Devco and the Regional Liquidity Support Facility are in the planning stage). In addition, the Federal Government is campaigning for the reduction of inefficient subsidies for fossil fuels in order to create a fair competitive environment for all energy sources.
b) Relevant national sustainability indicators and objectives/measures

7.1.a/b Final energy productivity and primary energy consumption

Resource conservation – Using resources economically and efficiently

Definition of the indicator

The indicator “Final energy productivity” shows the trend of value added per unit of final energy used. The concept of “final energy” refers to the part of the energy that is used energetically in form of thermal or electric energy in the production sectors for the manufacturing of goods or by private households.

Primary energy consumption specifies how much energy was consumed by a country in the energy sectors for conversion purposes on the one hand, and by production activities, transport and private households on the other.

Target and intention of the indicators

Along with the expansion of renewable energies, the lowering of energy consumption through increased energy efficiency represents the second supporting pillar of the energy transition. The aim is to achieve a high level of economic output while using as little energy as possible. Energy conservation protects the climate and the environment, it helps to improve the security of supply and the industrial competitiveness.

According to the Federal Government’s energy concept, final energy productivity is to be increased by 2.1% annually in the period 2008 to 2050. At the same time, primary energy consumption is to be reduced by 20% by 2020 and by 50% by 2050, both compared with 2008. These goals are also used here as a basis.

Content and progress of indicators

Final energy and primary energy consumption are directly related to one another. Final energy consumption is derived from the sum of primary energy consumption, (negative) conversion, flare and piping losses as well as the statistical difference. Primary energy consumption is the sum of domestically extracted primary fuels and all imported fuels minus the withdrawal of energy in the form of exports and marine bunkers. A key component in the calculation of energy consumption is the data from the energy balances of the Energy Balance Association in Berlin (AGEB), which is supplemented with data from other sources. Final energy productivity indicates the amount of value added created by each unit of final energy used. It represents a measurement of energy efficiency in production areas and in the energy use of private households. However, estimates of energy efficiency in the conversion areas (efficiency of power stations) or in the transmission of energy (elimination of leaks, improved heat insulation, etc.) cannot be directly derived from the indicator.

According to preliminary results, final energy productivity in the period 2008 to 2015 has increased by 9.3%, equating to an average annual increase of 1.3%. This means that the goal of an annual increase of 2.1% on average up to 2050 has not yet been achieved. In the year-on-year comparison, energy productivity for 2015 has even fallen slightly by 0.4 percentage points. A year-on-year increase in final
energy consumption by private households of around 4.6% was responsible for this. The final energy consumption of the industry at an annual rate of change of around 1.2% remained below the growth rate of gross domestic product and thus had a positive impact on final energy productivity.

Primary energy consumption rose slightly in 2015, which can be partially attributed to slightly cooler weather conditions and growth in the economy. Nevertheless, primary energy consumption reached its second lowest level since 1990. Preliminary results indicate that primary energy consumption fell by 7.6% in the period from 2008 to 2015. This means that the target value for 2020 will not be achieved if the trend recorded over the past few years remains unchanged. Primary energy consumption between the years 2008 and 2011 was subject to significant annual fluctuations of 5.1% on average. Based on these values, a trend from 2008 onwards can be determined only on a preliminary basis and with reservations.

Federal Government activities

Together with the reported gross domestic product, the increase of energy productivity and the reduction of primary energy consumption are important indicators of the extent to which economic growth was decoupled from the use of natural resources. The indicators that are part of the Sustainable Development Strategy thus play a key role. They show how serious the Federal Government is about reducing the utilisation of natural resources and how far Germany has come on its path to becoming one of the world’s most resource-efficient economies. The level of perception of these indicators by the public and in the media is high.

Previous measures

Germany has a broad mix of instruments for increasing energy efficiency at its disposal. Information and consulting are core elements of the energy efficiency policy. The energy consulting service provided by consumer centres and “Stromspar-Check PLUS” (Energy saving check PLUS), for example, are addressed to private households, while companies can obtain information through the SME Energy Consulting programme. The consulting and information services are complemented by targeted financial incentives that enable energy efficiency measures to be implemented in the different fields of application. With funds of EUR 2.0 billion per year, the Federal Government’s CO₂ Building Rehabilitation Programme that includes the KfW programmes for energy-efficient construction and rehabilitation is the funding instrument with the highest volume in Germany. Standard-setting instruments for new products and new investments (regulatory law) are another important starting point of the energy efficiency policy. Examples include the Energy Conservation Ordinance (EnEV), which imposes minimum requirements on the energy-related quality of the building shell and the systems engineering in new buildings and on existing buildings when larger rehabilitations are performed. Higher energy efficiency requirements have been in force for new buildings since 1 January 2016.

The National Action Plan on Energy Efficiency (NAPE) that the Federal Government launched at the end of 2014 is a comprehensive strategy that refines existing instruments for increasing energy efficiency and introduces new measures. The Climate Action Programme 2020, which was also launched at the end of 2014, includes measures for increasing energy efficiency and therefore contributes to climate protection.

Planned additional measures

The implementation of the NAPE and the Climate Action Programme 2020 are being further advanced in 2016; all remaining measures are set to start before the end of the year. The Energy Efficiency Strategy for Buildings adopted at the end of 2015 contains suggestions for the further development of existing measures that can be used to lower the energy consumption in buildings (both new and existing). For example, the energy conservation legislation for buildings is to be refined, and the control system for the energy requirements of efficiency and the use of renewable energies for heating are to be redesigned and coordinated.

At the same time, answers need to be developed for new questions that will arise in the medium and long terms. This is why a broad dialogue and consultation process with politics, business and society was started with the Green Paper on Energy Efficiency in August 2016. Conclusions and recommendations for a medium- to long-term efficiency strategy are being developed on this basis and will be bundled in a White Paper on Energy Efficiency. The aim is to identify the new challenges in the area of energy efficiency at an early stage and discuss relevant options for action with the stakeholders affected.
7.2.a/b Share of renewable energies in the gross final energy consumption and share of renewable energy sources in electricity consumption

**Renewable energies – Strengthening a sustainable energy supply**

### Definition of the indicator

The indicator expresses the generation of renewable energies relative to gross final energy consumption. Gross final energy consumption covers energy consumption by the end consumer and the losses arising during the generation and transportation of energy.

### Target and intention of the indicator

The reserves of fossil fuels such as oil and gas are limited, and their use is associated with greenhouse gas emissions. Switching to renewable energies (natural energy sources that constantly regenerate) serves to reduce energy-related emissions and hence the extent of climate change. In addition, dependency on energy imports and the consumption of resources is reduced and technical innovations are promoted. For this reason, the goal of the Federal Government is to increase the share of renewable energy in gross final energy consumption to 18% by 2020, to 30% by 2030 and to 60% by 2050.

### Content and progress of the indicator

For this indicator, the energy generated from renewable sources (including hydropower, wind power on land and at sea, solar energy and geothermal energy, biomass or biogenic waste) is expressed relative to all fuels consumed in Germany. In addition to renewable energy, this also includes imported electricity and fossil fuels such as lignite and hard coal, oil and gas. Another characteristic of the indicator is that energy consumption is taken into account in all areas of application. This includes its use in the form of mechanical energy, as electric power, as heat or as fuel in the transport sector.

The indicator is calculated by the Working Group on Renewable Energies Statistics (AGEE-Stat), but does not take into account the calculation rules according to the EU Renewable Energy Directive (Directive 2009/28/EC), which applies an average value across several years for the supply of hydropower and wind power due to the annual variations here. Instead, the actually generated quantities (of wind power and hydropower) are taken into account for these fuels. In calculating the indicator, it is assumed that all energy generated from renewable sources is consumed domestically and is not exported.

Between 1990 and 2015, the share of renewable energy in final gross energy consumption rose from 2.0% to 14.9%. If the trend continues at the average pace seen in the past few years, the goal for 2020 will be achieved. The use of renewable energies varies significantly depending on the sector. Of the total energy produced from renewable energies in 2015, 49% was used for electricity generation, 42% for heat generation and 9% for biogenic fuels. In particular, biomass with a 57.8% share and wind power with a 20.9% share of all renewable sources played the most important role as fuels used.

The indicator has cross-references to indicators 13.1.a “Greenhouse gas emissions”, 3.2.a “Emissions of air pollutants” and 7.2.b “Share of electricity from renewable energy sources in gross electricity consumption”.

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**Graph: Generation of renewable energies relative to gross final energy consumption**

- Target: 18
- Target: 30
- Target: 60

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**Definition of the indicator**

The indicator reflects the share of electricity from renewable energy sources in gross electricity consumption.

**Target and intention of the indicator**

Switching to renewable energies (natural energy sources that constantly regenerate) can reduce demand for fossil fuels. As a result, the dependency on imports of conventional fuels would be reduced, as would emissions of energy-related emissions, and hence the extent of climate change would be contained. According to the energy concept of the Federal Government, the share of electricity generated from renewable energy sources, measured against gross electricity consumption, is therefore set to increase to at least 35% by 2020, at least 50% by 2030, at least 65% by 2040 and at least 80% by 2050.

**Content and progress of the indicator**

The indicator is calculated by the Working Group on Renewable Energies Statistics based on different official and unofficial sources. Gross electricity consumption is the sum of all generated and imported electricity minus the amount of exported electricity, is therefore set to increase to at least 35% by 2020, at least 50% by 2030, at least 65% by 2040 and at least 80% by 2050.

The comparison of domestic gross electricity consumption with domestic electricity generation from renewable sources excludes foreign trade links. As a result, the indicator is calculated on the assumption that all energy generated domestically from renewable sources is also consumed domestically. However, domestically generated electricity from renewable sources may also be exported in the event of overproduction, and conventionally generated electricity may be imported from abroad in the event of insufficient production. Consequently, the indicator may also overestimate the share of renewable energy in gross electricity consumption.

During the period from 1990 to 2015, the share of renewable energy in electricity consumption increased from 3.4% to 31.6%. If the average trend over the past five years is maintained, the goal of 35% will already be achieved before 2020. This trend has been driven by legal measures, such as the Renewable Energy Sources Act (EEG). The EEG requires producers of electricity to give priority to renewable energy sources when buying and distributing electricity.

Since 2000, the share of renewable energy in electricity generation has risen, in particular due to the increased use of wind energy, biomass as well as photovoltaics. In the period between 2000 and 2015, a slight downward trend in the generation of electricity from conventional fuels coincided with an increase by more than 151 TWh in the production of renewable electricity. Specifically, electricity generation by means of wind energy on land and at sea soared from 9.5 TWh in 2000 to 79 TWh in 2015. Thereof, the share accounted for by wind energy at sea in 2015 was approximately 8.3 TWh. Electricity generation from photovoltaics rose between 2000 and 2015 from 0.06 TWh to around 39 TWh. Electricity generation from biomass has increased more than tenfold in the same period.
Federal Government activities

Expanding renewable energies enables the sustainable development of energy supply. The energy consumed is to be increasingly covered by energy from renewable sources, and the share of fossil fuels is thus to be reduced. This is one of the two strategic goals of the Federal Government’s energy concept for an environmentally friendly, reliable and affordable supply of energy.

Previous measures

The expansion of renewable energies in the electricity sector is supported by the Renewable Energy Sources Act (EEG). The EEG requires that producers of electricity give precedence to renewable energy sources when buying electricity. The reform of the 2014 EEG regulates, for example, that the amount of support provided to renewable energy systems is to be determined via competitive tendering processes as from 2017.

In the buildings sector, the Renewable Energies Heat Act (EEWärmeG) determines that a percentage of the heating and cooling requirements of new buildings must be provided from renewable energy sources. In addition, the Market Incentive Programme promotes investments in the use of renewable energies, predominantly in the building stock. The promotion of renewable energies on the heating market was strengthened with the Market Incentive Programme that was amended in 2015.

In the transport sector, the greenhouse gas quota anchored in the Federal Immission Control Act ensures that the percentage of renewable energies in end energy consumption is increasing. Further measures were decided as part of the Climate Action Programme 2020, for example, to promote the increased use of electric drives in motor vehicles.

Planned additional measures

In the electricity sector, financial support obtained by means of tendering processes will be essentially transformed from cost-based, administratively specified funding rates to funding rates determined in the context of a competition with the 2017 amendment of the EEG. The purpose of this amendment is to increase the cost efficiency of the support and ensure compliance with the expansion corridor for renewable energies specified in the 2014 EEG. The diversity of shareholders is to be maintained at the same time. The key idea of the 2014 EEG to pursue the expansion of renewable energies in a systematic and cost-efficient way is thus continued. The Energy Efficiency Strategy for Buildings contains suggestions for the further development of existing measures that can be used to accelerate the expansion of renewable energies in the buildings sector. This includes, for example, strengthening the combination of efficiency and renewable energies in the context of the energy-related rehabilitation of buildings by means of a closer integration of the existing funding instruments and increasing the coupling of the heat/electricity sectors.

In the transport sector, the Federal Government has further improved the basic conditions for the swift introduction of electric vehicles to the market. The Federal Government introduced the environmental bonus to promote the acceptance of environmentally friendly technologies, climate protection and air quality control. People who purchase a purely electric vehicle receive a premium of EUR 4,000; those who buy plug-in hybrids receive EUR 3,000. In each case, 50% of the premium is financed by the industry. Furthermore, the Federal Government intends to provide EUR 300 million before the end of 2016 to support the expansion and effective consolidation of the existing charging infrastructure. This will take place in the context of the further development of the mobility and fuel strategy to implement the EU Directive on the “deployment of alternative fuels infrastructure”. The coupling of sectors is also set to be expanded and strengthened in the transport sector. To this end, the Federal Government is continuing the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP). This programme promotes alternative drivetrain technologies. It is to be established in the transport sector such that it is competitive by the middle of next year.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

a) Basic content and political priorities from the point of view of the Federal Government

The 2030 Agenda describes (introductory declaration, no. 9) the vision of a world “in which every country enjoys sustained, inclusive and sustainable economic growth and decent work for all.” A world in which consumption and production patterns and use of all natural resources – from air to land, from rivers, lakes and aquifers to oceans and seas – are sustainable.

Without sustainable growth, there can be no eradication of poverty. In this respect, SDG 8 correlates directly with all other SDGs. Germany supports its partners in the design of economic policy measures that allow the greatest possible degree of economic prosperity, social equality and environmental protection. Alongside a competent and responsible state that creates fair and reliable conditions, the cornerstones of sustainable economic growth in partner countries are a strong private sector and support for micro-, small- and medium-sized enterprises in order to implement sustainable growth on a broad scale. Providing poor and vulnerable sections of society in particular with access to financial services according to their needs enables them to improve their own living situations and protect themselves against risks.

At international level, there are still numerous challenges regarding the guarantee of decent work, especially in terms freedom of association, occupational health and safety, the protection of young people at work, employees’ rights, the prohibition of child and forced labour and discrimination at the workplace. The objective is to work against employment without minimum social standards and adequate compensation and thus to ensure that the benefits of economic growth and globalisation are not felt only by the few but by as many people as possible. A key means of doing so is the better implementation and control of ILO core labour rights and international social, environmental and human rights standards along global supply chains, for which Germany is campaigning as part of the G7 in particular.

National importance

- Appropriate sustainable economic growth

Sustainable economic growth is a foundation of Germany’s prosperity: It ensures increasing earned income and more-secure jobs. It lays the groundwork for a productive welfare state and can increase the public sector’s room for manoeuvre. The Federal Government aims its economic and financial policy at stabilising the momentum of growth, further increasing the potential for growth and making economic growth more sustainable overall.

With regard to target 8.4, the Federal Government is endeavouring to reduce absolute resource and energy consumption along the entire value chain and to decouple it from economic development as well as to progressively improve efficiency. The Federal Government is also considering how new measures of progress for sustainable development can supplement gross domestic product. Natural resources are essential for maintaining current and future life on this planet, but many resources are limited. For this reason, Germany – in fulfilment of the leading role assigned to developed countries by target 8.4 – intends live up to its role as one of the world’s most efficient and environmentally friendly national economies. This also includes further strengthening the transition from an economy based primarily on fossil and finite raw materials to an economy based increasingly on renewable energies and raw materials.

The basic objectives of a sustainable, internationally competitive economy that is both environmentally and socially compatible have been drawn up in the Energy Concept, the German Resource Efficiency Programme and the National Policy Strategy on Bioeconomy, among others. For this purpose, the national Green Economy Research Agenda is also intended to convey the vision of a sustainable, because internationally competitive, and environmentally and socially compatible economy. The achievement of a green economy requires changes to production and consumption habits in order to ensure prosperity and high quality of life for future generations around the world.
Statement from the Dialogue on Sustainability

“Prosperity means more than just the mere supply of material goods. It is about what values are required for a sustainable, prosperous society in which solutions to the ecological and social challenges of our time can be developed in freedom.”

Advisory Council on Sustainable Development in Thuringia

- **Investment and innovation**

Industrial enterprises in Germany are already at the top of the table internationally with their energy- and resource-efficient technologies, systems and products, e.g. in clean air technology, sustainable water management, recycling management and sustainable mobility. German businesses’ share in environmentally friendly systems, products, processes and services on the global market totals 14%. They thus make important contributions to a sustainable, environmentally friendly way of doing business. In order to bolster Germany’s position in the global competition between information societies, the potential for innovation in particular shall also continue to be tapped. For this purpose, the Federal Government has bundled activities to promote research and innovation in the new High-Tech Strategy. In order to tap the innovative potential offered by digitalisation, the Federal Government is promoting the development of new technologies and improving conditions for start-up companies. This will contribute to the further improvement of conditions for high productivity and to the strengthening of medium-term growth potential in (8.1).

- **Public budgets and financial markets**

Thanks to a consistent course of growth-oriented budget consolidation, Germany has successfully turned around its financial policy for balanced budgets and a reduction in the debt ratio. Sustainable public finances in the long term are a requirement for ensuring the state’s and social security’s ability to function and tackling the challenges of sustainable development.

Only a stable financial sector can ensure the sustainable financing of the real economy. In response to the lessons of the global financial and economic crisis, since 2007, financial market regulations have been and are still being substantially revised and renewed at global, European and national levels. Important guiding principles, on which many of the individual regulations are based, aim at increasing the connection between risk and accountability as well as individual financial service providers’ and the financial markets as a whole’s resilience to shocks. The Federal Government is also advocating a financial transaction tax at European level. The financial sector shall make an appropriate contribution towards meeting the costs of the financial crisis.

In addition to sustainable public budgets and stable financial market structures, however, it is also about the sustainable use of funds. More and more investors want to invest their money for sustainable projects and businesses.

- **Social responsibility – good work**

The Federal Government sees sustainable and inclusive business that strengthens the social and labour partnership, fairly distributes economic prosperity and improves the participation and development opportunities of the entire population as a condition for peace and cohesion in society.

Through good work in Germany and around the world, all people should be enabled to lead self-determined and secure lives thanks to their employment. For decent work, it must be guaranteed that work is appropriately compensated and thus creates social security, that working conditions are good and that employees’ rights are observed. This is the basis for a prosperous economy lifting living standards worldwide and for effectively preventing poverty.

For the Federal Government, goals such as full employment and good work for all groups on the labour market, equal pay for equal work, functioning transitions from school to work and high occupational safety standards are particularly important concerns.

Employment promotion is a key component of the government’s employment policy. Employment promotion is used to prevent or reduce unemployment. Long-term unemployment in particular must be avoided, e.g. by improving individual employability. Cross-cutting tasks of employment policy include above all gender equality and equality for people with disabilities (see SDG 5 and 10). At the same time, the transition from school to work — notwithstanding that Germany’s dual education system is exemplary compared to the rest of the world — shall be improved further.
A major challenge that Germany must face in the years to come is - alongside increasing employment opportunities for people with disabilities - the labour market integration of the large number of immigrants. The first priority here is to promote (occupational) language skills.

- **Corporate responsibility – sustainable supply chains**

The assumption of corporate social responsibility (CSR) can drive innovation in order to make globalisation socially and ecologically sustainable. The Federal Government has therefore pursued a systematic CSR policy since 2010 and is enhancing its national CSR strategy. It is assisted by the National CSR Forum as an important advisory body in which all relevant stakeholders are represented. It draws up recommendations and opinions on current developments.

Since the adoption of the UN Guiding Principles on Business and Human Rights in 2011, the corporate responsibility to respect human rights has become the international focus. Companies should develop procedures to identify, prevent and mitigate the potential negative effects of their business activities and relationships. More and more companies in Germany are conscious of this responsibility and act appropriately. The European Commission also responded to this in its 2011 CSR Strategy and defined CSR as “the responsibility of enterprises for their impact on society”.

The Federal Government is following up on these developments, e.g. during the German presidencies of the G7 and G20 and in the drafting of a National Action Plan to Implement the UN Guiding Principles.

**Federal Government activities**

**i. Measures in Germany**

- The German Resource Efficiency Programme, the national programme for sustainable consumption, the waste avoidance programme and the enhancement of recycling management serve the objective of becoming one of the world’s most efficient and environmentally friendly national economies. Germany thereby fulfils its international responsibility in resource policy.

- For the implementation and enhancement of the Green Economy Research Agenda, the Green Economy Platform was launched by the BMUB together with the BMUB. The platform shall use the stimulus of the Research Agenda to initiate an ongoing process of inspiring, inventing, developing and launching innovations that promote social, ecological and economic sustainability. At the same time, it serves (alongside the National Research Strategy Bioeconomy 2030) as a basis for the Expert Forum “Sustainable Management”, which the High-Tech Forum uses to develop recommendations via expert discussions on the issues of sustainable consumption, sustainable production and sustainable finance.

- For the European Union, Directive 2014/95/EU is the main obligatory legal framework according to which public-interest entities with more than 500 employees to which the Directive applies will have to report on environmental, social, employee-related and other matters from 2017. The EU Directive is currently being implemented in Germany by the Federal Government.

- In the G7 Summit Declaration from Elmau, the Federal Government committed itself emphatically to the UN Guiding Principles on Business and Human Rights and welcomed the creation of substantial National Action Plans. Under the stewardship of the Federal Foreign Office, the Federal Government is therefore currently drawing up a National Action Plan (NAP) on business and human rights that formulates a clear governmental expectation, gives enterprises clear guidance but also includes supporting measures. Via the association platform “Unternehmen Biologische Vielfalt 2020”, the BMUB is conducting a constructive dialogue with business and conservation associations about measures to implement the National Strategy on Biological Diversity in business. Enshrining aspects of biological diversity in business management and in particular taking heed of the impact of business activity on biological diversity throughout the entire – often international – supply chain is one of the platform’s major goals alongside designing company premises such that they are compatible with nature and nature sponsoring. It can build on the experiences of the pioneering enterprises in the “Biodiversity in Good Company” initiative.

- Plattform Industrie 4.0 was relaunched. It is supported by policy-makers, business, science and trade unions. At the IT Summit in November 2015, the platform presented over 200 application examples to illustrate the benefits of Industrie 4.0, especially for SMEs and employees. It will compile recommendations for equipping industry in Germany for the “4th industrial revolution”.

- The Federal Government is taking a comprehensive approach to strengthening public and private investment and has already taken numerous measures in this legislative period. The proportion of investment spending in the Federal Budget was increased from 8.5% in 2014 to 9.5% in 2015. The Federal Government will continue to strengthen the momentum of investment and resolve additional measures as part
of its investment strategy before the end of this legislative period.

- Young businesses make an important contribution to the innovative strength and competitiveness of the German economy. In 2015, the Federal Government advanced Germany as an internationally competitive location for venture capital financing and will continue this strategy, as announced in its key issues paper on venture capital.

- As part of the “Alliance for Initial and Further Training 2015–2018”, the Federal Government along with the business community, trade unions, the Länder and the Federal Employment Agency are pursuing the goal of showing every young person interested in training the quickest path to a vocational qualification.

- The Federal Government is contributing to sustainable growth, the reduction of the skills shortage and the promotion of gender equality by helping parents to work and improving the compatibility of work and family life (see also SDG 4 and 5). The paid parental leave scheme “Elterngeld Plus” with a partnership bonus helps parents in an even more targeted manner to balance work and family life and return to work earlier while (jointly) caring for their newborn. Elterngeld Plus thus contributes to securing the economic livelihood of both parents in the long term. With the improvements in the amount of relief for single parents and the child supplement for low-income families, the Federal Government helps these people to work.

- As part of the Federal Government’s National Action Plan to implement the UN Convention on the Rights of Persons with Disabilities, initiatives were launched to make better use of the potential skilled workforce of people with severe disabilities, which are now being pursued.

- The general minimum wage, the Act for the Equal Participation of Women and Men in Management Positions and the planned act to introduce greater wage equality between women and men are intended to promote pay equality. Family caregiver leave, caregiver support benefit, Elterngeld Plus, and the federal programme “KitaPlus” (ChildcarePlus) are to enable the better compatibility of work and family life. The enhancement of the law on part-time work with a legal entitlement to temporary part-time work (right to return to previous working hours) envisaged in the Coalition Agreement will also help harmonise working and private lives and serve as more stable income protection over the course of people’s lives. The proposed legislation to prevent abuse in the design of contracts for work and to enhance labour leasing likewise serves to strengthen good work and labour partnership (see also SDG 1 and SDG 10).

- Research and model projects for sustainable tourism emphasise the promotion of environmentally and socially compatible tourism in Germany and abroad. Examples include the integration of environment/climate protection and biodiversity into business decisions, the improvement of energy and resource efficiency in the German hospitality industry, the protection of agrobiodiversity in rural regions and the integrated sustainable development of coastal regions.

- The theme of the “Initiative New Quality of Work”, launched in 2002 by the Federal Ministry of Labour and Social Affairs and social partners, is “Securing the Future, Shaping Work”. Today, the Federal Government, Länder, business associations, trade unions, the Federal Employment Agency, companies, social insurance providers and foundations work together in this non-partisan alliance. The crucial question is how can work be made profitable for businesses and healthy, motivating and attractive for employees? In order to answer this question, the Initiative kicked off a broad societal debate about the quality of work. In its networks, the Initiative brings together those who want to shape employment in Germany. In addition, the Initiative provides illustrative information about the “future of work” and inspiring examples and concrete solutions for business practice, which are developed in close cooperation with companies and their employees.

- Various national initiatives and dialogue forums are being promoted and supported, such as the Federal Government’s National CSR Forum, which comprises representatives of employers’ associations, chambers of commerce, trade unions, non-governmental organisations, science, politics and business. The Forum is currently working on a “Berlin CSR consensus on corporate responsibility in value and supply chains”, which is to give companies more guidance for specific action, their responsibility in the supply chain and the implementation of business due diligence. The website http://wwwcsr-in-deutschland.de is the Federal Government’s central information platform on the topic of CSR. It coherently presents all the measures and initiatives of the individual ministries and offers companies support. The CSR Award of the Federal Government offers another incentive to companies to make their own business sustainable (see above Chapter B) III.2.).

- The Federal Government supports the UN Global Compact, the largest initiative for corporate responsibility and sustainability worldwide. The office financed by the BMZ assists the around 400 German signatories of the Global Compact from business, politics and civil society in the fields of human rights and labour standards, environment and climate, anti-corruption and the implementation of the 2030 Agenda. One important component of these activities is the focus on the sustainable management of German
companies’ supply chains in partner countries in the German development cooperation and collaboration with UNICEF on children’s rights in companies.

II. Measures by Germany

- To combat child labour, it is chiefly necessary to ensure the labour force participation and appropriate compensation of parents. Germany is campaigning for this, especially as part of the International Labour Organization (ILO) with its Decent Work Agenda.
- Germany also particularly supports ILO programmes to combat child labour (International Programme on the Elimination of Child Labour, IPEC), to promote social protection (Social Protection Floor), to promote youth employment and to promote labour standards in global supply chains.
- A Federal-Länder working group to combat human trafficking for labour exploitation has been set up with the involvement of all relevant governmental and non-governmental stakeholders. It is to develop a strategy and effective structures to combat human trafficking.
- Under the German presidency in 2015, the G7 adopted an “Action for Fair Production” action plan for the better enforcement of labour, social and environmental standards (establishment of the global prevention fund “Vision Zero Fund”, better implementation of business due diligence, promotion of multi-stakeholder networks and strengthening of the OECD National Contact Point (NCP)).
- The G7’s commitment to promote multi-stakeholder networks for sustainable supply chains is also reflected in SDG 17 (developing global partnerships). The Federal Government fulfils this commitment by, among other things, supporting various initiatives like the Partnership for Sustainable Textiles, the Forum for Sustainable Palm Oil and the German Initiative on Sustainable Cocoa.
- The Federal Government is also endeavouring to embed the issue of sustainability in global supply chains more deeply into the global agenda, e.g. at EU level, at the OECD, in the ASEM process and during the German G20 presidency in 2017.

- In this context too, the Federal Government is championing the integration of high environmental, social and human rights standards in EU trade policy and unilateral EU trade instruments such as the Generalised System of Preferences Plus.
- Germany is campaigning around the world for an increase in resource efficiency. Under Germany’s G7 presidency in 2015, for example, resolutions were passed on resource efficiency for the first time, and a G7 Alliance on Resource Efficiency was founded. In bilateral cooperation, partner countries are helped to establish a resource-efficient economy and sustainable resource policy. The Federal Government will also encourage this development in other international forums such as the G20.
- Germany supports the diversification of tourism value chains to include new local products and services from the local culture(s).
- Deutschland is campaigning worldwide – e.g. via the G20 Global Partnership for Financial Inclusion – for improved access to adequate financial services, especially for poorer sections of society and micro- and small enterprises.

III. Measures with Germany

- In the trade sector, Germany is promoting the build-up of productive capacity in developing countries with around EUR 4 billion a year as part of the Aid for Trade initiative.
- Germany supports the dismantling of tariff and non-tariff barriers to trade around the world.
- In the field of sustainable economic development, Germany is promoting inclusive and sustainable growth in nearly 70 countries around the world.
- In the partner countries, Germany promotes vocational education and the establishment of job placement systems and supports access for disadvantaged groups, especially women, young people and people with disabilities. Equal pay for equal work is a specific target for support.
b) Relevant national sustainability indicators and objectives/measures

8.1. Total raw material productivity

Resource conservation – Using resources economically and efficiently

**Definition of the indicator**

The indicator for raw material input productivity compares the value of all goods submitted for final use (in EUR, price-adjusted) relative to the mass of the raw materials used domestically and abroad for their production (in tonnes). Final use covers all three, domestic consumption and domestic investment as well as exports.

The denominator of the indicator takes into account abiotic and biotic raw materials from the environment as well as plant materials produced by farming and forestry.

**Target and intention of the indicator**

The removal of raw materials is always associated with impairments to the natural environment. Due to the growing demand for raw materials, raw material deposits are increasingly being developed in areas worldwide that are particularly sensitive to mechanical influences. For this reason, the Federal Government has already set the goal in the German Resource Efficiency Programme (ProgResS) II in 2015 of continuing to increase raw material input productivity. In the years from 2000 to 2010, raw material input productivity was already increasing by an average of around 1.5% annually. This kind of positive trend should be continued up to 2030.

**Content and progress of the indicator**

To calculate this indicator, it is necessary to determine the mass of all raw materials required to produce the imports. The calculation of this variable designated as imports in raw material equivalents is based on a complex model that employs data from various official and unofficial sources.

Due to the monetary and physical incorporation of imports, the indicator takes into account the value added and raw material use across the entire production chain both inside and outside of Germany. Compared with the “raw material productivity” indicator of the previous national Sustainable Development Strategy, international economic ties are accommodated to a greater degree. The raw material use mapped in the indicator not only covers domestic final use, but also exports. It should therefore not be confused with a resource footprint for Germany.

With the mineral raw materials and fossil fuels, the previous indicator included exclusively those raw materials that were considered to be non-renewable. In contrast, the indicator presented here also includes...
plant-based products from farming and forestry activities. This means that duplicate counting occurs to a limited degree. For example, both the mass of an agricultural product at harvest time as well as that of the mineral fertiliser used to produce it are recorded. Based on preliminary results, the value of the indicator increased by approximately 20 % from 2000 to 2011. This increase results in particular from the growth of the numerator: The value of the final use increased by around 25 % during the reference period. The removal of domestic raw materials fell moderately between 2000 and 2011; at the same time, however, the mass of imports in raw material equivalents increased, causing a slight increase of approximately 5 % in the indicator’s denominator.

In the German Resource Efficiency Programme ProgRes II, it was agreed that the “total raw material productivity” indicator shall serve as a guide, and that the Federal Government does not intend to derive direct legal measures from it.

Federal Government activities

“Total raw material productivity” serves as a production-based indicator for the raw material efficiency of the German economy. It is an enhancement of the “raw material productivity” indicator previously listed in the Sustainable Development Strategy. Unlike the previous indicator, total raw material productivity includes biotic raw materials (materials that originate from living organisms) alongside abiotic materials. The focus is thus extended to the efficient and economical use of the former. This is an important signal, as biotic raw materials are not intrinsically more resource-efficient or environmentally friendly. Instead, they must be regarded in the context of their cultivation (including land use and its consequences), their use and exploitation and the associated social and ecological impact.

The indicator “total raw material productivity” looks at not just the tonnage of imported goods but the entire associated primary raw material input. This prevents relocations of raw-material-intensive processes abroad from being reported as domestic productivity increases. This is especially important because the volume of goods imported into Germany has increased significantly over recent years. The production processes this requires are associated with the use of materials and energy abroad and the accompanying environmental impact. For a realistic picture, these flows of energy and materials are now included. It is important to make these as efficient and environmentally friendly as possible, too. The aim is for Germany to maintain or improve its competitiveness in the long term and to fulfil its ecological responsibility internationally.

Domestically extracted raw materials as well as imports are also being exported (again) to an increasing degree. Consequently, the indicator’s denominator does not point to increased global raw material extraction for consumption and investment in Germany, but reflects generally more intensive links between the German economy and the outside world.

The year 2009 should be considered an outlier due to the exceptional economic situation. The values for the years 2010 and 2011 continued the path of development that prevailed up to 2008. From 2010 to 2011, the value of the indicator grew by 2.39 % and thus followed the positive trend from the preceding ten years.
The Federal Government will focus public procurement more on resource-efficient products and services, provide more detailed information on resource-efficient alternatives for households and businesses, embed the issue more firmly in all areas of education and continue promoting research, development and innovative pilot projects for resource conservation, including in integrated urban development and sustainable building. In addition, the existing legal conditions will be continuously enhanced in order to improve Germany’s resource efficiency.

The Federal Government will also forge ahead with its international activities to increase resource efficiency in other international forums such as the G20.

8.2.a/b Government deficit, structural deficit

Government debt – Consolidating public finances – creating intergenerational equity

Definition of the indicator

The indicators show the governmental funding balance (deficit or surplus) and the structural funding balance in relation to gross domestic product at current prices (GDP). The governmental funding balance is calculated from government revenue minus government expenditure. The annual structural balance refers to the part of the funding balance that cannot be attributed to cyclical fluctuations and temporary effects.

Target and intention of the indicators

Sound public finances represent an essential element of a sustainable financial policy. A policy that relies too heavily on borrowing to fund current public expenditures and then passes this debt on to future generations is simply not sustainable.

According to the convergence criteria for the European Union (referred to as the Maastricht Criteria), the annual government deficit should be less than 3% of GDP. The structural deficit must not exceed 0.5% of GDP. These are the stipulations of the European Stability and Growth Pact. The guiding principle of the structurally balanced budget has also been enshrined in Germany’s Basic Law since 2009 (Article 109, referred to as the debt brake).

Content and progress of indicators

The calculation of GDP and governmental funding balances is specified by the European System of National and Regional Accounts (ESA) and is conducted by the Federal Statistical Office. The structural funding balance is determined by the Federal Ministry of Finance. The calculation of the government deficit takes into account the finances of the public authorities, that is, of Federal Government, the Länder and municipalities, and the finances of the social insurance system. Additional units – such as the German Financial Market Stabilisation Fund, which must be allocated to the state sector according to the ESA – are also included. The values are based mainly on the financial results of the Federal Budget according to information provided by the Federal Minister of Finance and, for the Länder and
municipalities, on the quarterly cash results of the financial statistics.

In 2014, the governmental overall budget reported a surplus of EUR 8.6 billion – the first positive result since the German reunification. The Federal surplus rose to EUR 10.0 billion in 2015. At the same time, the Länder reported a cumulated budget surplus (EUR 4.6 billion) for the first time since 2007. The results from the municipalities (EUR 4.2 billion) and the social insurance fund (EUR 2.1 billion) were also positive. Combining all levels, the financing surplus was EUR 20.9 billion. The national budget in 2014 and 2015 showed a structural surplus of 0.8 % and 0.9 % of GDP respectively. As a result, the convergence criteria of the European Union for the government as well as the structural deficit were met for the fourth time in succession since 2012.

Viewed over the entire period from 1991 to 2015, government revenues grew more strongly (98.8 %) than GDP (92.0 %) at current prices and expenditure (82.1 %). The share of government revenues measured according to GDP therefore increased from 43.2 % to 44.7 %. However, higher revenue growth became apparent only from 2011 onwards.

Expenditures revealed a disproportionate increase in social benefits in kind. These have increased by 150.9 % since 1991, whereas the largest item on the expenditure side – monetary social benefits – recorded an increase of 100.0 %, which was only slightly higher than GDP growth (92.0 %). Around 70% of monetary social benefits are accounted for by social insurance, primarily in the form of pensions and unemployment benefits. From 2003 onwards, these two benefits measured as a proportion of GDP fell from 18.4 % to 15.5 % (2015), which can be primarily attributed to sharp reductions in payments of unemployment insurance cover. These fell between 2003 and 2015, as a result of the Hartz legislation and an upturn in the labour market, by approximately EUR 24 billion.

Federal Government activities

The European Union’s Stability and Growth Pact (SGP) obliges the member states to nearly balance the overall government budget and to set their own mandatory targets in this respect. In addition, the Pact prescribes upper limits for budget deficit and debt. Compliance with these targets and limits secures the financial capacity to act of each individual member state of the Economic and Monetary Union. The Pact thus commits the EU member states to a stability-focused financial policy as a condition for strong, sustainable growth in Europe.

Previous measures

In order to comply with the upper limits for the structural and nominal government deficit, the Federal Government and the Länder agreed what it calls the “debt brake” as part of the “Federal Reform II”. This generally obliges the Länder to maintain balanced budgets and limits the Federal Government to a structural deficit of 0.35% of annual economic output.

Since 2012, the government budget of the Federal Government, Länder, local authorities and social security funds has been close to balanced and the medium-term budget target (structural deficit of no more than 0.5% of GDP) achieved. The criterion of a government deficit of no more than 3% of annual economic output has been consistently fulfilled since 2011. In 2015, a general government surplus of 0.7% of gross domestic product (GDP) was achieved. With a Federal Budget without new debt, the Federal Government made a crucial contribution to this development.

Planned additional measures

The Federal Government, Länder and local authorities are faced with the large and urgent task of providing humanitarian support for hundreds of thousands of refugees and integrating them into society. This is a reason for rising government spending on social benefits. But far-sighted financial policy and a high degree of spending discipline are also required in light of the ageing population. This is all the more important as the pressure on public budgets is currently being relieved by extremely low interest rates on the capital market, but these extraordinary circumstances cannot continue forever.

The Federal Government has consistently set itself the goal of adhering to a growth-oriented financial policy and meeting all European and constitutional requirements.

The Bundestag has therefore adopted another Federal Budget without new debt for 2016. For 2017 and beyond, the Federal Government has reaffirmed the target of balanced budgets with the benchmark figures of the executive draft of the Federal Budget 2017 and the Financial Plan 2016 to 2020.
8.2.c Debt

Government debt – Consolidaing public finances – creating intergenerational equity

Definition of the indicator

The indicator shows the national debt as defined by the Maastricht Treaty as a ratio to gross domestic product (GDP) at current prices. The indicator therefore serves as a measure of government debt.

Target and intention of the indicator

The European Union’s Stability and Growth Pact specifies a reference value of 60% as the maximum debt-to-GDP ratio. This also is the upper limit of the national target-value of the indicator which is relevant for this report.

Content and progress of the indicator

The national debt is determined by the Bundesbank twice annually pursuant to the requirements of the Maastricht Treaty based on calculations by the Federal Statistical Office. Gross domestic product at current prices is determined as part of the national accounts systems by the Federal Statistical Office and published as a preliminary value in January of the following year. The debt-to-GDP ratio is influenced by the state of the public budgets and by economic development in general. Assuming balanced budgets, the debt-to-GDP ratio falls faster the stronger the GDP growth. In case of positive economic development, the debt-to-GDP ratio will even fall without any reduction in overall public debt.

Since the indicator compares only the inventory variable of debt in relation to the flow variable of gross domestic product, the nation’s financial and fixed assets are not included in the calculation. Furthermore, the indicator also excludes implicit government debt, which refers to the government’s future payment obligations that are pledged but not yet due.

Since 2003, the debt-to-GDP ratio in Germany has been continuously above, and since 2009 far above, the limit set on European level. Following public budget consolidation efforts in the middle of the last decade, it fell to 63.7% in 2007, only to increase further to a high of 81.0% by 2010. This rise must be seen in the light of the financial and economic crisis. The sharp increase from 72.6% (2009) to 81.0% (2010) was primarily due to the fact that the new resolution agencies established for the Hypo Real Estate and WestLB banks were assigned to the public sector, meaning that their liabilities were factored into the government debt. This alone accounted for EUR 238 billion of the increase in government debt in 2010. Overall, the financial market crisis had driven up government debt by an additional EUR 311 billion by 2010. At the same time, it also led to an increase in the government’s financial assets that is not shown by this indicator due to the gross presentation of debt.

In the subsequent years, the burdens imposed by the financial market crisis were significantly reduced. This was assisted by the repayment of the asset balances of the resolution agencies. The sales of financial assets of the agencies resulted in payments up to the end of
The Federal Government reduced its debt for the first time in 2015 by EUR 24.6 billion to EUR 1,359 billion. The debts of the Länder fell from their high point in 2012 by EUR 34 billion to EUR 648 billion in 2015. The debt owed by municipal governments in Germany continued to grow, albeit at a slower rate, to EUR 152 billion (2015). As in previous years, the social insurance payments achieved budget surpluses and have recorded small asset surpluses since 2010. In 2015, 63.0 % of the overall debt was owed by the Federal Government, 30.0 % by the Länder and 7.0 % by the municipalities.

In the national balance of assets, the debt owed by the government is balanced by its assets – both tangible and financial. The biggest asset owned by the state is its infrastructure (roads, schools, public buildings). According to the asset accounts maintained by the Federal Statistical Office, these assets were valued (after amortization) at EUR 1,338 billion in 2015. The financial assets were valued at EUR 1,063 billion (2014). Not least, due to the interests held in the resolution agencies mentioned above, securities now represent the second most highly valued asset.

Federal Government activities

Besides the general government deficit, government debt is also an important indicator of how sound public finances truly are. Public finances are sustainable as long as the government is always able to meet its obligations. The question as to how much debt public finances can sustainably bear cannot be answered reliably. There may be variations between countries, so that the answer will depend for one thing on the long-term development of each country’s economic strength. A long-term challenge for the financial sustainability of public finances is demographic development in Germany. The risks to the sustainability of public finances resulting from demographic change can be limited by sustainable, growth-oriented budget consolidation, early reforms of social security systems and a reduction in government debt.

The European Union’s Stability and Growth Pact specifies a reference value of 60% as the maximum debt-to-GDP ratio. Observance of the balanced budget provision anchored in Germany’s Basic Law guarantees a lasting reduction of the debt-to-GDP ratio.

Previous measures

Since 2002, the Maastricht debt-to-GDP ratio in Germany has continuously been above, and in some years far above, the limit set at European level. Following public budget consolidation efforts in the middle of the last decade, the ratio had fallen to 63.5% in 2007, only to initially rise again following the financial and economic crisis. It has fallen again since the high (81%) in 2010. At the end of 2015, it was still 71.2% of GDP and is expected to continue falling to 68.25% in 2016.

A major contributor to the sinking debt-to-GDP ratio was the successful reduction of the liabilities of the resolution agencies of the Federal Government and the Länder. By selling portfolios, the liabilities were reduced from the high of around 9.2% of GDP in 2010 to 5.6% of GDP in 2015.

Planned additional measures

The Federal Government has set itself the goal of reducing the debt-to-GDP ratio to below the permitted Maastricht limit of 60% by 2023 at the latest. The Federal Government in particular will contribute to this with balanced Federal Budgets in the years up to 2020.

The BMF publishes more in-depth analyses of the long-term development of government finances and their sustainability once per legislative period in its “Report on the Sustainability of Public Finances”. The BMF’s Fourth Report on the Sustainability of Public Finances was published in February 2016 and is available at www.bundesfinanzministerium.de.

As the BMF’s Report on the Sustainability of Public Finances of February 2016 describes, demographic change is necessitating reforms to guarantee the stability of public budgets in the long term.
8.3. Gross fixed capital formation in relation to GDP

Provision for future economic stability – Creating favourable investment conditions – securing long-term prosperity

Definition of the indicator

The indicator shows the share of gross fixed capital formation relative to nominal gross domestic product (which means at current prices). This share is also referred to as the investment ratio.

Target and intention of the indicator

Future investments made by both the private and public sectors are decisive in creating a strong and competitive economy. For this reason, the goal of the Federal Government is to promote appropriate development of the share of gross fixed capital formation in gross domestic product.

Content and progress of the indicator

The level of gross fixed capital formation is determined by the Federal Statistical Office. It includes net additions (that is, acquisition minus dispositions) of investment goods by resident producers. Investment goods are manufactured capital goods that are designed for repeated or continuous use in production processes for longer than a year. These include buildings (dwellings, non-dwellings), equipment (machinery, vehicles, tools), military weapon systems and other assets (intellectual property such as investments in research and development, software, copyrights and exploratory drilling as well as livestock and crops). Also included are repairs that lead to a significant increase in the value of an asset and/or prolong its useful life.

Gross fixed capital formation is determined as part of the system of national accounts, which are compiled according to harmonised European rules and based on multifaceted results of all available, relevant data sources.

In 2015, the share of gross fixed capital formation in gross domestic product was 19.9 % and was thus 5 percentage points below the initial value of the time series in 1991. The indicator has moved contrary to the desired direction both in the medium and the long run.

The investment ratio in Germany during the years 2012 to 2014 of 20.0 % on average was slightly below the investment ratio for the entire OECD region (20.4 %). However, the ratios have largely reached the same level since 2010.

Looking at the time series reveals a wavelike trend in the investment ratio that is marked by declines at the start of the millennium and, following a slight recovery, again in 2009 following the economic and financial crisis of 2008/2009. Up to 2011, investment activity recovered, and gross fixed capital formation once again exceeded the level of the pre-crisis year. After 2011, gross fixed capital formation grew less strongly than gross domestic product for two years, which pushed down the investment ratio to 19.7 %. In 2014 and 2015, gross fixed capital formation increased strongly again and reached a nominal level of just under EUR 604 billion. Since the increase in nominal gross domestic product in the same period was slightly lower, the investment ratio increased slightly to 19.9 %.

With regard to investments in construction, the dwellings sector has recorded strong nominal growth (+33.7 %) since 2010, while the growth of investments...
in the area of non-dwellings (both in building construction and underground construction) in the same period was less pronounced (+12.5 %) and even declined in 2012. Equipment investment at current prices increased most recently by 6.1 % (2014) and 4.6 % (2015) compared to the previous year, but have yet to return to pre-crisis levels due to the sharp decline in 2009 (-22.0 %).

The strongest growth since 1991 was recorded for investment in research and development as well as in software and databases. Between 1991 and 2015, its volume has more than doubled. Investment in research and development in 2015 already accounted for 12.9 % of overall gross fixed capital formation. Software and databases accounted for a share of 4.2 %.

The period from 1991 to 2015 witnessed a strong shift in investment activity from the manufacturing sector to the service sector. In 1991, 30.9 % of new investments were still being made by manufacturing companies. By 2015, this figure had fallen to just 24.1 %. In 2015, 74.4 % of investments were made in the service sectors. In 1991, this figure was still 67.5 %. The largest single investment area was that of property and housing. In 2015 alone, this sector accounted for 30.8 % of investments in all new buildings and equipment.

Federal Government activities

Gross fixed capital formation in relation to GDP describes what proportion of the new value added in the economy is invested. This investment helps to strengthen potential growth and safeguard prosperity in the long term.

Previous and planned measures

The Federal Government has set itself the goal of achieving an investment ratio above the OECD average. It is therefore taking a comprehensive approach to strengthening public and private investment and has already taken numerous measures in this legislative period to give a further boost to the momentum of investment. For example, additional funds are being provided for transport infrastructure, the broadband roll-out and energy-efficiency and climate-protection measures. At the same time, the conditions for private investment are being improved. As part of its investment strategy, the Federal Government will initiate further measures in this legislative period in order to give a lasting boost to investment activity (see the Federal Government’s 2016 Annual Economic Report).
**8.4. Gross domestic product per capita**

**Economic output – Combining greater economic output with environmental and social responsibility**

<table>
<thead>
<tr>
<th>Year</th>
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<tr>
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<tr>
<td>2000</td>
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<td>2011</td>
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<td>46.0</td>
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<td>2015</td>
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</table>

**Definition of the indicator**

The indicator shows the price-adjusted gross domestic product per inhabitant in Germany. Gross domestic product (GDP) measures the value of all goods and services produced in the domestic economy; inhabitants are all those people whose permanent residence is in Germany.

**Target and intention of the indicator**

Changes in GDP are related in a variety of ways to other indicators included within the National Sustainability Strategy. Social factors such as the population structure, the labour supply, the educational system and social cohesion play an important role in society with regard to international economic competitiveness. Gross domestic product is an important indicator of a nation’s economic strength and growth. Consequently, the goal is to achieve continuous and appropriate levels of growth.

**Content and progress of the indicator**

Gross domestic product expresses the total economic output produced within the country in a reporting period. The focus in this context is primarily on goods and services that are traded on markets as well as on public goods and services. GDP is determined quarterly and annually by the Federal Statistical Office in accordance with rules that are harmonised throughout Europe. Due to the early calculation dates, much of the necessary basic data is not available in time for the first publication date. Instead, the first publication is still largely based on indicators and estimates. Missing information is initially estimated or carried forward.

The data basis is subsequently improved with additional statistics, which are successively incorporated into the calculations. Only after around four years all basic statistics are virtually fully available, and the data is then classified as “final”.

GDP and other standard variables of the European System of National and Regional Accounts (ESA) represent an important part of the material wealth, namely, income generated primarily in the market and its use. However, GDP is not suitable for use as a welfare indicator, as an assessment of material wealth is not sufficient to achieve a comprehensive calculation of well-being and quality of life. This requires additional indicators, for example, to cover unpaid work in private households, which is not included in the calculation of GDP. The distribution of income (and assets) among different population groups is not shown by GDP.

Furthermore, GDP is also a pure flow parameter that generally refers to the period of a quarter or a year. The change of inventory variables is not recorded – with the exception of the capital stock through the calculation of investments and amortisations. Key economic variables such as inventories and qualities of human capital (such as education, health), of social capital (such as security, integration) and of natural capital (such as resources, ecosystems) remain hidden. Statements as to whether GDP and its growth have led to capital preservation in a broad sense are therefore impossible. Consequently, GDP cannot be incorporated for statements regarding the sustainability of the economic growth that it represents.

Between 1991 and 2015, price-adjusted gross domestic product per inhabitant increased by a total of 10%.
34.1%. Following vigorous year-on-year GDP growth averaging a 2.9% increase per annum over the period 2005 to 2008, in 2009, GDP per capita fell by 5.3% compared to the previous year to EUR 30,800 as a result of the global financial and economic crisis. Economic output then recovered and in 2011 GDP, at an average of EUR 33,300 per capita, once again exceeded the 2008 level. Between 2011 and 2013, GDP per capita was virtually stagnant. It rose again by 1.2% in 2014 and, following an increase of 0.9% in 2015, reached a value of EUR 34,200 per capita in 2015. If one examines the trend over the last five years, the indicator has developed in a positive direction.

### Federal Government activities

The Federal Government considers economic output a significant indicator of the material prosperity of the people that live in a country. It believes that economic growth is the foundation for the further improvement of quality of life in Germany. Good development of GDP has many positive effects on quality of life, e.g. due to a higher level of prosperity and employment, a stably financed welfare state with universal benefits for all citizens and a better-equipped healthcare system.

GDP is the usual measure of the economic performance of an economy. It is calculated on the basis of a mandatory set of international rules. It measures the market value added by the production of goods and services by private- and public-sector economic actors in a country in a given period of time. The rate of change of real (i.e. adjusted for changes in prices) GDP is the established, internationally comparable indicator of a country’s economic growth.

The calculation of GDP per capita gives the average share in economic output for each individual member of the resident population, enabling international comparisons regardless of the size of a country’s population.

However, GDP is not suitable as the sole indicator of the prosperity of a society, for prosperity is more than economic growth, and gross domestic product says nothing about how many people benefit and to what degree from growth, and how inclusive, permanent and environmentally friendly it is. There are also a few problems associated with the measurement of GDP. For example, GDP does not account for childcare within the family, home nursing by relatives and improvements in the quality of products. The same applies to negative effects of economic growth, such as the damage caused to the environment by industrial production. The measurement of value added by black market activity is also problematic, and even GDP per capita does not measure the distribution of overall prosperity within the population. Economists are also discussing the new question of to what extent prosperity generated by free internet services is underestimated by GDP.

Target 17.19 of the 2030 Agenda is, by 2030, to build on existing initiatives to develop measurements of progress for sustainable development that complement GDP. The Federal Government will continue reviewing whether and, as the case may be, how this can be done on the basis of other measures of prosperity. Pre-existing activities relevant in this context include the work of the Committee of Enquiry on “Growth, prosperity, quality of life” in the 17th legislative period of the German Bundestag, reports at Länder level on new prosperity indicators (see Contribution of the Länder, Chapter D. III.), and the indicator set for the measurement of quality of life as part of the government strategy “Living well in Germany – what’s important to us”.

### Previous and planned measures

Starting from a favourable economic position, the Federal Government is upholding its economic and financial policy focused on investment and sustainable growth. The Federal Government is strengthening the growth potential of the German economy, for example by giving a further boost to the momentum of investment, modernising the regulatory framework of the Social Market Economy and creating an innovation-friendly environment (see the Federal Government’s 2016 Annual Economic Report).
**8.5.a/b Employment rate**

**Employment – Boosting employment levels**

**Definition of the indicator**

The indicators specify the proportions of people in work aged between 20 and 64 years (8.5.a) and aged between 60 and 64 years (8.5.b), measured in each case out of the total population of the same age group.

**Aims and intention of the indicators**

Due to demographic changes, there may be a shortage of specialist personnel in Germany in the long term. At the same time, the social security system is threatened by an increasing lack of funds. Our labour potential must therefore be more effectively exploited in the future. The share of people in work in the employable age group (20 to 64 years of age) must be increased to 78% by 2030. In addition, the goal of the Federal Government is to achieve an employment rate among older people (60 to 64 years of age) of 60% by 2030.

**Content and development of indicators**

The source of data for the indicators is the EU Labour Force Survey, which is integrated into the microcensus in Germany. The Labour Force Survey is conducted during each year and is initially summarised by Eurostat in the form of quarterly results and then condensed to create annual average values. It covers the population living in private households, but does not include people living in shared accommodation. The working population consists of people aged 15 years and above who have performed an activity for remuneration or revenue for at least one hour during the reference week, or who have not worked because they were temporarily absent from their workplace, e.g., due to holidays or illness.

Since the reporting year 2005, average annual values are used for the employment rate. In previous years, the calculation was based on a single representative working week per year.

From 2011 onwards, the survey was revised in order to improve the recording of employment, and the extrapolation factor was adjusted using the population estimate based on the 2011 census. The results are therefore comparable with previous years only to a limited extent.

The indicators do not provide any information regarding the proportion of full-time and part-time employment. Since the number of people in work is shared among the population, an increase in the number of people in work does not address the question, for example, whether one full-time position was divided into two part-time positions or whether a further (full-time) position was created alongside the existing (full-time) position.

The employment rate overall rose by 9.3 percentage points from 68.7% in 2000 to 78.0% in 2015, with the result that the target value of 78.0% for 2030 has already been achieved.

The employment rate among the older age groups rose by 33.7 percentage points from 19.6% in 2000 to 53.3% in 2015. The rate for men in this age group more than doubled, by 31.9 percentage points to 59.1%, although the rate for women almost quadrupled in value: by 35.8 percentage points to 47.9%.

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**Working population**

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<tbody>
<tr>
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<td>20.2</td>
<td>20.7</td>
<td>21.2</td>
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<td><strong>Women (60–64 years)</strong></td>
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Source: Federal Statistical Office, Eurostat

© Statistisches Bundesamt (Destatis), 2017
If we break down the employment rate into age groups, we find that there have been various development trends. Among 20- to 24-year-olds, the rate from 2000 to 2015 fell by 1.2 percentage points to 63.6%. One of the reasons for this is the fact that the qualifications requirements placed on young people are growing, meaning that they are on average spending longer at school and university and therefore entering the workforce later than was previously the case. Among 25- to 59-year-olds, however, an increase to 82.8% (+6.6 percentage points compared with 2000) up to 2015 can be observed.

Federal Government activities

The employable population’s broad-scale labour force participation is of great importance for social cohesion and is desired by many people. But also in light of demographic developments, a further increase in the employment level and labour force participation of older people is an important political goal measured by the key indicator “employment rate”.

In order to enable broad-scale labour force participation, combating unemployment remains the central challenge. Training and integrating low-skilled workers and the long-term unemployed are therefore key aspects of (active) employment policy: In Germany, which is a skilled labour market, qualifications are the main determiner of labour market and employment prospects.

The indicator comprises two sub-indicators (overall employment from 20 to 64 years of age and specifically from 60 to 64). The former sub-group of 15- to 19-year-olds has been abandoned in order to harmonise with the indicators of the Europe 2020 Strategy. Moreover, this sub-group is of subordinate importance because people in this age bracket are often still in the (vocational) education system.

A specific assessment of the population group of 55- to 60- to 64-year-olds is also intended to extend the focus to older workers, who are sometimes forced to leave working life too early.

Previous measures

The Federal Government’s “Creating Opportunities – Social Participation” concept is making a tangible contribution towards reducing long-term unemployment. The concept has several components, including two programmes to integrate long-term unemployed people into the regular labour market and to encourage social participation on the labour market through publicly funded employment. The programmes are set to run until 2020 and 2018, respectively.

The Federal Government is supporting businesses in various ways to promote the labour force participation of older people. With the special programme “Promoting the training of low-skilled and older employees in companies” (WeGebAU), the Federal Employment Agency has also promoted the workplace training of low-skilled and older employees over 45 years of age in small and medium-sized enterprises (SMEs) since 2006.

In addition, employers can receive wage payment subsidies if they hire job-seekers whose placement is difficult and who require support for their workplace integration. The subsidies are intended to compensate for working capacity limitations that may arise, for example, from long-term unemployment, a disability, a lack of skills or age.

Planned measures

Low-skilled workers and the long-term unemployed are having difficulty finding jobs despite the good employment trend. The Federal Government therefore aims to boost support for training and adapt subsidy regulations according to Book Three of the Social Code (SGB III) to current and future challenges: The draft legislation to support vocational training and unemployment insurance cover (AWSG), which the Federal Cabinet approved on 3 February 2016, is intended in particular to further enhance support for low-skilled employees and the unemployed, e.g. by promoting basic skills in order to prepare...
for vocational training and the temporary introduction of further training grants. The Federal Government will use the experience gained from the federal programme “Prospects 50plus – Employment Pacts for Older People in the Regions”, which expired at the end of 2015 after ten years, in the “Networks for Activation, Advice and Opportunities” in order to enable new prospects for as many long-term unemployed people as possible in SGB II.

In light of the considerable increase in the arrival of refugees, the Federal Government is working intensively for their integration. Learning German is crucial to this. That is why the Federal Government is concentrating on language-support services, especially job-related language support services. In addition to additional measures already resolved that will allow labour market integration to start early on, all recognised refugees with a right to basic social security benefits for job-seekers will also in principle have access to all labour market instruments. The aim is to enable these people to earn a living as soon as possible.

8.6. Number of members of the Textile Partnership

**Global supply chains – Enabling decent work worldwide**

<table>
<thead>
<tr>
<th>Partnership for Sustainable Textiles</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1/2016</td>
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<td>3/2016</td>
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<td>4/2016</td>
<td>188</td>
</tr>
</tbody>
</table>

**Definition of the indicator**

The indicator shows the number of members of the Partnership for Sustainable Textiles (Textile Partnership), who demonstrably adhere to and report on the social and ecological partnership standards throughout their supply chain.

**Target and intention of the indicator**

The multi-stakeholder initiative “Partnership for Sustainable Textiles” was founded in 2014. The Textile Partnership aims to improve the underlying social, ecological and economic conditions in the producer countries. To this end, the number of members of the Textile Partnership who demonstrably introduce and report on measures to improve the conditions and adherence to social and ecological partnership standards all along their supply chain is to be significantly increased.

**Content and progress of the indicator**

Building on collectively defined partnership standards, each member on joining the partnership undertakes to implement measures aimed at bringing about continuous improvements. To this end, all members are to develop individual implementation plans (roadmaps) by the end of January 2017. In spring 2017, an independent body will carry out a plausibility check (logical comparison) on the roadmaps. From 2018 onwards, the members’ roadmaps must be published.

At present, the indicator maps the number of members of the textile partnership – irrespective of the extent to which they already adhere to the partnership standards. As a multi-stakeholder initiative, the Textile Partnership is striving to improve the conditions and adherence to social and ecological partnership standards all along their supply chain.
Partnership not only includes companies but also associations, trade unions, non-governmental organisations, standards organisations and the Federal Ministries of Labour and Social Affairs (BMAS), for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as well as for Economic Cooperation and Development (BMZ).

In its founding year of 2014, 59 members joined the Textile Partnership. By October 2016, the number of partners grew by 129 to a total of 188 members.

In addition to the number of members, the retail sales of member companies of the Textile Partnership in the area of clothing, textiles (excluding carpets) as well as curtains and drapes can be recorded. Retail sales by non-members of the Textile Partnership involving goods attributed to members of the partnership in an upstream step in the value-added chain are naturally not taken into account.

The data basis for this is provided by an analysis of the company register conducted by the Federal Statistical Office. Building on this, the retail sales of each member company were recorded along with the share of the above-mentioned product groups clothing, textiles (excluding carpets) as well as curtains and drapes typical for the respective economic sector.

In 2014, retail sales of the above-mentioned product groups for the 22 companies that joined the Textile Partnership in its founding year of 2014 were around EUR 53 million. By July 2016, the number of member companies had increased by 105 to a total of 127. If these 127 companies are examined, they generated revenues of just under EUR 11 billion in 2014 with the product groups clothing, textiles (excluding carpets) as well as curtains and drapes.

A detailed and differentiated evaluation by product groups can currently not be carried out for the other steps in the value-added chain, in particular for production. Here, the companies can only be attributed with their entire sales to a single main focus. The companies that announced their membership of the partnership by July 2016 and that will be allocated to the “manufacture of textiles”, generated revenues of around EUR 160 million in 2014. Sales of those companies that were primarily active in the area “manufacture of clothing (excluding fur garments) and clothing made from knitted and crocheted fabrics” were significantly higher. In 2014, they generated sales of around EUR 1.8 billion.

Federal Government activities

Previous measures

Supply chains are increasingly global and very complex. Production often occurs in countries with low social and environmental standards. Compliance with sustainability standards helps guarantee that quality and sustainability requirements are met, reduces risks in the supply chain and improves local working and living conditions. For consumers, sustainability standards perform a communication and guidance function.

The Federal Government therefore promotes the propagation of sustainability standards in global supply chains, e.g. through multi-stakeholder initiatives. Global problems can only be solved in an alliance between business, civil society, trade unions and government. The Partnership for Sustainable Textiles targetedly campaigns for the improvement of environmental and social standards along the entire textile supply chain. The Textile Partnership currently unites 55% of the German textile and clothing market (as of November 2016).

Via the association platform “Unternehmen Biologische Vielfalt 2020”, the BMUB will promote the development, testing and broad-scale introduction of effective measures for taking heed of the impact of business activity on biological diversity throughout supply chains together with business and conservation associations.

Planned additional measures

The Textile Partnership is pursuing the goal of ensuring that its members account for at least 75% of the German market for textiles and clothing by the end of 2017. This is intended to pool the resources of the economy and prevent unfair competition. The internationalisation of the Textile Partnership will be pursued further. An internationally active Textile Partnership is the requirement for effectively improving the social and ecological conditions across the board in producer countries. Initial initiatives to implement the Partnership’s objectives in producer countries are in preparation.

By joining the Textile Partnership, the members undertake to enter a continuous improvement process that is monitored by an independent third party. Based on a key set of questions and indicators, all members must develop individual plans of measures (roadmaps) annually; the first of these are due by the end of January 2017. A
robust sanction mechanism as well as regular reporting on the implementation of the roadmap will ensure credibility and transparency.

The Federal Government will continue working with business, but also with civil society and the trade unions, to improve social, ecological and economic conditions in global supply chains. Going forward, experiences from the textile sector will also be applied to other sectors.
9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

a) Basic content and political priorities from the point of view of the Federal Government

The sustainability of the three closely interlinked areas of infrastructure, industrialisation and innovation of SDG 9 also forms an important basis for other SDGs, e.g. for sustainable agriculture (SDG 2), sustainable economic growth (SDG 8), sustainable cities (SDG 11), and sustainable consumption and production patterns (SDG 12).

Sustainable infrastructure

Infrastructure includes both technical infrastructure (transport, energy, water/sewage, information and communication technology/broadband, air quality control, waste management) and societal infrastructure (education, healthcare, public administration, etc.). While target 9.1 (sustainable infrastructure) also emphasises regional and cross-border infrastructure and aims at “affordable and equitable access”, target 9.4 (modernisation of infrastructure and industries) is a cross-cutting target aimed at increased efficiency of resource use and protection and clean and environmentally sound technologies. Nationally and internationally, even the planning of infrastructure must account for requirements relating to health, noise protection, air quality control, climate change and adaptation and the protection of natural resources, etc., as well as equal participation in social and economic life.

Sustainable industrialisation

Targets 9.2 (significant rise in industry’s share of employment) and 9.3 (access of small-scale industrial and other enterprises to financial services) are primarily global in their focus. Germany, meanwhile, is focusing on the modernisation and upgrading of infrastructure and the further increase of resource-use efficiency according to target 9.4. Due to climate change and the potential environmental damage caused by raw material extraction, target 9.4 aims at making industrial production cleaner and more efficient with resources.

Sustainable business is one of the ongoing challenges that industry will continue to face in the years to come. At the same time, these challenges come with major opportunities. The Federal Government’s aim is to enable the dynamic, sustainable economic performance of businesses through structural and industrial policy measures. Germany is set to become one of the most efficient and environmentally friendly economies in the world.

Sustainable scientific research and innovation

Science and research (target 9.5) contribute to new solutions and alternatives and to the development of innovative strategies and measures. Innovation is a tool for finding creative answers to the most pressing questions of our time – regarding sustainable economics, climate and resource protection, the energy transition, demographic and digital change and social problems. The Federal Government’s extended understanding of innovation includes not only technological but also social innovations and sees society as a central stakeholder. This understanding of innovation upholds the precautionary principle as well as existing protection standards and identifies innovations that also help to reduce risks for people and the environment. It is important to support innovation, improve scientific research and technological capabilities and steadily increase public and private spending on research and development.

The promotion of science, technology and innovation makes a fundamental contribution to industrialisation processes. The international community has therefore set itself the industrial policy target of expanding scientific research and production capacities, especially in developing countries. Target 9.5 is closely associated with the targets of SDG 17 (primarily 17.6, 17.7 and 17.8), which deal with the transfer of technology.

Numerous other goals of the 2030 Agenda also refer to research and innovation. All 17 SDGs call for support for research in order to implement the Agenda both nationally and internationally. Only science and research will allow new solutions and alternatives and innovative strategies and measures to be developed and implemented. With its programmes and measures, the Federal Government is taking an integrated approach.
that takes a holistic view of the goals of the Agenda. In addition, it is relying on cooperation with stakeholders from local authorities, business, science and civil society to align them closely with real challenges and needs.

**Federal Government activities**

1. **Measures in Germany**

1. **Transport infrastructure**

The Federal Transport Infrastructure Plan 2030 (FTIP) comprises the projects for investment in Germany’s federal road, rail and waterway network that the Federal Government wants to implement by 2030. The priority is maintaining these networks transparently and according to need. Beyond the FTIP, the Federal Government is funding infrastructure for public transport and cycling and the interconnection and intermodal use of means of transport on the basis of their respective strengths. The consumption of new land is measured and evaluated using the indicator of the Sustainable Development Strategy (no more than 30 ha/day up to 2020) (see SDG 11).

2. **Broadband infrastructure**

Due to changing production conditions (Industrie 4.0) and demographic change, access to information and the automated and flexible management of infrastructure, among other things, are becoming more important. The right conditions for this must be created all over Germany. The Federal Government’s broadband strategy plans to provide all German households with broadband internet, initially at speeds of at least 50 Mbps, by 2018.

In order to achieve this ambitious target, the Federal Government has launched a network alliance for a digital Germany (Netzallianz Digitales Deutschland). In dialogue with the network operators and associations represented in the alliance, private-sector investment in network expansion of around EUR 8 billion was successfully agreed for each of the years 2015 and 2016. The Federal Government is supplementing this with an investment of more than EUR 2.7 billion (for the period from 2016 to 2019), of which around EUR 600 million will be made available to the Länder for the broadband roll-out and digitalisation and around EUR 2 billion will be contributed to the Federal Government’s own broadband subsidy programme.

In all these endeavours, it is important that the networks created are permanent. Where possible, sustainable optical fibre infrastructure should be laid directly into buildings. The broadband roll-out measures are supported by the Act to Facilitate the Expansion of Digital High-Speed Networks, which envisages the provision of development areas with optical fibre networks. In addition, it reduces the costs of network expansion by improving the regulation of joint use and joint installation.

In addition to wired broadband infrastructure, mobile data transmission is also becoming ever more important. The Federal Government is therefore committed to providing broader public Wi-Fi access and introducing the new 5G mobile communications standard.

3. **High-Tech Strategy**

Overriding objectives of the new High-Tech Strategy are further bolstering Germany’s position in the global competition between information societies, pooling resources more effectively and creating new stimulus for innovation in business and society. The new Strategy systematically considers the entire innovation chain and integrates all aspects of the innovation process. This results in a comprehensive innovation policy that creates an ideal environment for ideas, innovation and new value creation. Priority tasks are to make Germany fit for the future. These include, for example, digitalisation, a sustainable way of doing business and supplying energy, innovative working environments, healthy living, intelligent mobility and civil security. The projects derived from this incorporate social and technological developments and formulate specific guiding principles for research and innovation policy. In line with the extended understanding of innovation, society is actively involved as a central stakeholder to reinforce important elements such as an openness to technology, public participation and social innovation. All stakeholders in the innovation process are therefore working together towards a tangible goal. Good ideas can thus be made a reality as quickly as possible.

4. **“Research for Sustainable Development” (FONA³) framework programme**

The “Research for Sustainable Development” (FONA³) framework programme is building the foundations for decision-making and supplying innovative solutions for a sustainable society. It centres on three flagship initiatives on the issues of green economy, the city of the future and Germany’s transformation of its energy system. Federal and Länder Ministries cooperate in these flagship initiatives, allowing the results of the research to have a direct impact on their decision-making processes. In addition, the flagship initiatives are application-oriented and involve stakeholders such as businesses and local authorities. All in all, it is about supporting implementation processes and providing a clear incentive for sustainable development. Prevention research is also promoted in order to implement other SDGs, such as to combat climate change (SDG 13), conserve the seas and oceans (SDG 14) and to protect ecosystems (SDG 15). As it is important to impart new knowledge and support engagement, research and education on sustainable development are systematically combined for the first time in the third FONA framework programme.
5. Shift to a bio-based economy

The bioeconomy relies both on renewable raw materials and bio-based process solutions that draw on the entire range of biological resources right down to micro-organisms. The “Policy Strategy on Bioeconomy” supports the shift to a resource-efficient economy based on renewable resources. The “National Research Strategy Bioeconomy 2030” makes the bioeconomy more deeply entrenched in industry and integrates basic and application-related research.

6. Action plan for eco-innovation

The priority measures to implement targets 9.4 and 9.5 also include the implementation of the Climate Action Programme 2020. The promotion of environmentally friendly modes of transport and development of networking and control technology allow more environmentally compatible and resource-efficient mobility. The Federal Government will also establish a national action plan for eco-innovation based on the EU’s Eco-Innovation Action Plan.

II. Measures by Germany

Germany is supporting sustainable infrastructure investment on a global scale, including as a shareholder of multilateral development banks, in international forums such as the G7 and G20 and with its own financing. With regard to public- and private-sector infrastructure investment, Germany places political emphasis on quality and sustainability.

III. Measures with Germany

At the international level, the Federal Government is promoting the development of sustainable local and regional economic cycles, knowledge and technology transfer, industry-policy measures and investment in sustainable infrastructure in developing countries. In the future, support will be focused even more clearly on the goals and targets of the 2030 Agenda.

Due to transport’s increasing share in pollutant emissions with an impact on the climate, resources for capacity building, investment promotion and sustainable mobility services are being enhanced in developing countries, e.g. through the International Climate Initiative.

The Federal Government is promoting processes that will lead to poverty-reducing industrial development and sustainable economic growth by establishing local and regional processes or economic cycles (“pro-poor growth” and “green and inclusive growth”).
**b) Relevant national sustainability indicators and objectives/measures**

**9.1. Private and public spending on research and development**

Innovation – *Shaping the future with new solutions*

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**Definition of the indicator**

The indicator shows the expenditure on research and development by the private sector, the Federal Government and institutions of higher education in relation to gross domestic product (GDP).

**Target and intention of the indicator**

Spending on research and development (R&D) can be counted among the most important parameters in determining the pace of innovation of an economy. The higher the spending, the better the prospects of more dynamic gains in productivity, the stronger economic growth and the more competitiveness is improved. The Federal Government has therefore set itself the goal of ensuring that expenditure on research and development amounts to at least 3 % of gross domestic product annually by 2030.

**Content and progress of the indicator**

Research and development are scientific activities and are defined as creative and systematic activities with the goal of expanding knowledge – including knowledge of humankind, culture and society – as well as the designing of new application possibilities for existing knowledge. In order to differentiate between R&D and related activities, the existence of an appreciable element of further development is evaluated as a main criterion.

The share of research and development expenditure in the gross domestic product is determined annually by the Federal Statistical Office. Overall expenditure on research and development comprises expenditure by the public and private sectors and by institutions of higher education. The surveys and calculations adhere to the recommended methodologies of the Frascati Manual of the OECD on statistics about research and development, which also enable international comparisons.

Overall R&D expenditure in Germany in 2014 amounted to EUR 84.5 billion, equivalent to 2.9 % of GDP. Since 2000, the proportion in Germany has risen by about 0.5 percentage points. In the 1990s it initially fell, dropping to its lowest point in 1994/95 and not surpassing the 1991 level again until 2002. The original goal envisaged for 2010 – a 3 % share of R&D expenditure in GDP – had not yet been achieved at this time - the share was at 2.7 %. Even in 2014, the share was still 0.1 percentage points below the annual goal. If the trend observed over the last five years continues, it will be possible to reach the target mark only in the coming years.

In international comparison, Germany is ahead of the USA with 2.7 % (2013) and the EU-28 region with just 1.9 %. On the other hand, Japan with a share of 3.5 % leads Germany by a significant margin.

In 2014, the private sector accounted for the by far largest share of R&D expenditure at around 67 %, with 18 % spent by institutions of higher education and a further 15 % by both public and private non-profit research institutions. Staff employed in R&D comprised...
around 605 000 full-time equivalents, a figure that includes only the share of their working hours actually spent on R&D work. Some 61% of these employees work in the private sector, 22% in institutions of higher education and 17% in public and private non-profit research institutions.

<table>
<thead>
<tr>
<th>Federal Government activities</th>
<th>Planned additional measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Previous measures</strong></td>
<td></td>
</tr>
<tr>
<td>In this legislative period, the Federal Government is providing an additional EUR 3 billion for the target of spending 3% of GDP on research and development.</td>
<td>Together with business, the heads of the Federal and Länder governments will continue working to achieve the 3% target and to make research and development more competitive.</td>
</tr>
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</table>
10. Reduce inequality within and among countries

a) Basic content and political priorities from the point of view of the Federal Government

In its 2030 Agenda, the United Nations set itself the goal of reducing inequality. There is a high level of wealth and income inequality around the world, in many countries it is growing, and in some OECD countries it is even at its highest since 1945. Various studies\(^1\) show that, in OECD countries and the eurozone, the richest 10% of the population own around half of the total wealth, and according to the OECD around 80% of the population share around a third of the total wealth. In Germany, the share of the upper decile (currently between 52% and 60% depending on data source) has grown in the long term, but has been relatively constant since 2008. The inequality of income distribution likewise increased in Germany from 1999 to 2005, but has been largely stable since 2005. Because income is so important to individual consumption and living standards, income distribution plays an important role when it comes to distributive justice. After taxes and social transfers, inequality in Germany is below the OECD average.

From a global perspective, this inequality is much greater. In 2015, half of global household assets were held by just 1% of the world’s population. The ten per cent of the global population with the highest incomes take over 40% of global income, while the ten per cent with the lowest incomes receive only a share of between two and seven per cent. Large differences in this area strengthen incentives for migration. The goal of eradicating extreme poverty cannot be achieved without reducing inequality within and among countries.

Inequality as a social problem

High or increasing inequality often goes hand in hand with social problems. International studies show that stark inequality and widespread exclusion of parts of the population from social participation can negatively influence social cohesion and the economic performance of even industrialised countries. This can ultimately put social peace at risk.

Improving opportunities to participate

Breaking down inequality and discrimination is an elementary principle of human rights. A smaller gap between low and high incomes and wealth, more equal opportunities and the participation of everybody regardless of age, gender, disability, race, ethnicity, origin, religion, economic or other status are not just imperatives of social responsibility. They are also important requirements for using the economic, social and scientific potential of all people. For this reason, it is necessary to take measures to improve opportunities for economic and social participation, especially for people in the lower income bracket, as well as measures that allow everyone to participate appropriately in economic progress and social achievements. To this end, SDG 10 does not consider inequality merely from an economic or financial point of view. The goal includes equal opportunities and freedom from discrimination as necessary conditions.

Structure of the SDG

The first four targets (10.1–10.4) are geared towards reducing inequality within countries. They first target above-average income growth for the bottom income groups. This is augmented by promoting inclusion, ensuring equal opportunities, progressive taxation and greater equality in wage and social protection policies. The other targets (10.5–10.7) seek to break down global inequality and call for an international approach to improving the regulation of global financial markets, granting developing countries a louder voice and facilitating orderly, safe, regular and responsible migration of people. Targets 10.a–10.c stipulate, among other things, that official development assistance and financial flows be directed to states where the need is greatest.

Federal Government activities

I. Measures in Germany

The promotion of economic and social participation, e.g. through fair income distribution, has been one of Germany’s aims for a long time. It is aligned with its

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\(^1\) e.g. Bundesbank 2013/16, OECD 2015, DIW 2009.
guiding economic principle of the Social Market Economy. According to calculations by the OECD, Germany is one of the states where income inequality is most reduced by taxes and social transfers. In this country, these measures reduce the at-risk-of-poverty rate by 74%. Up to the middle of the last decade, Germany saw an increase in income inequality that coincided with growth in the low-wage sector. At the same time, however, the increase in work, the reduction in unemployment and the minimum wage increased opportunities for participation.

1. Minimum wage
With the introduction of the general, statutory minimum wage of EUR 8.50 gross per hour in early 2015, the wage groups below that figure saw an increase. This measure is also helping to reduce pay inequality between women and men, as women were overrepresented among the around 3.7 million employees whose hourly wage was less than EUR 8.50 before the introduction of the minimum wage.

2. Organisation of labour leasing and contracts for work
Another draft law from the Federal Government aims to prevent abuse in the design of contracts for work and to enhance labour leasing.

3. Inclusion
The National Action Plan (NAP) to Implement the UN Convention on the Rights of Persons with Disabilities (UN CRPD) approved by the Federal Cabinet in 2011 was the first overall disability policy strategy to include education at federal level as an area for action spanning policy areas. Building on insights from the evaluation of the NAP and considering the recommendations of the UN Committee, the Federal Government will continue to campaign for inclusive education to become a matter of course. This is also reflected in the education measures planned for the NAP 2.0. The education action area includes measures relating to schools, universities and educational research. Schools, universities and training institutions are to include and support people in their uniqueness and with their individual needs right from the start.

The Federal Government is also supporting the Studying with Disability Information and Advice Centre (IAC) at Deutsches Studentenwerk. IAC provides information on access to university, dismantling barriers to studying and compensation for disadvantages while studying and in exams.

4. Improving equal opportunities in the education system
Increasing the opportunities in all areas of education for all children and adolescents to obtain an education and participate therein is a central aim of the Federal Government (see SDG 4).

II. Measures by Germany
1. Trade regulation
Global trade can help reduce inequality among countries. The Federal Government is committed to an active trade policy that dismantles tariff and non-tariff barriers to trade. Important are development-friendly and non-discriminatory trade policy instruments, the entrenchment of the highest possible environmental, social and human rights standards in EU trade policy, transparency in trade policy and the involvement of affected civil-society stakeholders (above all groups in particular need of protection) from the private sector and other interest groups. To ensure this, when making free trade agreements, the Federal Government advocates timely impact assessments regarding human rights, economy, society, and ecology, as well as regular monitoring.

2. Stakeholder inclusion
Goals such as the comprehensive implementation of living wages and incomes can best be achieved in close cooperation between all groups (governments, business, trade unions, civil society). The Federal Government is therefore committed to establishing and promoting multi-stakeholder initiatives such as the Partnership for Sustainable Textiles and the German Initiative on Sustainable Cocoa and purposefully introduces the issue to international processes, e.g. the 2015 G7 Summit in Elmau.

3. World Bank funding
With the support of the Federal Government, the World Bank Group, the world’s largest funder of development projects, has defined fighting poverty and promoting shared prosperity as strategic goals. The poorest 40% of the population in every country shall thus be secured a proportionally above-average share in income growth. When implementing the World Bank’s current (still valid until the end of 2017) and new (valid from 2018) environmental and social standards, the Federal Government wants to systematically invoke and itself implement human rights aspects through systematic impact assessment and more civil-society participation and create more transparency. In the ongoing talks on the reform of the weighting of voices in the World Bank, Germany is advocating a fairer distribution among industrialised, developing and emerging countries in order to reduce imbalances.

4. Engagement for orderly, safe and responsible migration
Worldwide, around 244 million migrants lived outside of their countries of origin in 2015. They play an important role in sustainable development in origin, transit and destination countries: remittances to home countries exceed official development assistance many times; knowledge and information sharing benefits mi-
grants and destination and origin countries. The Federal Government is therefore working actively at an international level to manage migration in line with target 10.7 and with respect to human rights. In 2017 and 2018, it will use the joint German-Moroccan Chairmanship of the Global Forum on Migration and Development (GFMD) for this purpose. The Forum will also participate in drafting an international migration compact, which was resolved at the UN Summit for Refugees and Migrants on 19 September 2016 in New York and is to be accepted at a Meeting of States in 2018.

III. Measures with Germany

In order to reduce income and wealth inequality, the Federal Government helps its partner governments to promote inclusive growth through progressive fiscal policy that provides financial resources for investments and social transfers for poorer sections of the population or to establish social security systems, for example.

b) Relevant national sustainability indicators and objectives/measures

10.1. Foreign school graduates

Integration – Educational success of foreigners in German schools

<table>
<thead>
<tr>
<th>Year</th>
<th>German school graduates (share of all German leavers)</th>
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<td>88.2%</td>
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<tr>
<td>2013</td>
<td>95.0%</td>
<td>88.2%</td>
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<tr>
<td>2014</td>
<td>95.0%</td>
<td>88.2%</td>
</tr>
<tr>
<td>2015</td>
<td>95.0%</td>
<td>88.2%</td>
</tr>
</tbody>
</table>

Source: Federal Statistical Office
© Statistisches Bundesamt (Destatis), 2017

Definition of the indicator

The indicator shows the proportion of foreign school graduates as a percentage of all foreign school leavers within one school year. In this case, the term “graduates” refers to people who leave general education schools with at least a Hauptschulabschluss.

Target and intention of the indicator

The integration of foreigners living in Germany is an important prerequisite for cohesion within our society. A necessary condition for successful integration is the acquisition of sufficient qualifications at school to open up further educational and professional opportunities later on. The goal of the Federal Government is therefore to increase the share of foreign school graduates who obtain at least a Hauptschulabschluss and to bring this share into line with the corresponding rate for German school graduates by 2030.

Content and progress of the indicator

The school statistics, compiled by the individual Länder, form the data basis for this indicator. These statistics are generally derived from a full census for which a disclosure obligation applies. They are summarised to create a national result by the Federal Statistical Office based on the catalogue of school types compiled by the Standing Conference of the Ministers of Education and Cultural Affairs.

The survey date is generally four weeks after the start of the school year following the survey period. Due to the different holiday dates in the individual Länder, the survey dates of the Länder differ from one another.

The ability to aggregate the Länder results into the national result is impaired by the different education policies of the Länder, for example, with regard to admission rules, in setting up courses of education in the
area of vocational schools, etc. This can also only be partially offset by formal regulations for the respective allocations.

In 2015, the share of foreign school graduates who obtained at least a Hauptschulabschluss measured against all foreign school leavers was 88.2%. Consequently, the share has increased by 7.9 percentage points compared with 1996. Regarding the gender-specific shares, the share of foreign female graduates from all foreign female leavers was 90.3%, whereas the share of male graduates from all foreign male leavers was slightly lower at 86.2%.

The share of German school graduates, who obtained at least a Hauptschulabschluss, measured against all German school leavers, was most recently 95.0% and has therefore continued to increase compared with the figure of 92.3% in 1996. As a result, the gap between the share of foreign school graduates and German school graduates of just 12.0 percentage points in 1996 has narrowed to 6.8 percentage points in 2015.

Without the increase among German graduates, this gap would already have been significantly smaller at 4.1 percentage points.

Considering the certificates achieved, just under 32.7% of foreign school graduates from general schools achieved a Hauptschulabschluss in 2015, 49.8% completed their schooling with an intermediate secondary school leaving certificate, and 17.5% earned entrance qualification for general or applied sciences universities. The corresponding figures among German school graduates were 16.1%, 46.0% and 37.9%. Young foreign people are thus substantially under-represented in comparison to Germans, especially when it comes to the higher-level school leaving certificates.

The indicator 4.1.a “Early school leavers” also offers additional information on the topic of school graduates.

Federal Government activities

Previous measures

A sound knowledge of German is crucial for social integration, but especially for integration into the labour market. It is a prerequisite for obtaining a higher-level school leaving certificate, as well as for participation in the labour market and society generally. For this reason, integration courses for immigrants were introduced in 2005 and have been attended by over 1.5 million people so far. More than 55% of all those taking the final exam attained the B1 level of the Common European Framework of Reference (CEFR) for describing language abilities. If we include the next lower level (A2 CEFR), a total of 90.5% of all course participants have obtained a language certificate since mid-2009 (source: Federal Ministry of the Interior).

The Federal Government’s further measures are aimed at the transitions in the course of education and at greater permeability between the various educational pathways, at the promotion of opportunities for qualification and advancement, at the improvement of conditions for education and equal participation and at the creation of principles for educational policy management. With regard to language support services, the BMI and BMAS are therefore working hard on an improved transition from integration courses to vocational language training, plus the transition to or combination with labour-market measures.

The Federal Government also prioritises – according to its constitutional responsibility – vocational training and extracurricular educational opportunities. With many of its measures, the Federal Government is following the principle of mainstreaming, i.e. the measures are not geared exclusively to people with a migrant background, but do take their special situations into account.

For example, the Federal Government’s measures are geared towards targeted support for students in danger of leaving school without qualifications and to young people who refuse to go to school. The support initiative “Graduation and continuation – Education chains up to the vocational training qualification” involves analyses of potential, a vocational orientation programme, career-start counselling and an initiative to prevent apprentices from breaking off their training (VerA) from BMBF and the Federal Ministry of Labour and Social Affairs (BMAS) together with the Federal Employment Agency (BA) and the Länder. Young people with migrant backgrounds make great use of these services and make up nearly half of the participants in the career-start counselling, for example. Every year, around 3,000 young people in apprenticeships receive expert support as part of the VerA initiative to prevent them from breaking off their training. Roughly one third of apprentices helped by VerA have a migrant background. As part of the “Education chains” initiative since 2015, the Federal Government has concluded agreements with the Länder.
on enshrining the education chain philosophy in the Länder’s regular systems in the long term.

To create additional apprenticeship places in companies managed by migrants, the BMBF has established the Coordination Agency for Training and Migration (KAUSA) as part of the JOBSTARTER programme. Since 2015, 13 KAUSA service centres have been funded to offer advice on dual education as regional contact points. They are geared towards entrepreneurs as well as young people and parents with migrant backgrounds. Another aim is to strengthen the existing networks and to develop strategies and fix structures that sustainably allow all young people equal participation in training together with migrant organisations, parents’ associations, vocational training institutions, policy-makers and business associations. The plan is to support around 15 additional KAUSA service centres from May 2016.

Due to the arrival of refugees since 2015, the BMBF issued a package of measures to respond to the challenges quickly. The BMBF’s priorities in the first package of measures for refugees, “Enabling access to education and training”, are language promotion services, the identification of skills and potential, vocational orientation, entering training and support for local authorities. Priorities in the second package of measures, “Enabling access to studies”, are identifying skills and qualifications, ensuring aptitude for study and supporting integration at universities. In addition, research projects are being funded in order to improve the level of knowledge about migration and integration.

Planned additional measures

The previous measures in the areas mentioned above are continued, refined and expanded.
10.2. Gini coefficient of income distribution

Distributive justice – Preventing too-great inequality within Germany

The Gini coefficient of income distribution measures the degree of income inequality in a country. In Germany, the Gini coefficient of equivalised disposable income is 0.31 for the year 2014, which is below the EU average.

The equivalised disposable income is a household’s income, including social transfers, after taxes and other deductions. It is calculated as disposable income minus social transfers such as pensions. Market income, which is calculated before taxes, social contributions and social benefits, is a different measure.

The initial data for equivalised income is taken from the harmonised Europe-wide annual statistics on income and living conditions (EU-SILC), the data on income distribution comes from the “Household Finance and Consumption Survey” (HFCS) conducted at irregular intervals by the European Central Bank. The fact that households with high income and extensive assets are under-represented in voluntary sample surveys is methodologically compensated for. As a result, the values for income as well as for assets in Germany are comparable to those of Europe and the Eurozone in terms of methodology. Apart from that, no equivalent, methodologically harmonised and verifiable international comparative values are available. Since no Gini coefficient is yet calculated for market income from the EU-SILC, the data from the German Socio-Economic Panel (SOEP) located at the German Institute for Economic Research is used.

The equivalised disposable income of 0.31 in 2014 is clearly below the Gini coefficient of equivalised disposable income (Gini coefficient)
the equivalised income before social benefits and excluding pensions (0.37). As expected, the Gini coefficient for market income of 0.51 (2013) was higher. As a general rule, in Germany social benefits, social insurance and taxes therefore contribute significantly to reducing inequalities in disposable income. However, the equivalised disposable income in Germany is still not noticeably more equally distributed than the European average (EU-28). Consequently, the Gini coefficient of equivalised disposable income for Germany is virtually identical to the value for the European Union (0.31). Even in previous years, the differences recorded between the Gini coefficient of equivalised disposable income for Germany and Europe tended to be low and did not suggest significant differences in income distribution.

<table>
<thead>
<tr>
<th>Federal Government activities</th>
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<tbody>
<tr>
<td>Inequality in income and wealth distribution is a generally accepted component of a dynamic market economy. However, the income and wealth gap must remain moderate and social inclusion guaranteed for all. Otherwise, the sense of justice will rightly be violated, putting social cohesion at risk. This is particularly true if inequalities are not predominantly based on personal ability and individual performance and equal opportunities are no longer guaranteed.</td>
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<table>
<thead>
<tr>
<th>Planned additional measures</th>
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<tr>
<td>The major efforts aimed at integrating the long-term unemployed into the labour market and helping the many refugees who have arrived to take up employment will continue to be significant in the future. Tax policy must take into account that it has significant effects on the development of income and wealth inequality. The experiences of the last decade have shown that sustainable growth and more employment create better opportunities for participation for all.</td>
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</table>

Turning to the corresponding Gini coefficient (0.76 in 2014), wealth in Germany is much less evenly distributed than income. In this context, virtually no change can be detected over time (2010: 0.76). The gap to the European comparative value (Eurozone 0.68 in 2010) is substantial. However, the impression of disproportionately high wealth inequality is qualified by several factors not covered by the Gini coefficient. For instance, the evaluation of wealth does not take into account future pension entitlements. In addition, due to the stricter tenant protection people in Germany are more likely to rent rather own their homes, compared to other European countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable

a) Basic content and political priorities from the point of view of the Federal Government

The first ever adoption of a specific global goal for cities and human settlements underscores the value of a long-term oriented, sustainable and inclusive urban development policy and the great significance of increasing urbanisation.

Significance of cities

SDG 11 and its associated targets reflect the global significance of urban spaces. Although cities occupy only 2% of global land area, more than 50% of the population already lives in urban centres; 75% is forecast for 2050.

“Whether sustainable development is a success – in Germany, in Europe and around the world – will be decided in the cities. ... It is cities where poor development and problems are magnified as if through a lens. This is why cities must be given the ability to act as drivers of sustainable development nationally and internationally.”

Federal Minister Peter Altmaier, 30 March 2015

Cities are central stakeholders and arenas of sustainable development. They are centres for innovation and growth, for social mobility and integration, and the jumping-off point for changes in democratic culture, governance and administrative organisation. Cities are also pillars of national economies: 80% of global value added in terms of money is generated in cities. At the same time, social disparities are intensifying in cities especially. The challenges of immigration and integration are immense. One the one hand, cities are most affected by the ecological risks of global developments and particularly vulnerable to the effects of climate change. On the other hand, growing cities and settlements are driving land use. Cities are responsible for 50% of waste and 80% of CO₂ emissions and use 75% of all natural resources. 90% of all mineral raw materials used in Germany (approx. 550 million tonnes) are deployed in the manufacture of construction materials and products. In total, around 40% of the entire final energy demand results from consumption in buildings for heating, hot water preparation and the electricity supply.

Accounting for regional differences

Sustainable urban development must account for cities’ respective regional and local conditions and different requirements. Urbanisation is not a uniform process. It has different regional characteristics – not least influenced by demographic shifts, climate change, increasing scarcity of resources, digitalisation and the hope of finding work and a livelihood in cities.

It is already becoming clear that the number of the world’s so-called megacities with more than ten million inhabitants will increase from 28 today to 41 in 2030. Outside of urban centres, many regions, especially in industrialised countries, are being affected by emigration and contraction. Globally, small and medium-sized towns are expected to see the highest population growth. There should therefore be supported and reinforced in their decentralised functions. Germany is expected to continue being characterised by its decentralised settlement structure. This poses particular challenges for sustainable land use.

Cities – a cross-cutting issue in the Agenda

Alongside SDG 11, numerous other goals of the 2030 Agenda also refer to sustainable urban development as well as – indirectly – issues regarding the sustainable planning, construction and operation of buildings. For example, SDG 6 (“sustainable management of water”), 7 (“access to sustainable energy”), 9 (“sustainable infrastructure”) and 13 (“combat climate change and its impacts”) also call for implementation processes at local level and as part of sustainable urban development policy. Cities have multifaceted relationships with rural regions. Firstly, the boundaries between cities themselves and between cities and their surrounding areas are increasingly melting away; conurbations are becoming ever more important. Secondly, the movement of young people out of many regions into conurbations is leading to social and ecological problems.

Areas for action for a sustainable, integrated and inclusive urban development policy

What is required is an urban development policy that combines social economic and ecological goals and promotes cross-sectoral thinking. Cities
around the world must become operative agents of sustainable development. Current key tasks for integrated urban development are social participation, the resource-efficient, ecological and accessible construction and modification of buildings, neighbourhoods and urban infrastructure and the preservation of the attractiveness of cities even in light of demographic change. The city as a whole, its neighbourhoods and its buildings in particular must be developed sustainably, as the renovation and modernisation of building stock can lead to substantially longer useful lives and unlock great resource-efficiency potential. As the largest public builder in Germany, the Federal Government is also a role model in questions of sustainable and thus energy-efficient, resource-conserving, accessible and forward-looking planning and construction. Integrated planning is supported by the transparent provision of information available in the public administration, especially geographic data (geoinformation) and environment- and health-related construction material data (WECOBIS, ÖKOBAUDAT) if permitted by data protection laws. This is possible only in close cooperation with stakeholders from politics, administration, business, civil society, associations and science.

The social dimension is particularly relevant in Germany at the moment, such as access to affordable housing, affordable public transport and green and public spaces (targets 11.1 and 11.7), the preservation and restoration of social mixing within neighbourhoods, including the prevention of exclusion and ghettoisation, and the safety of residents. The reduction of environmental impacts in cities (target 11.6) is also – especially with regard to protecting the health of city residents – an important aim. Particular areas for action here are air quality control, noise protection and traffic safety. At the international level, supporting the least-developed countries is also of central importance (“means-of-implementation” target/means of implementation 11c).

As another priority for achieving SDG 11, the Federal Government also emphasises the realisation of resource-efficient infrastructure that is suitable for daily use in order to ensure sustainable mobility in and between cities, settlements and rural regions. As around a fifth of all CO₂ emissions in Germany are attributable to transport, material contributions to their reduction from this sector are also imperative for the achievement of the Paris climate targets (see SDG 13). In its Fifth Assessment Report, the Intergovernmental Panel on Climate Change sees enormous potential for this: by 2050, up to 20–50% of worldwide emissions could be avoided compared to the “business-as-usual scenario”. This would require a radical shake-up of mobility: alongside a change in use behaviour and a clever integration of different transport systems, this would in particular involve the introduction of low-carbon fuels or the development of more energy-efficient drive systems. For Germany as a significant location for transport technology, the latter promises great business opportunities and the possibility of demonstrating pioneering technological innovations as a model for its international partners. At the same time, the transformation of our transport system is a complex challenge to be tackled by the whole of society, which can only be overcome if the central stakeholders from politics, business and society work together.

**Federal Government activities**

**I. Measures in Germany**

1. **Cooperation within the framework of the National Urban Development Policy**

   The existing, successful cooperation between the Federal Government, Länder and local authorities is being continued and expanded within the framework of the National Urban Development Policy. The latter is concerned with tackling the upcoming economic, ecological and social challenges in cities and towns with an interdisciplinary approach.

2. **IMA Stadt**

   The implementation of the 2030 Agenda and the National Sustainable Development Strategy is supported by the interdepartmental working group “Sustainable Urban Development from a National and International Perspective” (IMA Stadt) set up in 2015. In cooperation with the Association of German Cities and the German Association of Towns and Municipalities, IMA Stadt is intended to create a basis of information and to pool and connect the work of the ministries. Improving the interconnection and propagation of pre-existing activities, merging previously isolated efforts and integrating existing networks is also a fundamental aspect of IMA Stadt’s work.

3. **City of the Future Innovation Platform**

   Local authorities, scientists, civil society and businesses agree that research findings can make a material contribution to the sustainable development of cities. They
have formulated the important tasks in the “City of the Future” Strategic Research and Innovation Agenda (FINA). The City of the Future Innovation Platform under the aegis of IMA Stadt serves its implementation. The platform is led jointly by the Federal Ministry of Education and Research and the Federal Ministry for the Environment and Building.

4. Strengthening communication – activities of the Sustainable Development Council

The Sustainable Development Council’s Lord Mayor Initiative and the new initiative to create regional sustainable development networks are intended to strengthen communication between municipal and regional stakeholders and the link to the federal level.

5. National Geoinformation Strategy

The Federal Government, Länder and local authorities have used the Strategy to agree on shared goals. They want to enable the effective deployment of geoinformation for all geographic decision-making processes and thus improve the sustainability of planning. This includes the efficient collection and the value-adding use of geoinformation.

6. Sustainable federal buildings and accessible public buildings

In accordance with the specifications of the State Secretaries’ Committee for Sustainable Development, mandatory quality requirements for the sustainability of buildings have been introduced in recent years for the Federal Government’s construction projects. For the purposes of this programme of measures, the Federal Government also supports the Länder and local authorities in the sustainable construction and operation of public buildings in order to broaden impact. The Sustainable Construction Guidelines, the Sustainable Construction Rating System (BNB) and a range of supplementary tools are available as implementation instruments for the planning, construction and operation of federal buildings. The aim is to optimise planning as part of a holistic approach such that high-quality and sustainable buildings can be constructed and operated. So far, 25 buildings have documented their integrated sustainability qualities through certification; another 30 construction projects are currently in the planning process according to BNB.

New buildings and large-scale modifications and extensions on the part of the Federal Government have had to be made accessible since as far back as 2002. The reform of the German Act on Equality for People with Disabilities abolished the size thresholds, so all future modifications and extensions will have to meet the accessibility requirement.

Reports on the accessibility status of existing buildings and binding and verifiable plans and timetables for the further improvement of accessibility must be compiled by 30 June 2021.

II. Measures by Germany

German contribution to the Habitat III process

Habitat III will be the first global conference of the United Nations (UN) since the adoption of the 2030 Agenda for Sustainable Development. The aim of the conference is to place sustainable urban development on the global stage and to present a jointly developed global urban development agenda (New Urban Agenda) for the next two decades. The German contribution was submitted to the United Nations in September 2015. The connection of urban areas to surrounding rural regions in particular in order to secure regional food in the cities will also be addressed.

III. Measures with Germany

1. Sustainable urban development in bilateral cooperation

A significant proportion of German cooperation projects support sustainable urban development. Priorities are boosting city and national governments’ managerial capacity for sustainable urban development and promoting good local governance and public participation. With regard to urban infrastructure, integrated, resource-efficient approaches are promoted in residential construction, energy supply and the expansion of sustainable urban mobility.

As part of the International Climate Initiative and urbanisation partnerships, the Federal Government also supports sustainable urban development in other countries through integrated approaches (e.g. smart-city concepts), in order to enable cities to become independently involved climate policy and thus to launch concrete initiatives with ambitious contributions to climate protection.

2. Research for sustainable urban development

As part of the “Research for Sustainable Development” (FONA³) programme, Germany is promoting the development of sustainable principles and directly applicable practical knowledge for the development of urban environments in developing and emerging countries. The resulting international research networks form the international axis of the City of the Future Innovation Platform (see above).

3. Protection of cultural and natural world heritage, monument protection

The Federal Government is campaigning worldwide for the maintenance, protection and conservation of cultural heritage, especially cultural and natural world heritage sites. Notable are the Federal Foreign Office’s Cultural Preservation Programme and the recent establishment of a UNESCO World Heritage information and documentation centre in Berlin in the World Heritage division of the German Commission for UNESCO. It provides information and advice on questions of world heritage in Germany and abroad, taking international
discourse into account. In Germany, this preserves the cultural sovereignty of the Länder in close coordination with the World Heritage Director in the Federal Foreign Office and with the Federal Agency for Nature Conservation, which is responsible for natural heritage. Abroad, the focus is on advising regions and groups of countries that have previously been under-represented on the World Heritage list. The reform of the German Act to Protect Cultural Property in Germany led by the Federal Government Commissioner for Culture and the Media primarily serves to improve the fight against the illegal trade with cultural property and also helps to protect cultural World Heritage sites around the world in their structural integrity and against plundering and thus to prevent the irretrievable destruction of a part of humanity’s cultural heritage. Principles, dimensions and attributes of sustainable construction should – as far as possible – also be applied to project funding for the renovation and preservation cultural monuments of national significance and must be calibrated to the concerns of monument protection law on a case-by-case basis.

b) Relevant national sustainability indicators and objectives/measures

11.1.a Built-up area and transport infrastructure expansion

**Land use – Sustainable land use**

<table>
<thead>
<tr>
<th>Built-up area and transport infrastructure expansion in hectares per day</th>
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<tbody>
<tr>
<td>1993-1996</td>
</tr>
<tr>
<td>Buildings and open land, commercial/industrial land</td>
</tr>
<tr>
<td>Transport land</td>
</tr>
<tr>
<td>Recreational land, cemetery</td>
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<tr>
<td>Moving four-year average</td>
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</tbody>
</table>

**Definition of the indicator**

The indicator shows the average daily expansion of built-up area and transport infrastructure.

**Target and intention of the indicator**

Land is a limited resource. A variety of interests are competing for such land, including those of agriculture and forestry, settlement and transport, nature conservation, resource extraction and energy generation. The development of additional land for settlement and transport purposes is to be limited to below 30 hectares per day by 2030.

**Content and progress of the indicator**

Settlement and transport land should not be compared with sealed land. Settlement and transport land includes the usage types of buildings and open land, commercial/industrial land (except mining), transport land, recreational land and cemeteries. The indicator does not focus on sealed land, but also records undeveloped and non-sealed land such as gardens, yard areas and landscaping around transport infrastructure as well as open spaces such as parks and green spaces, allotments, garden landscape within towns and villages, sports and recreational facilities, camp sites as well as cemeteries. According to the calculations of the Environmental-Economic Accounting reports compiled by the Länder, the sealed share of settlement and...
transport land in the Länder average is estimated at 45% (2013).

The data source for the indicator is the land use survey by type of actual use in the public land survey registers of the Länder. Changes in the methodology of the public land survey register have in previous years resulted increasingly in the reclassification of land for which no real changes of use applied. In order to partially offset the resulting distortion, a moving average to enable the evaluation of development is formed, in each case, from the four preceding specified years.

Between 1992 and 2014, 8,590 km² of land was converted into settlement and transport land. As a result, settlement and transport land expanded by 21.3% compared to 1992 settlement land by 29.2% and transport land by 9.9%.

In recent years, this increase in the amount of land used for settlement and transport has noticeably been slowing down. In 2014, the moving four-year average for first-time land use for settlement and transport purposes was 69 hectares per day, compared to 120 hectares per day at the start of the time series. If the average trend of the previous five years is maintained, the originally specified goal of 30 hectares per day, which is supposed to be reached by 2020, will be achieved in 2030.

From 2005 until 2009, the development of settlement land was temporarily dominated by high growth rates in the usage category “recreational land, cemeteries”. To this extent, it does not reflect any real changes in the landscape and can be attributed to, among other things, the above-mentioned changes in the land survey registers. In 2014, the share of recreational land and cemeteries in settlement and transport land was 9.8%. However, the expansion of transport land has accelerated again significantly since 2012.

Overall, settlement and transport land of 48,895 km² in 2014 accounted for around 13.7% of the all land in Germany. The largest land types in Germany are agricultural land with 184,607 km² (51.7%) followed by forest land with 109,306 km² (30.6%). In the reference period from 1992 to 2014, the share of forest land increased by 4,770 km², while agricultural land shrank by 10,505 km². It can thus be assumed that the increase in settlement and transport land was primarily at the expense of agricultural land.

Federal Government activities

Previous measures

The achievement of the 30 hectare target – especially in urban planning – is primarily a task for the Länder and local authorities. The Federal Government’s measures – except the Federal Transport Infrastructure Plan – are largely making only an indirect contribution to the achievement of the target. A highlight is the 2013 Act to Strengthen Brownfield Development and Further Enhance Urban Planning Legislation, which explicitly addresses the priority of brownfield development measures in urban development in the Federal Building Code. The Federal Government supports local authorities in the use of their brownfield and infill sites and the reuse and conversion of vacant building stock in inner cities and village centres with Federal-Länder programmes for the promotion of urban planning and village development. One outcome of the “Research for the Reduction of Land Consumption and for Sustainable Land Management (REFINA)” is the development of easy-to-use, internet-assisted cost calculators for calculating the often underestimated follow-up costs of residential development. The current Federal Transport Infrastructure Plan (see SDG 9) follows the principle of “maintenance before expansion and construction”: from 2016 to 2030, around 69% of the total funding will go towards maintaining existing infrastructure. These investments mostly relate to sealed land and land pre-shaped by traffic.

Planned additional measures

It is important to continue developing the above approaches. The current demand for the construction of (rented) housing shall be met, as before, by the prioritised use of development potential in built-up areas (brownfield development).
11.1.b/c Loss of open spaces and settlement density

Land use – Sustainable land use

Definition of the indicator

The indicator represents the annual change in open space in square metres per capita as a moving four-year average.

Target and intention of the indicator

Open-space land should be preserved for agricultural and forestry use, as cultural and natural landscapes as well as recreational areas. For this reason, the decline in open-space land per capita should be reduced. A reduction in the loss of open space points to the success of measures to strengthen brownfield development and thereby conserve agricultural and forest land as well as water systems for farming forestry, nature conservation and for recreational use by the population.

Content and progress of the indicator

Agricultural, forest, mining and dumping areas as well as water systems in the form of flowing and standing water are designated as open-space land. Therefore, all land not covered by the category of settlement and transport land is included. A distinction must be made between open-space land and open areas and settlement open areas, such as cemeteries, gardens, parks, green spaces or wildlife preserves, which although underdeveloped are considered part of settlement and transport land. The indicator for the loss of open space corresponds to the indicators 11.1.a “increase in settlement and transport land” (in hectares per day) and 11.1.c “settlement density”.

The data sources for the indicator are the population and the land use survey by type of actual use compiled by the Federal Statistical Office. Since population data at regional level is used for the calculation, the 2011 census delivered a jump in the time series. Moreover, changes in the methodology of the public land survey register in the Länder have increasingly resulted in the reclassification of land in previous years. To smooth out these effects and to establish the long-term trend, a moving four-year average is calculated, which spans the four preceding years.

The distinction between “rural” and “non-rural” is based on a type standardisation of the Thünen Institute. This standardisation allocates a degree of “ruralness” to districts and district-free cities – based on spatial characteristics such as “settlement density”, “share of agricultural and forest land” and “location relative to the centres”.

In the period under review, the loss of open space per capita reduced on average nationwide. Whereas the moving four-year average for 2004 was still around 5 square metres per capita and year, the current average for 2014 reveals a figure of just 3.5 square metres. Although subject to a similar trend, significant differences can be observed between rural and non-rural district types in terms of the scope of change. For instance, the loss of open space per capita and year in rural district types fell back from above 7 to slightly over 5 square metres. In the non-rural district types, it fell from just under 2 to around 1 square metre. In this context, it is important to remember that non-rural
districts and district-free cities have much less open-space land such as forests or agricultural land than rural areas. In addition, demographic trends develop at differing rates and have a corresponding impact on the indicator. Whereas the majority of rural regions in the period under review reported a decline in population, the population figures in non-rural regions as a whole rose slightly.

**Definition of the indicator**

The indicator shows the number of inhabitants per square kilometre of settlement and transport land.

**Target and intention of the indicator**

The “settlement density” indicator provides information on the efficiency of settlement land use. The goal of the Federal Government is to implement space-saving measures for all new construction projects and in brownfield development such as the reduction in residential and commercial vacancy as well as re-densification and increased densities of development in order to counteract the reduction in settlement density.

**Content and progress of the indicator**

The data sources for the indicator are the population and the land use survey by type of actual use compiled by the Federal Statistical Office. With regard to population data, the 2011 census resulted in a jump in the time series, which is why only the comparisons up to 2010 and after 2011 can be usefully interpreted. The distinction between “rural” and “non-rural” is based on a type standardisation of the Thünen Institute. This standardisation allocates a degree of “ruralness” to districts and district-free cities based on spatial characteristics such as “settlement density”, “share of agricultural and forest land” and “location relative to the centres”.

In contrast to population density, the concept of settlement density the inhabitants are solely related to settlement and transport land. In addition to residential building land, settlement land includes areas of special functional character (such as hospitals and schools), industrial and commercial land and mixed-use land. Consequently, changes not only in population numbers, but in residential building land, transport land or commercial land lead to a change in settlement density.

Settlement density differs substantially between rural and non-rural regions: one square kilometre of settlement and transport land accommodates around 3,267 people on average in non-rural district types, compared with around 1,214 people in rural district types (as in 2014). In this context, residential building land in cities is frequently more densely developed (and with multiple floors) than in rural regions, where more scattered development incorporating larger, unsealed areas such as domestic gardens is prevalent.

From 2000 until the end of 2010, there was a steady decline in settlement density in both rural and non-rural regions. In this case, the non-rural regions, which had an average settlement density of 3,432 inhabitants per square kilometre in 2000, experienced an absolute decline by 130 to 3,302 people per square kilometre of settlement and transport land in 2010. This reduction was slightly lower than in rural regions, where settlement density fell by 151 from 1,415 to 1,264 people per square kilometre of settlement and transport land. Viewed in relative terms, this 11 % decline, due to the significantly lower settlement density...
in rural regions, was however significantly larger than that of 4% in non-rural regions.

Since 2012, differences have been observed between the trends in rural and non-rural regions. Whereas the decline in rural regions continued at a weaker level (down to 1,214 inhabitants per square kilometre), settlement density in the non-rural regions slightly rose again to 3,267 inhabitants per square kilometre. The development of additional land for settlement and transport purposes here was slightly below the population growth.

Considering the trends for inhabitants and settlement and transport land separately, marked differences between rural and non-rural regions can be observed. Between 2000 and 2014, the volume of settlement and transport land in both rural and non-rural regions increased, although to different extents of 12% and 7% respectively.

Following the slight increase in the population of rural regions at the start of the millennium, it reduced by around 2% over the entire period until 2010 and then remained virtually unchanged until 2014. In the non-rural regions, however, the population grew between 2000 and 2010 (by a total of just under 2%) and between 2011 and 2014 (by over 2%). The effects of the development of additional settlement and transport land were therefore amplified in rural regions by the declining population numbers.

### Federal Government activities

Both in urban and rural regions, the new indicators of “loss of open spaces and settlement density” reflect the loss of open spaces in connection with the efficiency of settlement land use. They monitor the measures that promote brownfield development and thus conserve agricultural land, woodland areas and waters for recreation, farming, forestry and nature conservation. Diminishing open spaces and settlement density, unless the latter results from a declining population, should be seen as a call for improvements towards sustainable development. Vacancies and simultaneous increases in residential and commercial space and thoroughfares, especially when the population is stagnant or sinking, lead to new costly infrastructure whose use at full capacity is not guaranteed.

### Previous measures

Many local authorities – also in the context of their own or their Land’s sustainable development considerations and targets – have set about numerous meticulous and intricate measures for brownfield development and the preservation of open spaces. Particularly notable here are the reduction in residential and commercial vacancy, the development of brownfield and infill sites, and redensification and increased densities of (new) development.

### Planned additional measures

To prevent the further loss of open spaces and support sustainable residential development, it is important to continue developing the above approaches in future.
11.2.a/b Final energy consumption in freight transport and passenger transport

Mobility – Guaranteeing mobility – protecting the environment

Definition of the indicator

Final energy consumption in freight transport represents the energy consumption for the transport of goods within Germany via inland shipping, by rail and by road.

Target and intention of the indicator

Transport creates a range of problems. For instance, noise and air pollutants impair the quality of life especially in cities, and traffic-related emissions contribute to climate change. The emission of harmful greenhouse gases is closely linked to the energy consumed for transport purposes. Therefore, final energy consumption in freight transport shall be reduced by 15 to 20 % by 2030.

Content and progress of the indicator

The data regarding domestic energy consumption originates from the TREMOD database at the Institute for Energy and Environmental Research. TREMOD (Transport Emission Estimation Model) is a model for evaluating transport emissions. The data includes fuel consumption levels within Germany irrespective of where refuelling takes place (according to the consumption concept). “Final energy” refers to the part of the energy used directly during transportation, so this excludes conversion losses that arise during production of fuels as well as possible pipeline losses.

The transport performances used to calculate the specific energy consumption are calculated by the German Institute for Economic Research on behalf of the Federal Ministry of Transport and Digital Infrastructure. Road freight transport takes into account transports on lorries with payloads in excess of 3.5 tonnes. On the other hand, air freight transport is not included as it accounts for negligibly small volumes.

The indicator for final energy consumption in freight transport refers by definition to consumption within Germany. The influence of the German economy’s increasingly international links in the context of globalization are reflected only to an insufficient degree. As a result, transport flows and the associated energy consumption that arises due to German exports and imports are not included.

The energy consumption presented here is supplemented by energy efficiency, or the energy consumption per ton-kilometre. The number of ton-kilometres provides information about the extent to which the transport intensity, or the distance per transported ton, changes.

Contrary to the reduction targeted in the previous Sustainable Development Strategy – final energy consumption for the carriage of goods in 2014 increased by 7.2 % compared to 2005. This sharp increase can be attributed primarily to freight transport by road. Final energy consumption for road freight transport increased during this period by 8.8 %, while consumption for rail and inland shipping was significantly reduced (-5.9 % and -12.7 % respectively).

During the same period, the transport of goods performance increased by 13.1 %. With comparable energy consumption in 2005 and 2014, efficiency increased significantly by 5.2 % during this period.
During the economic crisis of 2009, price-adjusted gross value added in the manufacturing industry suffered a particularly sharp decline of nearly 20%. This heavy loss affected the transport sector in particular, which reacts directly to increases and falls in the production of goods. The resulting lower transport capacity utilisation explains the slight increase in average energy consumption per ton-kilometre, despite the fact that overall energy consumption fell sharply during the crisis years.

Besides the presumably short-term consequences of the economic crisis of 2009, a number of long-term factors also influenced the development of final energy consumption in freight transport during the review period between 2005 and 2014. For instance, the number of production steps per company has decreased, something that is normally associated with greater transport volumes because companies procure more intermediate goods from domestic and international suppliers. Furthermore, the average distance between the production location for the goods and their place of use increased, which also caused transport volumes to increase. These effects are countered by a shift in the demand structure towards less material-intensive goods (e.g., an increasing demand for services). The resulting change of composition in the volume of goods dampened the increase in transport-related energy consumption.

**Definition of the indicator**

Final energy consumption in passenger transport represents energy consumption due to the carriage of people by rail, by air and by road (public and private transport) within Germany.

**Target and intention of the indicator**

Transport implicates a range of challenges. For instance, noise and air pollutants impair the quality of life especially in cities, and traffic-related emissions contribute to climate change. The emission of harmful greenhouse gases is linked to the energy consumed for transport purposes. Therefore, final energy consumption in passenger transport shall be reduced by 15 to 20% by 2030.

**Content and progress of the indicator**

The data regarding domestic final energy consumption originates from the TREMOD database at the Institute for Energy and Environmental Research. TREMOD (Transport Emission Estimation Model) is a model for evaluating transport emissions. The data includes fuel consumption levels associated with passenger transport within Germany – irrespective of where refuelling takes place (according to the consumption concept). “Final energy” refers to the part of the energy used directly during transportation, so this excludes conversion losses that arise during production of fuels as well as possible pipeline losses.

Passenger transport performance specifies the number of passenger-kilometres covered. It is used to calculate the specific energy consumption and is calculated by the German Institute for Economic Research.
Nearly 30% of overall final energy consumption can be attributed to transport. Savings in final energy consumption in passenger transport therefore have a marked effect on total energy consumption in Germany. The number of passenger-kilometres provides information on the extent to which transport intensity (distance per road/rail or air passenger numbers) changes. In addition to final energy consumption, energy efficiency in passenger transport, measured as energy consumption per passenger-kilometre, is examined.

Final energy consumption in passenger transport decreased by a total of 2.4% in the period from 2005 until 2014. Analysis of the subsequent progress since 2008 reveals that the indicator value increased slightly by 1%.

Although the number of passenger-kilometres covered increased by 6.7% between 2005 and 2014, energy consumption with reference to all forms of transport fell by 8.5% to 1.48 megajoules per passenger-kilometre during the same period. Consequently, efficiency in passenger transport was increased notably. A particular large share of the efficiency increase can be attributed to the railway. Here, transport performance increased by 18.4%, while final energy consumption was successfully reduced by 12.7%. This accumulates to a 26.3% increase in efficiency. A significant increase in efficiency of 15.6% was also achieved in aviation compared to 2005. A slight improvement in the efficiency of private motorised transport was recently achieved due to the increased transport performance, even if energy consumption here remained constant.

Private motorised transport by car and two-wheel vehicles accounted for 83.9% of total passenger transport performance in 2014. It can be subdivided into various categories. In 2014, recreational traffic at 35.5% accounted for the largest share, closely followed by commuter traffic (commuter and business trips) with 34.3%. Shopping traffic had a share of 17.6%. The various journey types have developed in differing directions since 2005. In particular, work-related traffic has increased significantly (+13.5%), while holiday journeys have declined.

Federal Government activities

With this new version of the Sustainable Development Strategy, the Federal Government is also presenting a reworking of its indicators regarding mobility. The newly included indicator of final energy consumption reflects the Federal Government’s energy policy objectives in the transport sector. The objectives are technology-neutral and freely actionable. More efficient vehicles can contribute just as much as the promotion of efficient modes of transport, traffic-saving settlement structures and logistic processes.

With its Energy Concept back in 2010, the Federal Government set itself the target of reducing final energy consumption in transport by 10% by 2020 and by 40% by 2050 (both compared to 2005).

Previous measures

At the end of 2014, the Federal Government took measures to contribute to the reduction of final energy consumption in transport as part of the “Climate Action Programme 2020” and the “National Action Plan on Energy Efficiency”. These include strengthening waterways and railways as a means of transport (including increasingly relocating freight to railways) as well as local public transport, increasingly promoting e-mobility and non-motorised transport, and measures regarding aviation and maritime transport.

Additional measures

In addition, the Federal Government is working for the greater promotion of low-emission propulsion systems and technologies in order to considerably reduce emissions in Germany by 2050. In the context of the further development of the Federal Government’s mobility and fuel strategy, there is support for the deployment of refuelling and recharging infrastructure for alternative fuels (e-mobility, liquid natural gas, hydrogen/fuel cells).

Reducing the direct greenhouse gas emissions from cars and commercial vehicles per vehicle kilometre allows car and lorry traffic to contribute to the achievement of the climate protection targets. The European legislation on limiting the CO₂ emissions of road vehicles must therefore be updated for the years after 2020. The early stipulation of concrete efficiency targets for commercial vehicles is a central catalyst for the accelerated market penetration of CO₂-efficient vehicles and ensures planning certainty for businesses. The Federal Government will work towards an ambitious formulation of the CO₂ limits for new vehicles at the European level.
A pronounced relocation of traffic from the roads to the railways is also important for the potential achievement of the final energy indicator. The energy demand in road transport is to be reduced by further traffic relocations. Greater use should be made of the potential of cycling – even for longer journeys – in order to further increase its share in traffic compared to the traffic forecast (2.6% in 2030).

In addition, the consistent use of the potential of digitalisation allows significant improvements in the provision of transport services. For example, commuter traffic can be reduced with the aid of modern ways of working (home office, mobile working), and overland journeys can be controlled in an energy-saving manner. With regard to logistics, processes are being optimised further and the number of transports can thus be reduced. With the aid of digitalisation, it also possible to use infrastructure more efficiently, for example to make traffic more fluid by harmonising speeds.

### 11.2.c Population-weighted average travel time with public transport from each stop to the next medium-sized/large city

#### Mobility – Guaranteeing mobility – protecting the environment

<table>
<thead>
<tr>
<th>Year</th>
<th>Travel time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>23.5</td>
</tr>
<tr>
<td>2016</td>
<td>22.4</td>
</tr>
</tbody>
</table>

Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development © Statistisches Bundesamt (Destatis), 2017

#### Definition of the indicator

The indicator shows the population-weighted average travel time by public transport to the nearest medium-sized or large city.

#### Target and intention of the indicator

Mobility is a key factor in enabling people to participate in society. Accordingly, spatial development and transportation should be designed to provide good mobility services and suitable connections to medium-sized or large cities for the entire population. Therefore, the target of the Federal Government is to shorten the average travel time by means of public transport to the nearest medium-sized or large city.

#### Content and progress of the indicator

The indicator is computed by the Federal Institute for Research on Building, Urban Affairs and Spatial Development. Means of public transport are defined as those transport services that are available for use by anyone on payment of the relevant fees. Flexible forms of operation, such as on-call buses that operate on demand without fixed stopping points and timetables, are therefore not taken into account.

The data basis comprises schedule data of the Deutsche Bahn, transport associations along with numerous other timetables. With the help of the timetable data, the travel times to the nearest medium-sized or large city during peak morning traffic times were determined for approximately 250,000 stops. This period is defined differently in the two reporting years.
Whereas connections with an arrival time between 6:00 a.m. and 9:00 a.m. were taken into account in 2012, only those with arrival times between 8:00 a.m. and 12:00 noon were included in 2016.

Since not all local transport schedules were fully integrated into the database used, the values for 2012 and 2016 cannot be compared without restrictions, too. The frequency of a transport service to the nearest medium-sized or large city is similarly ignored as is the travel time to and from the stopping point. Furthermore, this indicator is based on the timetable data – which means that delays or even cancellations are not taken into account.

The frequency of a transport service to the nearest medium-sized or large city is similarly ignored as is the travel time to and from the stopping point. Furthermore, this indicator is based on the timetable data – which means that delays or even cancellations are not taken into account.

The classification of a location as a medium-sized or large city is determined according to the availability of goods, services and infrastructures at that location that are not available in the surrounding regional towns. These include, among other things, specialist doctors, hospitals, cultural facilities as well as secondary schools and institutions of higher education.

In each medium-sized or large city, especially in major cities, only one destination point (city centre) was determined. The destination stops were selected in a radius of one kilometre around the destination point. After that, the fastest connection from the starting stop to this final destination is searched for. With the help of small-scale population data from the Federal Statistical Office, a population-weighted average value of the travel time for Germany was then determined.

The indicator values available for 2012 and 2016 show that the population-weighted average travel time to the nearest medium-sized or large city in this period has reduced from 23.5 to 22.4 minutes. This corresponds to a reduction of 4.7 %. It is not possible to determine the extent to which the previously described methodological changes or re-designation of medium-sized cities are partly responsible for the decrease. However, the number of medium-sized or large cities has increased from 1,010 in 2012 to 1,069.

Federal Government activities

An important gauge of environmentally friendly mobility is the population-weighted average travel time with public transport from each stop to the next medium-sized/large city. Equivalent living conditions in all sub-regions can be achieved only if public service facilities are sufficiently reachable by public transport.

Previous measures

With regard to public transport, the Federal Government supports the Länder and local authorities financially with regionalisation funds, via the Disentanglement Act and according to the Community Transportation Financing Act (GVFG) and thus makes a considerable contribution to environmentally friendly mobility.

Planned additional measures

The Federal Government will once again considerably increase its commitment with the increase in regionalisation funds agreed between the Federal Government and the Länder, securing the Länder a reliable financial basis and planning certainty from 2016 to 2031 with a total of EUR 150 billion in order to organise attractive, modern local transport. The funding under the GVFG will continue undiminished beyond 2019. The Federal Government supports the nationwide introduction of e-tickets and an improved passenger information system.
11.3. Housing cost overload

Housing – Affordable housing for all

Definition of the indicator
The indicator shows the share of people who live in households that spend more than 40% of their disposable household income on living expenses. Living expenses in this case are net rent not including heating, ancillary costs, energy costs and expenditure on water supply as well as value-maintaining investments and interest payments on loans in the case of homeownership.

Target and intention of the indicator
High living costs place restrictions on households with regard to their other consumption choices. Living expenses that amount to more than 40% of disposable household income are considered to be an overload. The share of people who live in households that spend more than 40% of their disposable household income on living expenses is therefore to be reduced to 13% by 2030.

Content and progress of the indicator
The initial data for the indicator originates from the Europe-wide harmonised statistics on income and living conditions (EU-SILC). The indicator expresses expenditure on living relative to disposable household income. In case a household is in receipt of housing benefits or comparable social benefits such as payments for accommodation and heating from basic social security benefits, these are also included in the calculation of the indicator. These social benefits are not added to the income, but are deducted from the living expenses so that the burden of living expenses of households that rely on housing-related social benefits is reduced or approaches zero.

The purchase of an owner-occupied property is not added to the expenditure on living. Other spending on measures to enhance the value of a property should also not be taken into account. However, it is not always possible to clearly differentiate between these and value-maintaining expenditures that are considered as expenditures on living. To do this, it is necessary to fall back on simplifying assumptions in some cases. Moreover, the indicator also does not take into account any additional expenditure associated with the place of residence. For instance, expenditure on travelling from the place of residence to the workplace is not taken into account, although it is possible that only due to the long distance from home to work the threshold of 40% can be undercut.

By defining the threshold value “40% of disposable household income”, the indicator provides no information about average costs of living. If clusters emerge close to this threshold, they can cause major changes in the indicator over time even if there is only a small change in the ratio of income and living expenses.

The indicator rose from 14.5% in 2010 to a relatively constant 16% during the period from 2011 until 2013. In 2014, it fell slightly to 15.9%, and decreased further to 15.6% in 2015. Due to statistical uncertainties, however, this cannot be considered a statistically significant change, but constitutes more of a continuation at a similar level. Based on the current trend, it is
therefore not possible to determine whether there is any movement in the direction of the set target. With regard to the actual living situation and disposable income, the indicator provides only a limited amount of information. Ultimately, the calculation method declares households with high incomes and high expenditure on living as also being overloaded. However, the data does indicate that significantly more households with a low income are above the 40% threshold. Separate analysis of the population at risk of poverty, which means those people with less than 60% of the median of the equivalised income of the population at their disposal, also shows that the share of people overloaded by living costs is closely related to income. Among those at risk of poverty, the share of people overloaded by living costs rose from 42.2% (2010) to 51.9% (2015). For those people who are not considered at risk of poverty, however, the share of households overloaded by the cost of living reduced particularly during the last two years (2010: 9.4%, 2015: 8.4%).

**Federal Government activities**

Housing is an essential need. Housing costs constitute the largest single expenditure in private households’ consumer spending. The money spent is no longer available, for example, for private pensions, education and leisure activities for children and young people, cultural services or consumption, e.g. paying higher prices for sustainable products. This especially affects people on lower incomes. High housing costs, especially in inner-city locations, also foster segregation and thus run counter to the social mixing that is important for social cohesion.

**Statement from the Dialogue on Sustainability**

“The creation of more affordable housing within easy reach of employment and education centres by public transport, bicycle or foot is a key element for traffic prevention and modal shift. The housing shortage and inducement of unsustainable commuting flows can only be stopped and reversed by increasing the supply.”

Greenpeace

**Previous measures**

To ensure the affordability of housing, the Federal Government implemented rent control and reformed housing benefit law as priority housing policy measures. The Federal Government has increased the compensation granted to the Länder for the discontinuation of earlier federal financial assistance for the promotion of social housing by a total of EUR 2 billion for the years 2016 to 2019 and wants to raise it by another EUR 500 million a year in 2017 and 2018. The Länder have agreed to use this compensation solely for the purpose of constructing social housing. Alongside conversion properties, the Federal Government will also quickly and cheaply provide local authorities and municipal companies with additional real estate and properties for social housing construction.

**Planned additional measures**

With the residential construction offensive, which is building on the findings of the Alliance for Affordable Housing and Construction, the Federal Government, Länder, local authorities, the housing and construction industry and other partners are working together towards tangible relief on the housing markets. With this package of measures comprising the provision of developable land, the review of construction and planning regulations for potential simplification and increasing funds for social housing construction and housing benefit, the Federal Government is establishing a framework for quickly creating the urgently required housing. It helps Länder and local authorities fulfil their tasks according to the allocation of competencies and to create incentives and easements for the housing and construction industry. With all the measures to simplify regulations and standards in order to limit an increase in construction costs, there will be no compromises on health (e.g. noise protection), safety (e.g. fire prevention) or environmental integrity (e.g. climate protection and energy efficiency targets).

The second package of amendments to rental law is intended to further ensure the affordability of housing.
12. Ensure sustainable consumption and production patterns

a) Basic content and political priorities from the point of view of the Federal Government

SDG 12 aims to achieve the necessary change to our ways of life and business. In order to achieve sustainable consumption and production, it must be ensured that our current consumption and production do not jeopardise the satisfaction of the justified needs of current and future generations in consideration of the boundaries of the earth’s resilience and universal human rights. To this end, growth and wealth must be decoupled as far as possible from the utilisation of natural resources.

Global responsibility

The industrialised countries play an important role with regard to the global development of sustainable consumption and production patterns and the increase of resource efficiency. As their economies are so firmly integrated in the global value and supply chains, they have a significant impact on the production methods in industrialised, emerging and developing countries. As a result, the industrialised nations bear a special responsibility for the associated economic, ecological and social effects in these countries. What is more, the middle classes that are establishing themselves in emerging and developing countries often copy the consumption behaviour they see in industrial countries; the latter must therefore act as a role model in terms of sustainable consumption.

Consumption and production patterns

SDG 12 ties in with the 10-Year Framework of Programmes for Sustainable Consumption and Production (target 12.1) agreed at the World Summit in Rio de Janeiro in 2012. Based on the fundamental imperative of sustainable management and the efficient use of natural resources (12.2), the requirements focus on halving food waste and reducing food losses (12.3), achieving environmentally sound management of chemicals throughout their entire life cycle (12.4), reducing waste generation (12.5), introducing the integration of sustainability information into the reporting cycle of large companies (12.6), promoting sustainable public procurement practices (12.7) and ensuring the provision of relevant information and the awareness for sustainable lifestyles (12.8). Further demands include strengthening science and technology in developing countries (12.a), developing sustainable tourism (12.b, see also SDG 8) and abolishing inefficient fossil-fuel subsidies (12.c).

Central challenges

So far, the degree to which our consumption behaviour takes into account our planet’s boundaries is inadequate. Throughout the entire value chain, sustainable production is focused mainly on the efficient use of natural resources. It emphasises the importance of keeping nature intact as well as observing human rights and social standards and ensuring fair trade.

Statement from the Dialogue on Sustainability

“The most sustainable form of consumption is no consumption. (...) We would like (...) research projects to be set up that investigate how people’s consumption behaviour can be steered towards less consumption. We would also like other research projects to examine how business models that are aimed to a lesser extent at material consumption and to a greater extent at services/the pure provision of benefit can be strengthened. We would like the Federal Government to take a serious look at the topic of consumption reduction.”

plant values

Sustainable products are to be designed to be as durable and resource-efficient as possible and to be recyclable to the greatest possible extent after they have been used (cascade use). Further, they must not constitute a health risk. Transparent and independent certification and symbol systems help consumers to identify sustainable products, thereby allowing them to make informed purchase decisions. Sustainable consumption and sustainable production are thus two sides of the same coin.

At the moment, 20% of the world’s population consume 80% of globally available raw materials. Natural resources constitute the foundation for life and the well-being of future generations as well. This must be kept in mind in particular when consuming limited resources. The Federal Government’s aim is thus to further decouple the use of natural resources from economic develop-
ment, continuously increase efficiency and to further reduce the consumption of natural resources. It is important here to promote human rights and social standards along the global supply chains. This way, Germany is set to become one of the most efficient and environmentally friendly economies in the world.

**Role model function of the state**

The state is setting a good example as a consumer, too: The Federal Government is campaigning for strengthening sustainable public procurement. By updating the programme of sustainability measures from 2015 and amending public procurement law from 2016, it has taken important measures to set the course (see above, Chapter B). The National Programme for Sustainable Consumption adopted in February 2016 and the German Resource Efficiency Programme (ProgRess), the first update of which (ProgRess II) was resolved by the Federal Government in March 2016, are also contributing to this cause.

**Setting the framework**

Sustainable consumption is an integral part of a sustainable value chain. It requires environmentally and socially compatible products that are marked in a clear and reliable way. This allows consumers to consider matters such as working conditions, social standards and the environmental pollution caused by the manufacturing process when making their purchase decision. Consumers can thus include further product-relevant selection criteria in addition to the market price, which is often the main focus.

The supply and demand sides bear joint responsibility. To ensure that the market-based competition to win the customers’ favour and the demand for products at the lowest possible price do not come at the expense of working conditions and the environment, transparent, binding and effect-oriented environmental and social standards must be observed during production and distribution as well as during subsequent recycling and disposal.

**Statement from the Dialogue on Sustainability**

“Retail plays a crucial role with regard to the implementation of measures to promote sustainable consumption and, to a certain extent, also with regard to the production of goods. It is indeed not possible for retail alone to determine the consumers’ preferences or force manufacturers to use a particular production method. However, retail does play an important role as an intermediary: In a market-based structure, retailers decide themselves which products to include in their range and which quality requirements to impose on the producers. In the context of advice and customer support, retailers can also work towards imparting information relevant to sustainability to their customers in addition to information on quality.”

Galeria-Kaufhof

In addition, the consumption of natural resources, the generation of waste as well as the content and, above all, the release of hazardous substances are to be further reduced. The negative effects of consumption on society and the environment (with a particular focus on biological diversity) must be minimised. In line with the closed materials cycle principle, the environmentally and socially compatible reuse of waste as a resource or energy source must be made easier than before. It is also important to use the available potential for power generation and materials recovery in sewage management. The domestic farming, fishing and forestry industries are focused on attractive, liveable and vital rural areas that offer employment, realise sustainable forms of agriculture and assume ecological responsibility. Agriculture, vital and liveable areas as well as nature and the landscape are to be preserved as areas that people identify with and perceive as their home. The challenge is to ensure food diversity and security of supply, the protection of soils, bodies of water and animals, as well as the conservation and sustainable use of biological diversity. At the moment, there is a need for action in particular with regard to groundwater pollution control (nitrate, pesticides and antibiotics) and livestock farming.

*Such products are not yet as high as those generated by conventionally produced products.*

vzbv
Federal Government activities

I. Measures in Germany

- Implementation of the national programme for sustainable consumption and establishment of a competence centre for sustainable consumption
- Promotion of a public discussion on sustainable lifestyles and support thereof by providing the appropriate basic conditions
- Implementation and further development of the German Resource Efficiency Programme
- Implementation of the Federal Government’s Waste Prevention Programme and further development of recycling management; implementation of measures to promote the increased consideration of aspects such as durability, repair-friendliness and recyclability in product design
- Measures for the prevention and reduction of food waste and losses, e.g. providing information and raising awareness and, in particular, stabilising and further developing the “Too good for the bin” initiative
- Creation of information and support services for companies (especially SMEs) for the implementation of the EU Directive on sustainability reporting
- Implementation of the initiative for consumer behaviour and biological diversity and increased topic- and target group-specific communication as part of the UN Decade on Biodiversity 2011–2020 through the stronger embedding of the topic of “biological diversity” in environmental labels such as the Blue Angel and through the development of concrete biodiversity criteria as an integral part of sustainable procurement and sustainable building
- Implementation of the “Organic Farming – Looking Forwards” strategy, continuation and further development of the Federal Organic Farming and Other Forms of Sustainable Agriculture (BÖLN), of agri-environmental, climate and animal protection measures as well as the protein crops strategy of the Federal Ministry for Food and Agriculture
- Implementation of the National Policy Strategy on Bioeconomy
- Research projects and measures on the topic of “sustainable management”, e.g. on rebound effects, paths towards attitude changes in society as a whole towards sustainable lifestyles, sustainable business models, sustainability assessment, basic conditions for a sustainable economic system
- Implementation and further development of the “Programme of sustainability measures” for the federal administration as a contracting authority; continued alignment of federal properties with the requirements of the Sustainable Construction Rating System (BNB); support of procurement managers with the implementation of the new procurement directives for the increased integration of sustainability criteria (e.g. from the Competence Centre for Sustainable Procurement, the Sustainability Compass, corresponding design of master agreements); use of the leeway provided by the amended procurement law for sustainable public procurement

II. Measures by Germany

- Implementation of the resolutions on sustainable supply chains and resource efficiency reached at the G7 summit in Elmau (e.g. continuation of the G7 Alliance on Resource Efficiency) and strengthening in other international processes (e.g. G20)
- Provision of information on trustworthy seals and labels to promote good purchase decisions (e.g. siegelklarheit.de) and expansion of existing trustworthy symbol systems such as the Blue Angel to include further consumer-relevant product groups
- Further promotion of sustainable supply chains by means of global partnerships with business, trade unions, the government and civil society (e.g. the Partnership for Sustainable Textiles, the German Initiative on Sustainable Cocoa, the Forum for Sustainable Palm Oil, EU and national requirements for biofuels) and a corresponding configuration of international agreements with the aim of promoting sustainable production patterns.
- More active support of the 10-Year Framework of Programmes for Sustainable Consumption and Production (10 YFP) and in the UNEP International Resource Panel; support of the Partnership for Action on Green Economy (PAGE)
- Improvement of transparency and good governance in the raw materials and resources sectors, e.g. through German reporting in the context of the Extractive Industry Transparency Initiative (EITI), the rapid configuration and implementation of the EU draft legislation on the containment of the funding of conflicts with proceeds from raw materials and the G7 CONNEX Initiative that offers support to resource-rich developing countries with the conclusion of raw materials contracts.
- The achievement of SDG 12.4, but also the comprehensive targets of the sustainable development agenda, such as fighting poverty, economic development, resource efficiency and climate protection, requires a holistic approach to chemicals management. Sustainable Chemistry, which incorporates ecological, economic and social aspects in the decision-making process on the production and use of chemicals, provides this approach. In order to realise this approach and continue to support the connection, communication and further development of Sustainable Chemistry, the Federal Government is
planning to establish an independent International Sustainable Chemistry Collaborative Centre (ISC) in May 2017.

III. Measures with Germany

- Support of the partner countries, e.g. with the implementation of internationally recognised environmental and social standards, by the German development cooperation and the International Climate Initiative
- Promotion of the transfer of technology and knowledge in emerging and developing countries

with regard to sustainable consumption and production patterns and the establishment of a resource-efficient economic structure (e.g. advice on national action plans)

- Support of the partner countries, e.g. with the transformation towards a green economy, the promotion of inclusive business models as well as environment- and climate-oriented investments (green finance), for example in the form of measures for increasing resource efficiency.

b) Relevant national sustainability indicators and objectives/measures

12.1.a Market share of goods certified by independently verified sustainability labelling schemes (future perspective: market share of products and services with trustworthy and ambitious eco- and social labels)

Sustainable consumption – Making consumption environmentally and socially compatible

<table>
<thead>
<tr>
<th>Market share of products certified by independently verified sustainability labelling schemes</th>
<th>in %</th>
</tr>
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<tbody>
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<td>2012</td>
<td>3.8</td>
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</tr>
<tr>
<td>2030</td>
<td>Target: 34</td>
</tr>
</tbody>
</table>

All data is preliminary.

Source: Gesellschaft für Konsumforschung, the Federal Motor Transport Authority, Agrarmarkt Informations-Gesellschaft mbH, the Organic Food Production Alliance, the Association for Sustainable Mobility, the German Environment Agency

Definition of the indicator

The indicator measures the market share of products with voluntary or mandatory ecolabels, whose tendering procedures are stipulated by governmental bodies.

Target and intention of the indicator

Private households can carry out sustainable consumption directly and indirectly. On the one hand, their purchasing decision influences their own environmental balance, as energy-efficient vehicles or insulated homes require less energy and lead to lower emissions of greenhouse gases. On the other hand, the consumers can purchase products that have been manufactured along exceptionally sustainable lines. The aim of the Federal Government is therefore to increase the market share of products certified by independently verified sustainability labelling schemes to 34% by 2030.
Content and progress of the indicator

The indicator comprises the market shares of products bearing one of the ecotags “EU ecolabel”, “EU organic label”, the “Blue Angel” or the respective highest class of the “EU energy label”. The EU energy label primarily addresses energy consumption and greenhouse gas emissions, while the other three product labels also take into account other threats to the environment such as pesticide use and harmful wastewater. The indicator should monitor whether environmentally friendly product variants are replacing conventional product variants in the market. In this case, only a selection of product groups is examined for reasons that include the limited availability of data regarding sales of products bearing sustainability labels. In addition, the inclusion of certain product groups would lead to duplicate counting as they bear multiple sustainability labels simultaneously.

For the indicator, household appliances such as refrigerators, washing machines, televisions and vacuum cleaners are examined. Illuminants, organic foods, tissue paper, washing and cleaning agents and cars are also assessed. Since the markets for the individual product groups are of different sizes, the market shares are weighted with the sales volume of the respective overall market. This is to prevent any distortion of the indicator by high market shares in small niche markets. Furthermore, this enables the expenditure on environmentally friendly products to be related to the total expenditure by private households.

It is not possible to weight the market shares of the respective product groups according to their environmental relevance because the environmental labels address different categories (energy consumption, greenhouse gas emissions, material demand) that cannot be balanced against one another. Therefore, it is not possible to present an all-encompassing evaluation across multiple environmental categories in form of an environmental footprint of the product groups. As the indicator covers only products that are newly introduced on the market in relation to the overall market, rebound effects are not considered. It also describes the market share based on sales. Due to the price differences between products with and without the relevant ecotags, it does not allow conclusions to be drawn regarding their numbers. In addition, any change in the value of the indicator may be attributable to pricing changes for a product group.

Data supplied by the Gesellschaft für Konsumforshung, the Federal Motor Transport Authority, Agrarmarkt Informations-Gesellschaft mbH, the Organic Food Production Alliance, the Association for Sustainable Mobility and the German Environment Agency serves as source for calculating the indicator. The latter calculates the indicator values annually from the reporting year of 2012 onwards.

Between 2012 and 2014, the market share of products certified by independently verified sustainability labelling schemes increased from 3.8 % to 6.0 %. This is equivalent to overall sales of EUR 16.8 million in 2014. Due to the short time series, it is not yet possible to evaluate the realisation of the set target.

The definition of the energy consumption classes is updated in line with the current technical state at regular intervals by the European Union. The corresponding devices such as refrigerators, ovens or tumble dryers must also meet minimum legal requirements for new products. In general, this will contribute to the wider distribution of energy-saving products, but can also manipulate the indicator indirectly, through adjustments to the allocation criteria.

Federal Government activities

The consumption of goods and services fulfils various social and individual functions. It is a foundation of economic growth and wealth and enables consumers to satisfy needs such as those for food, a home and mobility. At the same time, consumption is responsible for the majority of natural resources consumed and the resulting environmental effects. There are considerable possibilities for reducing the burden on the environment, conserving biodiversity through sustainable use, preserving natural resources and many more. When it comes to promoting sustainable consumption, social aspects such as the observation of human rights, international labour and social standards in producer countries, the transparency and sustainable design of global supply and production chains and business due diligence play an important part.

The indicator “Market share of products certified by independently verified sustainability labelling schemes” shows how consumption is changing. It highlights how the consumption of products certified by independently verified sustainability labelling schemes is developing in Germany. Due to the lack of underlying data, the indicator initially includes only government figures and only the ecological dimension in this regard. However, social aspects are recorded for information purposes. The indicator is set to be expanded to include social aspects and additional ambitious and credible environmental and social labels if suitable labels are available in this area. In terms of its significance, this indicator is closely coupled with...
the indicator for sustainable consumption, “energy consumption and CO₂ emissions”.

**Previous measures**

In order to strengthen and systematically expand sustainable consumption in various areas, the Federal Government adopted a “National programme for sustainable consumption” on 24 February 2016. This programme describes the areas for action that are relevant to sustainable consumption (mobility, food, living and household, work and office, clothing, leisure time and tourism), indicates approaches (e.g. education, consumer information, research) and identifies concrete measures. These measures are geared not only towards the public, but address all relevant stakeholders, such as business, civil society, science and the state itself in its role model function. Every two years, the Umweltbewussten study (Environmental awareness study) conducted by the Federal Ministry for the Environment provides an insight into the knowledge on and attitudes towards sustainable consumption in Germany.

**Planned additional measures**

The Federal Government intends to expand its existing information services on sustainable consumption for consumers, companies, associations and organisations. This also includes consumer information on e-commerce. Further, knowledge on sustainability is to be integrated in the education programme for schools and in extracurricular education. Moreover, the Blue Angel environmental label will be further expanded by including even more everyday products in the portfolio. The portal “siegelklarheit.de” is to be expanded considerably to include new product groups. New bureaucratic costs are to be avoided.

### 12.1.b Energy consumption/CO₂ emissions from private household consumption

**Sustainable consumption – Making consumption environmentally and socially compatible**

![Energy consumption and CO₂ emissions by private households](source: Federal Statistical Office)

**Definition of the indicator**

The indicator specifies the development of direct and indirect energy consumption by private households and thus illustrates the strain placed on energy by the consumption activities of private households.

**Target and intention of the indicator**

Private households are responsible for a significant share of the energy consumption in an economy as well as the carbon dioxide emissions that are closely linked to energy consumption. However, energy use in consumption is not confined to the domestic economy alone, but also extends to the production of imported...
goods abroad. The indicator therefore provides additional information about the damage being done to the environment on a global scale as a result of consumption activities. A reduction in energy consumption will conserve resources both domestically and abroad and will curb carbon dioxide emissions that are harmful to the environment. The target of the Federal Government is therefore, to continuously lower energy consumption associated with consumption.

Content and progress of the indicator

The data originates from calculations by the Federal Statistical Office based on the energy balances from abroad, both at the actual manufacturers of the correct energy consumption occurs domestically and consumption involves large expenses of energy. This indirect energy consumption occurs domestically and abroad, both at the actual manufacturers of the consumer goods and with their suppliers. Both forms are recorded by this indicator.

The same applies to the emissions of carbon dioxide (CO₂), presented here as an index for information purposes: In addition to the direct emissions by private households caused by the combustion of fuels, much greater quantities of emissions are generated indirectly during the production of consumer goods. The depicted key figure includes both direct as well as indirect emissions.

Closer analysis of the time series reveals a wavelike trend in energy consumption due to the consumption activities of private households with a slight increase by 1.9 % from 2005 until 2010. Between 2010 and 2012, energy consumption by private households declined steadily by a total of 5.1 %. In contrast, consumption in 2013 rose again by 2.6 % year on year, which means in summary, that the value of the indicator in 2013 fell by a total of 0.9 % compared with 2005. However, there are currently no signs of a continuous reduction.

In 2013, direct energy consumption by private households accounted for 40.1 % of overall household energy consumption. Of this total, combustibles including electricity and district heating accounted for 64.7 % and fuels accounted for 35.3 %. The larger component of overall energy consumption at 59.9 % was indirect energy consumption associated with the production of consumer goods domestically and abroad. The reduction of 1.0 % in the energy content of consumer goods between 2005 and 2013 was slightly stronger than the reduction in direct energy consumption.

Energy consumption is differentiated according to the demand areas of living, mobility, food, other products and services. The most energy is consumed in the areas of living, transport and food. Here, the living area with around 3,696 petajoules in total (37.6 % of total consumption of private households) represents the highest consumption area in 2013. The losses incurred during the generation of electricity and district heating for private households are included here via indirect consumption.

The trend for energy-related CO₂ emissions reveals a similar pattern as that for energy consumption. In 2013, CO₂ emissions by private households including the emission content of consumer goods as well as emissions from the combustion of biomass amounted to 668 million tons, representing a 3.8 % increase compared with 2005. The combustion of fuels accounted for 34.0 % of emissions, with the remaining 66.0 % accounted for by the production of consumer goods. Between 2005 and 2013, direct CO₂ emissions fell by 2.2 %, although the emission content of consumer goods rose by 7.2 %.

This indicator has cross-references to indicators 7.1.a, b "Final energy productivity and primary energy consumption", 7.2.a "Share of renewable energy sources in gross final energy consumption" as well as 11.2.a, b "Final energy consumption in freight transport and passenger transport".

Federal Government activities

The consumption of goods and services influences not only the economic and social situation of people all over the world, but also the status of the environment. Private households make up a significant share of the overall energy demand and the CO₂ emissions. The reduction of CO₂ emissions is crucial for combating climate change. It is thus important to know how consumption is expected to develop. To gain information on this, global environmental consumption and impacts, in particular CO₂ emissions, that arise due to imports must be included in the analysis.

The indicator “energy consumption and CO₂ emissions” displays the development of energy consumption and CO₂ emissions of private households, broken down into the demand areas of living, mobility and food. The indicator thereby maps an essential part of environmental impacts and resource utilisation resulting from consumption decisions. It also takes into account environmental impacts and resource utilisation caused by imports, but not those caused by exports. This
is the central feature of the “consumption perspective” that attributes environmental impacts to the end consumer. The extent to which environmental impacts are outsourced from Germany is also taken into consideration.

The indicator complements the significance of the indicator “Market share of goods and services with trustworthy and ambitious eco- and social labels”. This is important, as the increasing market shares and higher sales of certified sustainable products can be connected with an overall increase in consumption. On the balance sheet, this increased consumption can result in a greater environmental impact or cancel out the positive effects completely or partially (known as the rebound effect). However, both indicators on sustainable consumption reflect the development of sustainability in the area of consumption.

Previous measures
In recent years, the Federal Government has made a considerable effort to raise consumers’ awareness of climate protection and to reduce the emission of greenhouse gases by private households. For example, the energy consumption labelling system resulted not only in significantly more efficient household appliances, but also in a reduction of the electricity consumption of households. The same applies to the corresponding product groups with the Blue Angel environmental label. The Federal Government also supported various reduction measures in the context of the National Climate Initiative, e.g. advice on and exchange of devices in lower-income households (known as the Caritas project) or the Eco Top Ten portal.

Planned additional measures
In the context of the implementation of the “National programme for sustainable consumption”, the Federal Government is planning various measures that will make sustainable consumption easier for consumers and provide better orientation, in particular with regard to the carbon footprint and energy consumption in the context of the production and use of goods and services. The Federal Government will continue to campaign for an ambitious revision of the Energy Consumption Labelling Ordinance. In addition, the Federal Government is planning further measures to include the external effects, in particular with regard to consumer goods, to a greater extent. Educational measures that are intended to reduce possible rebound effects are also planned.

12.2. EMAS eco-management

Sustainable production – Increasing the proportion of sustainable production

Use of the EMAS eco-management system in Germany
Number of organisation locations registered in Germany as well as their employees

<table>
<thead>
<tr>
<th>Year</th>
<th>EMAS® organisational locations</th>
<th>Employees in thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,958</td>
<td>961</td>
</tr>
<tr>
<td>2006</td>
<td>2,000</td>
<td>801</td>
</tr>
<tr>
<td>2007</td>
<td>2,031</td>
<td></td>
</tr>
</tbody>
</table>

Target: 5,000

Source: Deutscher Industrie und Handelskammertag e.V., the German EMAS Advisory Board, the German Environment Agency
© Statistisches Bundesamt (Destatis), 2017
**Definition of the indicator**

The indicator shows the number of organisation locations registered in Germany for EMAS (Eco-Management and Audit Scheme).

**Target and intention of the indicator**

Climate change, the energy transition and scarce resources are presenting companies with new challenges that are forcing them to reconfigure their business processes, structures and products along environmentally sound and resource-saving lines. The EMAS environmental management system offers a concept of systematic corporate environmental protection and is associated with the goal of continuously improving the environmental performance of the organisation’s location. For this reason, the target is to identify a total of 5,000 organisational locations complying with the EMAS environmental management system by 2030.

**Content and progress of the indicator**

EMAS is a voluntary instrument of the European Union that helps companies and organisations of any size in any sector to continuously improve their environmental performance. EMAS is associated with an environmental reporting obligation (called an environmental statement) that contains the most important environmental impacts of the company in question and involves the obligatory provision of data on the topics of energy and material efficiency, emissions, water, waste and land use/biodiversity. Internal documents as well as the environmental statement are inspected by independent, government-approved environmental experts. Organisations that pass the inspection against which no environmental violations and complaints apply are accepted into the EMAS register. The inspection must be repeated on a regular basis, no later than every three years. The environmental verification committee is responsible for quality control. The environmental statement must be updated by the organisations annually – since 2010, small and medium-sized companies can apply to do so every two years. EMAS organisations and locations are registered by the responsible chambers of industry and commerce and listed in a publicly-accessible database at the Association of German Chambers of Commerce and Industry. Data recorded using a standardised methodology is available from 2005 onwards.

In terms of methodology, note that the EMAS register shows the number of registrations. Participating organisations are free to include several locations under a single organisation registration (collective registration) or to have locations registered individually. Some companies also participate in EMAS with foreign locations and have these registered in Germany. These are also contained in the EMAS register, which can result in the number of managed EMAS locations and employees with reference to Germany to be too high. Statistical data is available regarding the number of registered organisations and regarding the number of locations, irrespective of whether they are part of a registered organisation or are registered as independent location.

In 2015, there were 2,031 EMAS locations registered in Germany. This is an increase of 3.7 % compared with 2005. Considering the development of the last five years, the indicator has on average been moving gradually in the direction of the set target. If the trend continues unchanged, the goal for 2030 will nevertheless not be achieved.

A new EC Regulation, known as EMAS III, came into force in 2010. The details of the key environmental aspects in the environmental statement were further specified in the form of standardised key figures for the above-mentioned topics. The specifications were interpreted by some stakeholders as an intensification. At the same time, EMAS III introduces simplifications for small- and medium-sized companies.

The 2,031 EMAS locations registered in Germany in 2015 belonged to a total of 1,216 organisations, which were distributed very unevenly across the country. The majority were based in Baden-Württemberg (422) and Bavaria (269), followed by North Rhine-Westphalia (114). In contrast, there were just 5 organisations in Mecklenburg-Western Pomerania. Distributed according to economic sectors, 38 % of the organisations were manufacturing companies, 11 % were involved in the provision of other services and 10 % operated in the hospitality industry.

The registered organisations employed a total of 800,635 people in 2015. This is a decline of 16.7 % compared with 2005.

**Federal Government activities**

The purpose of EMAS is to make a voluntary contribution to corporate environmental protection that extends beyond the legal requirements, while at the same time optimising the use of resources, saving costs and improving the company’s reputation in the public sphere and among contracting authorities. In addition, it is to increase the employees’ motivation and open up new market opportunities and possibilities for innovation. Today, EMAS is a permanent feature and a hallmark of economically efficient, sustainable and environmentally oriented corporate governance as well as an expression of great corporate responsibility. It thus contributes on the
corporate level to the Federal Government’s aim of making Germany one of the most efficient and environmentally friendly economies in the world.

EMAS constitutes the most ambitious solution in the area of environmental management systems. EMAS demands that each and every participating company continuously improve its environmental performance and comply with all statutory provisions. The companies’ environmental performance is measured on the basis of what are known as core indicators (e.g. energy, material and resource efficiency, land use, water consumption, waste, emissions). EMAS participants report on these indicators in their environmental statement, which is accessible to the public. It is also reviewed by an independent environmental auditor. Various investigations and surveys conducted among the EMAS companies in Germany and throughout the EU confirm that participation in EMAS reduces the burden on the environment. All EMAS participants are listed in a public register. The number of EMAS locations registered in Germany rose above 2,000 at the end of 2015.

Previous measures
The measures initiated by the Federal Government aim to promote the EMAS system and further increase the number of EMAS participants. A mix of instruments that is tailored to EMAS is used for this purpose.

On the level of legislation, EMAS is recognised as part of the EEG compensation scheme and for top tax adjustment with regard to the electricity and energy tax and also in the Law on Energy Services and other Energy Efficiency Measures. EMAS companies are granted relief, for example, with regard to various reporting duties, monitoring by regulatory authorities and employing environmental auditors as authorised experts. The environmental concerns of corporate sustainability reporting are covered by the reviewed environmental statement. Various countries grant a reduction in charges and other forms of enforcement relief to EMAS companies (a detailed overview can be found at www.emas.de/downloads).

The 20th anniversary of EMAS was celebrated in 2015 with numerous events on the national and state levels and also at the Chambers of Industry and Commerce and the Chamber of Crafts. There was also a travelling exhibition on EMAS that toured through Germany. All EMAS companies also had the opportunity to participate in an “EMAS flag campaign”. Regular expert discussions that provide a platform for a mutual exchange on expert topics have been conducted with applicants for the EMAS prize since 2011. The companies also receive certificates of approval from the respective Federal Minister for the Environment.

Various federal authorities and Federal Ministries have introduced EMAS in the context of pilot projects. A guideline for federal authorities explains the basic steps involved in introducing EMAS and the environmental aspects that are important for the federal authorities.

Planned additional measures
The Federal Government will continue to expand the incentives for introducing environmental management systems. The central focus here is on reinforcing the integration between EMAS and other instruments and measures that aim to support sustainable corporate governance and sustainable business.

The Annexes to the EMAS Regulation will be adapted to the amended environmental management standard ISO 14001:2015 in the near term. In this context, the Federal Government is campaigning for the expansion of the user friendliness of EMAS and the strengthening of compatibility with CSR reporting. A subsequent revision of the EMAS Regulation is planned to take place as from 2018. From the perspective of the Federal Government, it is to relieve small and medium-sized enterprises of unnecessary bureaucratic requirements.

The aim of introducing EMAS in all Federal Ministries will be pursued further in accordance with the evaluation task of the Federal Government’s programme of sustainability measures. All Federal Ministries will assess whether or not they will introduce EMAS on the basis of the guideline described above.

The annual expert discussions with EMAS organisations on the award of certificates of approval will be continued.
13. Take urgent action to combat climate change and its impacts

a) Basic content and political priorities from the point of view of the Federal Government

The purpose of goal 13 is to protect one of the most important worldwide limitations, the preservation of which is of utmost importance for the survival of humankind in its current form. The protection of the global climate is one of the greatest challenges of the 21st century. Swift and ambitious measures designed to reduce emissions that are harmful to the climate and to adjust to the consequences of climate change are indispensable for ensuring global sustainable development. Climate change is global threat. International cooperations are essential in the fight against it.

The goal: Keeping the temperature rise well below 2 °C – increasing resilience and adaptive capacity

According to calculations by the Intergovernmental Panel on Climate Change, IPCC, a global rise in temperature by an average of 4 °C or more within this century is likely unless quick and consistent climate protection measures are taken. This temperature rise would increase the risk of abrupt irreversible climate changes and reduce the possibilities for people and ecosystems to adjust to the climate change. At the same time, the IPCC explains that it is possible to limit the increase in temperature to 2 °C as compared to the level prior to the industrialisation if effective action is taken now.

The IPCC also emphasises that the current adaptation measures are already insufficient in view of the expected climate change. The consequences of climate change – such as an increase in temperature, ocean acidification and the extinction of species, limited availability of water and an increasing risk of erosion – can result in the aggravation of social and economic inequality and social conflicts, migration, poverty and hunger. This would impair sustainable development.

The international goal set by the new Paris Agreement on climate change adopted by the UN at the end of 2015 is now to keep the global temperature increase well below 2 °C and strengthen the capacities to adapt at the same time.
also adopted a framework for the EU’s climate and energy policy until 2030:

- Reduction of the EU-internal greenhouse gas emissions by at least 40% as compared to 1990.
- Expansion of renewable energies to at least 27% of final energy consumption.
- Reduction of primary energy consumption by at least 27% as compared to the trend (by 2020, check whether a reduction by 30% is possible).

National targets

The Federal Government has made a commitment to reduce greenhouse gas emissions as compared to 1990 by at least 40% by 2020, by at least 55% by 2030, by at least 70% by 2040 and by 80–95% by 2050 (Fourth “Energy Transition” Monitoring Report, 2015). In the transport sector, final energy consumption is to be cut back by roughly 10% by 2020 and by around 40% by 2050 as compared to 2005. For Federal buildings, the binding Sustainable Construction Guidelines were introduced by decree in the Federal Office for Building and Regional Planning. In combination with concrete calculation methods and assessment specifications of the Sustainable Construction Rating System (BNB), these guidelines address all basic issues of sustainability in the life cycle of a building.

The timely adjustment to climate change to prevent damage and risks caused by changes in the climate is becoming increasingly important in Germany, too. The aim of the Federal Government’s policy is to reduce Germany’s susceptibility to the effects of climate change and increase the country’s capacity to adapt to climate change, to thereby ensure that the existing goals of action of the different political fields remain as feasible as possible even under the conditions of advancing climate change.

The associated targets in detail

SDG 13 essentially envisages the strengthening of resilience and adaptive capacity to climate-related hazards (13.1), the integration of climate change measures into national policies (13.2) and the improvement of human and institutional capacities on climate change mitigation and adaptation (13.3). At national level, these goals are reflected in the German Strategy for Adaptation to Climate Change (DAS). On the international level, the commitments undertaken by the developed-countries in the accompanying resolutions on the Paris Agreement on climate change to mobilise jointly USD 100 billion annually by 2020 from private and public sources for the support of developing countries are to be fulfilled (13.a) and plan-ning and management capacities in least-developed countries and small island developing States are to be promoted (13.b).

Statement from the Dialogue on Sustainability

“Environmental protection, the fight against climate change and the global combat against poverty and hunger go hand in hand, for both environmental degradation and the consequences of climate change harm the most vulnerable among us on the planet in particular (Laudato Si’, no. 48).”
Commissariat of German Bishops

Germany’s international role

Germany is among the top donors towards international climate protection. Projects that address the reduction of greenhouse gas emissions, the adaptation to climate change and the protection of forest and biological diversity are funded via bilateral and multilateral programmes and funds. Following the successful conclusion of the UN Climate Change Conference in Paris, it is important to continue promoting structural elements of the global climate protection architecture (implementation of contributions to climate protection, transparency of the reduction effort, ambition mechanism) in partner countries in a targeted fashion, to support the necessary transformation processes and to accelerate these even before 2020.

National challenges: Successful implementation of the climate policy

The Paris Agreement on climate change that was adopted at the end of 2015 is the guiding principle and benchmark for the Federal Government’s climate protection policy. Swift and ambitious action is called for in order to prevent the worst consequences of climate change and the dwindling of possibilities to adapt. Comprehensive social and economic changes are required in order to achieve the climate protection target and greenhouse gas neutrality agreed in the Paris Agreement in the second half of the century. The Federal Government’s Climate Action Plan 2050 is to provide orientation with regard to the content of the transformation process required to achieve the national climate protection targets.

If current predictions hold true and climate change increases, there will also be an increase in the potential for damage to nature, society and the economy. Extreme weather events such as heat, heavy rain, strong wind and river flooding in
particular can cause damage to buildings and the infrastructure. In the German Strategy for Adaptation to Climate Change (DAS, 2008), the Federal Government has assessed the risks of climate change, identified the need for action, defined the corresponding targets and developed possible measures for maintaining or increasing the adaptive capacity of natural, social and economic systems.

On the international level, Germany’s energy transition is frequently considered a role model for the successful transformation of the energy system in favour of effective climate protection. In order to arrive at a successful climate policy that is geared towards achieving the long-term goals, not only the energy sector, but all areas for action, such as transport, agriculture, buildings, industry and business, trade and services need to be included.

**Federal Government activities**

**I. Measures in Germany**

When it comes to climate protection, Germany relies on a broad mix of instruments consisting of legal regulations, economic instruments and support programmes, for example in the fields of renewable energies and energy efficiency, as well as information and consulting. In order to achieve the German climate protection target for 2020 in particular, the Climate Action Programme 2020 and the National Action Plan on Energy Efficiency were adopted at the end of 2014. The former includes roughly 100 measures for all sectors relevant in terms of greenhouse gases (e.g. energy industry, buildings, transport, industry, business, trade and services, waste/recycling management, agriculture). The implementation of the programme is supported by a coalition for action consisting of representatives from business and civil society. The status of the Climate Action Programme is presented in an annual progress report.

In the light of the European targets and the results of the 2015 Climate Change Conference in Paris, further reduction measures for the achievement of a target value of between 80 and 95% in 2050 (as compared to 1990) are to be defined and supplemented with measures in the context of a broad dialogue process (Climate Action Plan 2050).

To pursue the activities necessary to overcome the consequences of climate change consistently, the Federal Government resolved the First Progress Report on the German Strategy for Adaptation to Climate Change (DAS) in December 2015. It comprises roughly 140 measures defined by the Federal Government for various policy areas, such as transport, construction, coastal protection, health, research and international cooperation. The implementation status of the measures is reviewed in order to assess the progress that has been made in terms of adapting to climate change in Germany. The risks associated with climate change are ascertained and made transparent regularly. To this end, a monitoring report will be published every four years that presents those effects of climate change that can already be observed on the basis of more than 100 indicators and further analyses will identify the future priorities of the German adaptation policy. The next progress report will be submitted in 2020.

The National Climate Initiative for the promotion of broad climate protection activities in Germany and the DAS support programme for the promotion of measures for the adaptation to climate change will be continued.

The Federal Government is improving the knowledge base and foundations for decision-making on climate protection and the adaptation to climate change with the “Research for Sustainable Development” (FONA³) framework programme. The main focuses of this programme are the “National Initiative for Climate Modelling”, the “Regionalisation of climate data” and the “Integrated evaluations for climate policy and innovation”.

**II. Measures by Germany**

Within the EU, the United Nations and G7 climate negotiations and informal forums, the Federal Government is campaigning for an ambitious international climate policy and appropriate targets for reducing greenhouse gas emissions in order to accelerate the necessary transformation towards decarbonising the global economy and increasing what is known as resilience, i.e. the power of resistance to the consequences of climate change, on an international level. The following should be noted here:

- Germany is aiming to double its international funding for climate protection by 2020 as compared to 2014 (announcement by German Chancellor Angela Merkel at the 2015 Petersberg Climate Dialogue).
- Germany will make an adequate contribution to the USD 100 billion target for 2020 with the instruments for the leverage of capital market funds and the mobilisation of private investments.
- The Federal Government is supporting research on climate change and thus also the work of the Intergovernmental Panel on Climate Change (IPCC). It provides essential scientific foundations for decisions regarding climate policy.

**III. Measures with Germany**

The Federal Government has supported developing and emerging countries via the International Climate Initiative (IKI) since 2008. The IKI has supported
roughly 75 projects in the area of renewable energies with a total volume of more than EUR 285 million so far. IKI projects contribute to the creation of political, technological, economic and financial market-specific conditions for sustainable energy systems in the partner countries and thereby improve energy access and energy security in the partner countries.

Germany supports developing and emerging countries with their contributions to climate protection via development and research cooperation by creating capacities, helping to identify priority measures within national planning and providing funding for climate protection.

Insurance is to be provided for 400 million people in developing countries that are poor and susceptible to climate-related risks by 2020 by means of the G7 Initiative on Climate Risk Insurance, “InsuResilience", established in Elmau. The G7 nations agreed to provide USD 420 million by the time the climate summit in Paris took place in 2015.

b) Relevant national sustainability indicators and objectives/measures

13.1.a Greenhouse gas emissions

Climate protection – Reducing greenhouse gases

**Definition of the indicator**

The indicator shows emissions of the following greenhouse gases (substances or substance groups) in CO2 equivalents: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulphur hexafluoride (SF6), nitrogen trifluoride (NF3), hydrofluorocarbons (HFC), perfluorocarbons (PFC) as well as sulphur hexafluoride (SF6).

**Aim and intention of the indicator**

The global average temperature on the surface of the Earth is continuously rising due to the increasing concentration of carbon dioxide and other greenhouse gases in the atmosphere, which is already having detectable effects on the climate system today. The Federal Government therefore aims to lower greenhouse gas emissions in Germany by at least 40% compared with 1990 by 2020. Additional goals are the reduction by at least 55% by 2030, by at least at least 70% by 2040 and by 80 to 95% by 2050 – in each case compared with 1990.

**Content and development of the indicator**

To summarise the various greenhouse gases into a single index, they are each expressed in “CO2 equivalents”, which means that they are converted into the quantity of CO2 that has a comparable effect on global warming.

The data is provided annually by the German Environment Agency as part of the reporting under the United Nations Framework Convention on Climate Change.
Federal Government activities

The indicator is based upon the scientific finding that there is a direct connection between the increase in global warming and the concentration of greenhouse gas emissions in the atmosphere. The reduction of greenhouse gas emissions is therefore crucial for combating climate change.

The Federal Government has aligned its national climate protection targets with the upper limit of 2 °C. By 2050, Germany intends to reduce its greenhouse gas emissions by between 80% and 95% as compared to 1990. This is particularly important in light of the Paris Agreement. The indicator is an important criterion for measuring the success of the Federal Government’s climate policy.

Previous measures

The Federal Government is relying on a broad mix of instruments to achieve its climate protection goals. At the end of 2014, the Federal Government adopted the “Climate Action Programme 2020” and the “National Action Plan on Energy Efficiency”, a comprehensive package of measures designed for achieving the climate protection goal for 2020. The implementation status of the action programme is reviewed annually in what is known as the climate action report. Business and the civil society are involved in this process via the climate action coalition.

The Federal Government also supports a large number of climate protection projects, for example via the National and International Climate Initiatives. In addition, it is investing in the research and development of climate protection technologies. At European level, too, Germany is committed to climate protection. It is involved in the European Union Emissions Trading System, the central European climate protection instrument.

Planned additional measures

In light of the Paris Agreement on climate change, the Federal Government will resolve its “Climate Action Plan 2050” in 2016. This plan is to indicate long-term strategies designed to ensure that the goal of reducing greenhouse gas emissions by 80–95% as compared to 1990 by 2050 can be achieved. The Climate Action Plan will point out the required reduction measures. The preparation of the Climate Action Plan 2050 was accompanied by a broad dialogue with citizens, associations, the Länder and local authorities.
13.1.b International climate protection funding for the reduction of greenhouse gases and adaptation to climate change

Climate protection – Germany’s contribution to international climate protection funding

Definition of the indicator

The indicator includes the financing of measures for the reduction of greenhouse gases, for the adaptation to climate change, for the protection of biodiversity as well as REDD+ projects primarily in developing and emerging countries from German public funds including the grant elements of development loans, which include public funds.

Target and intention of the indicator

The intention of the Federal Government is to double its international climate protection funding by 2020 relative to the target value of EUR 2 billion for 2014. By the United Nations Framework Convention on Climate Change, the industrialised countries committed themselves to provide support to developing and emerging countries in the form of funding, capacity building and technology development to help implement measures for reducing emissions and adapting to climate change.

Content and progress of the indicator

The data for the indicator is taken from the reporting to the United Nations Framework Convention on Climate Change. The data source of the data collected annually across the EU is the Federal Ministry for Economic Cooperation and Development (BMZ), which in this context also reports on climate protection funding from other federal ministries. The bilateral climate protection funding here is based on commitments, and multilateral climate protection funding and contributions to energy and climate funds are based on payments. Since 2011, the Rio Markers of the development committee of the Organisation for Economic Cooperation and Development are used to identify climate protection projects in the context of German development cooperation. The indicator also includes climate protection funding that is to be attributed proportionately to the bilateral donors. This funding is derived from their contributions to multilateral funds with development banks. As far as the climate protection funding primarily benefits developing countries, it is considered to be part of public development expenditure (see indicator 17.1).

The purely monetary analysis of climate protection funding does not allow any conclusions to be drawn regarding the impact of the financed projects. An impact assessment of how many tons of carbon dioxide emissions will be saved in the future through emission-reduction projects or how many people can profit from adaptation projects is attempted by the BMZ, based on the funds earmarked for technical and financial cooperation by the BMZ. Here, both direct (e.g. the expansion of renewable energy) as well as indirect measures (e.g. policy advice) are taken into account. A precise quality assessment of the methodology used in order to measure the impact is not possible due to the information available. However, since impact monitoring is based on financing commitments and therefore also on an ex-ante estimate of the impact of projects,
the indicator can lead to overestimates. For instance, consulting aimed at improved adaptation planning is assumed to have an indirect impact so that, presumably, the entire population of a region or country will be reached.

In 2014, Germany committed or provided EUR 2.34 billion of public funds to international climate protection funding for the reduction of greenhouse gases and adaptation to climate change. Compared to the previous year, during which climate protection funding amounted to EUR 1.95 billion, this represents an increase of 20%. 37% of climate protection funding in 2014 was devoted to emission-reduction projects and 42% to adaptation measures. The remaining 21% was used to finance REDD+- as well as biodiversity projects. Since the latter are also relevant to reduction and adaptation, this means that overall in 2014 more funds were spent on adaptation projects (53%) than on emission-reduction projects (47%).

According to statements by the BMZ, the funds for technical and financial cooperation by the BMZ enabled German development cooperation to contribute directly to the reduction of around 413 million tons of CO₂ equivalents during the anticipated average impact duration of the investments of 20 years. Indirectly, which means through other stakeholders who are outside the project’s immediate sphere of influence, these projects could help bring about a reduction of up to 6 gigatons of CO₂ equivalents. Adaptation measures implemented in developing and emerging countries reached 2.3 million people directly. The BMZ estimates that significantly more people – around 300 million – are likely to have benefited indirectly from the measures.

In addition to official climate protection funding from public funds, the Kreditanstalt für Wiederaufbau and the German Investment and Development Corporation also provide climate-related loans with funds from the market. These represent “mobilised public climate protection funding” and are not included in the indicator. In 2014, the resources mobilised through this channel amounted to EUR 2.79 billion compared with EUR 1.47 billion the previous year.

Federal Government activities

The United Nations Framework Convention on Climate Change (UNFCCC) commits the industrialised countries to provide support to developing countries in the form of funding, capacity building and technology development to help implement measures for reducing emissions and adapting to climate change. At the Copenhagen Climate Change Conference in 2009, the industrialised countries agreed to support developing and emerging countries with climate protection funding in the amount of USD 100 billion per year from public and private sources as of 2020. At the 2015 climate summit in Paris, this commitment to long-term financing was confirmed and carried forward until 2025. By contributing to this cause, Germany is gaining the trust of the developing countries, supporting them with the implementation of their national determined contributions and thereby contributing towards the timely implementation of the Paris Agreement on climate change. In this regard, Germany is campaigning for the integration of the climate targets in national development strategies and the combination of the Sustainable Development Goals and the climate targets for the purpose of sustainable development in the partner countries.

Previous measures

Germany is an important partner in international development cooperation and one of the main donors for international climate protection and adaptation. The funds provided for the reduction of greenhouse gases and the adaptation to climate change have been increased considerably over the last years. In 2014, the Federal Government provided a total of roughly EUR 2.34 billion from its public budget for international climate protection funding in developing countries with ODA relevance. Additional public funds for international climate protection in the amount of EUR 2.79 billion were mobilised via KfW and DEG.

The purpose of climate protection funding is to attain direct, indirect and transformative effects with the measures financed. Direct effects are attained, for example, by supporting investments in renewable energies as compared to a reference case. Indirect effects are achieved when technical advice enables the partner country to yield effects as compared to a reference case with public and private investments. Transformative effects are attained when projects contribute to initiating a change in policy, e.g. towards long-term sustainable energy supply. These effects are not assessable. An estimation given when a project is confirmed is a forecast; the success of the project and the setting in of effects are not proven at this
Preliminary quantitative estimations of effects can be made with these limitations.

According to the preliminary assessment method used here, German development cooperation\(^2\) is contributing to the direct reduction of around 413 million tonnes of CO\(_2\) eq during the prospective 20-year average duration of effect of the investments with the funds provided as part of Germany’s climate protection funding in 2014. Indirectly, i.e. via other stakeholders who are not in the direct area of influence of the project, German development cooperation can contribute to a reduction of up to 6 gigatonnes of CO\(_2\) eq with the climate protection funding provided in 2014. However, it cannot be estimated when these effects will set in. Estimations by the GIZ regarding the adaptation to climate change predict that climate protection funding provided by the German development cooperation in 2014 will reach 2.3 million people in developing countries directly (based on the entire project duration). Indirectly, the measures implemented to help with the adaptation to climate change are expected to benefit significantly more people – around 300 million with the funds from 2014.

In addition to the quantifiable effects stated here, transformative effects that cannot be depicted with these figures are achieved in the developing countries.

Due to existing uncertainties, the preliminary figures given above and their assessment method will undergo a further check and be adapted if necessary in order to represent and quantify climate effects as realistically as possible and so as not to overestimate them.

**Planned additional measures**

However, in order to implement the international affirmations given by the industrialised countries, spending on international climate protection funding must further increase by 2020. German Chancellor Angela Merkel announced at the Petersberg Climate Dialogue in May 2015 that Germany intends to double its annual international climate protection funding as compared to 2014 by 2020. Building on the budgeted amount for 2014 of EUR 2 billion, the 2020 target for German public climate protection funding is EUR 4 billion.

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\(^2\) Technical cooperation and financial cooperation funds provided by the BMZ. This does not include IKI funds by the BMUB, measures supported by the BMBF and AA, multilateral contributions and BMZ support of NGOs, church sponsors and political foundations.
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

a) Basic content and political priorities from the point of view of the Federal Government

Ecologically intact, effective marine and coastal ecosystems are of great importance with regard to global food security, sustainable economic development and the adaptation of coastal inhabitants to the impacts of climate change. The oceans’ functionality as ecosystems represents a global limitation that must not be exceeded.

Coastal areas all over the world are centres of settlement and business that are subject to high utilisation impact. Forms of utilisation that are adapted to the peculiarities of coasts and oceans, precautionary coastal protection strategies and effective protection, e.g. through protected area networks that make it possible to compensate for the increased utilisation requirements in the marine area, too, are key factors for the sustainable development of coasts and oceans. Sustainable management of natural resources in consideration of the ecosystem approach and the precautionary principle is the central challenge, also with regard to SDG 1. Saltwater fish are the most important source of animal protein in the world. Catch quotas that are in line with scientific recommendations (maximum sustainable yield as the upper limit) which are observed and monitored, as well as refugia and replenishment areas are required here. An ecologically representative and effectively managed protected area network (German Advisory Council on Global Change, WBGU 2013: at least 20–30% of the area of marine ecosystems as a planetary guideline) is also needed.

The Federal Government’s policy is guided by the notion that future generations will still find ecologically intact and effective coasts and oceans whose resources they can draw upon. The conservation of the oceans’ natural resources is in the interest of both the economy and society. It is for this purpose that the Federal Government adopted the “National Strategy for the Sustainable Use and Protection of the Seas” (National Marine Strategy) in 2008 and reported its environmental targets for the North Sea and the Baltic to the Commission in 2012.

SDG 14 and its associated targets

SDG 14 reflects the content of the strategic plan for the period from 2009 to 2020 based on the Convention on Biological Diversity. The targets provide more detailed definitions of the protection and sustainable use of the oceans: Targets 14.1 and 14.3 address marine pollution and eutrophication (target year 2025) and ocean acidification, and targets 14.2 and 14.5 focus on the sustainable management and effective protection of marine and coastal ecosystems (target year 2020 for both). The aim of targets 14.4 and 14.6 is to end overfishing, illegal fishing and destructive fishing practices, e.g. by eliminating counter-productive subsidies (target year 2020). Target 14.7 demands that developing countries receive economic benefits for the sustainable use of the oceans. Further aspects include the transfer of marine technology (14.a), access for small-scale artisanal fishers to marine resources and markets (14.b) and the implementation of the United Nations Convention on the Law of the Sea (14.c).

Federal Government activities

1. Measures in Germany

1. Regulations for the reduction of nutrient input

The input of nutrients into bodies of water and oceans via groundwater intake as a result of overfertilisation is to be reduced, for example by way of the current amendment of the fertiliser regulations. It must therefore be checked whether this measure can contribute to achieving the targets of applicable EU law (Water Framework Directive, Marine Strategy Framework Directive). It may be necessary for the Länder to take further measures to reduce the input of nutrients into bodies of water, including from other sources.

2. Agri-environmental and climate protection measures, organic farming

Agri-environmental and climate protection measures as well as the promotion of organic farming also make important contributions to reducing the amount of nutrients input into the oceans. The net area that is supported in Germany has been larger than 4 million hectares for a few years.
3. The protected area network

The Federal Government established bird sanctuaries in the German Exclusive Economic Zone (EEZ) as part of the European protected area network NATURA 2000 as early as 2005. The Federal Government is currently preparing to place eight areas under conservation protection in the German Exclusive Economic Zone (EEZ) under the Habitats Directive (FFH) (merging with the existing bird sanctuaries to form nature reserves). They will complement the already existing protected areas that the Länder have designated on shore and in coastal waters. The Federal Government intends to campaign for the effective protection of the protected areas in the EEZ in compliance with EU and regional international law (OSPAR, HELCOM) and for the integration of a type of fisheries management that is necessary to achieve the protection targets.

4. Improvement of agricultural structures and coastal protection

In the context of the “Joint Task for the Improvement of Agricultural Structures and Coastal Protection” as specified in Article 91a of Germany’s Basic Law, the Federal Government is providing a majority of the funds for coastal protection measures that are implemented by the Länder by means of regular framework plans (currently ongoing since 2015) and a special framework plan for the consequences of climate change (2009–2012). In future, the Federal Government will work more intensively towards ensuring that the measures that are taken are consistent with sustainable coastal development.

5. National Marine Strategy/national programme of measures as per EU MSFD

The EU Marine Strategy Framework Directive (MSFD) is to be implemented in order to achieve a good status of the European seas by 2020. National programmes of measures that contain an integrated cross-sectoral protection concept and enable the sustainable use of the seas today and by future generations are to be developed on the basis of the ecosystem approach. The national programme of measures agreed between the Federal Government and the coastal Länder in the current MSFD reporting cycle was delivered to the EU Commission within the prescribed time limit, in March 2016.

6. National ICZM strategy

In view of the increasing utilisation requirements in Germany’s coastal area, Integrated Coastal Zone Management (ICZM) is to contribute to the preservation and sustainable development of the coastal and marine areas as an ecologically intact and economically prosperous habitat. For this purpose, Germany resolved the ICZM strategy in 2006 and an implementation report in 2011. The Federal Government will examine, possibly in the context of the implementation of the Marine Strategy Framework Directive, whether the strategy is to be further developed, in particular for the purpose of maintaining the vital processes of coastal and marine ecosystems as a basis for the coast as a habitat and economic region.

II. Measures by Germany

1. Prevention of marine litter

With regard to the fight against marine litter, the Federal Government is placing its main focus on preventing litter and litter input. Germany is campaigning intensively on a regional level in the context of the OSPAR and HELCOM Conventions for the Protection of the Marine Environment (‘Regional Action Plans on Marine Litter’) and made marine litter one of the topics of its 2015 G7 presidency. The G7 adopted their own G7 Action Plan on Marine Litter and have already agreed on concrete measures, including a time frame and the stakeholders responsible.

2. Partnership on Regional Ocean Governance

With the support of the “Partnership on Regional Ocean Governance” (PROG) initiated in 2015 by the UN Environment Programme (UNEP), the Potsdam Institute for Advanced Sustainability Studies (PIAASS) and the Institute for Sustainable Development and International Relations (IDDRI), Germany is also contributing to removing the structural obstacles that stand in the way of integrated marine resource management.

Deep seabed mining was a topic of Germany’s G7 presidency. The G7 states are appealing to the International Seabed Authority (ISA) to continue their work on a code for sustainable deep seabed mining.

3. Implementing agreement on the UN Convention on the Law of the Sea

The Federal Government is campaigning in the context of both the EU and the UN for the establishment of prerequisites for the effective protection of marine biodiversity through the negotiation of an implementing agreement on the UN Convention on the Law of the Sea that extends beyond national sovereignty – to the open sea. Such an agreement is necessary in order to establish and effectively implement internationally recognised protected areas on the open sea.

4. Marine protected areas in the Arctic and Antarctic

The Federal Government is supporting the establishment of protected areas in the Arctic and Antarctic. It thus prepared an EU proposal for the Weddell Sea in the Antarctic, which will be negotiated by the responsible Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) at the next annual meeting in October 2016.

In the context of OSPAR (the Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic), the Federal Government is campaigning intensively for the designation of an OSPAR high sea
5. Sustainable fisheries

In the context of the EU Common Fisheries Policy (CFP), the Federal Government is pursuing a campaign to ensure that by 2020 at the latest, all fish stocks are fished in such a way that the stocks are kept above the level that allows the maximum possible yield to be achieved, that the negative effects of fishing on the marine ecosystem are reduced to a minimum and that discards are stopped by avoiding by-catch and reducing it as far as possible and by introducing landing obligations.

III. Measures with Germany

1. Protection and sustainable use of coastal and marine areas

The Federal Government is contributing to ensuring that further coastal and marine areas in partner countries of the development cooperation are placed under conservation protection, are managed sustainably and are financially secure. To this end, Germany is supporting measures for the conservation, protection, regeneration and sustainable use of coastal ecosystems.

2. Sustainable fisheries in partner countries

The Federal Government also supports sustainable fisheries in developing countries and is pursuing a campaign to ensure that the natural resources in coastal areas are preserved for the people who live there. On the international level, the Federal Government is campaigning for the fight against illegal, unregulated and unreported fishing and is supporting its partner countries with the implementation of concrete measures against these fishing practices.

b) Relevant national sustainability indicators and objectives/measures

14.1.a Nutrient inputs in coastal waters and marine waters

Protecting the oceans – Protection and sustainable use of oceans and marine resources

**Total nitrogen input into Baltic/ North Seas via selected German inflows**

<table>
<thead>
<tr>
<th>Year</th>
<th>North Sea Management Target</th>
<th>Baltic Sea Management Target</th>
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<tbody>
<tr>
<td>2000</td>
<td>2.8 mg/l N</td>
<td>2.6 mg/l N</td>
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<tr>
<td>2001</td>
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<td>2014</td>
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</tbody>
</table>

**Definition of the indicators**

The indicators map the moving five-year average of nitrogen inputs in mg nitrogen per litre of water discharge via the rivers Eider, Elbe, Ems and Weser into the North Sea as well as Peene, Trave and Warnow into the Baltic Sea.

**Target and intension of the indicators**

High concentrations of nitrogen in the seas can lead to eutrophication effects such as oxygen depletion, the loss of biodiversity and to the destruction of fish spawning grounds. Therefore, the input of nitrogen should stay below 2.8 mg nitrogen per litre discharge for the rivers flowing into the North Sea and below 2.6 mg N/l for the rivers flowing into the Baltic Sea. This corresponds to the management targets of the
Regarding nitrogen concentrations and water discharge, nutrient inputs into both of these marine areas and a “good ecological status” as per the WFD, “good environmental status” as per the MSFD puts through air and water. In order to attain a “good environmental status”. Eutrophication is caused by excessive nutrient inputs through air and water. In order to attain a “good environmental status” as per the MSFD and a “good ecological status” as per the WFD, nutrient inputs into both of these marine areas must thus be reduced significantly. Quantitative reduction targets were specified as management values in the most recent Ordinance on the Protection of Surface Waters. Effective measures designed to reduce nutrient input are currently being implemented, mainly under the WFD. The measures described for the two indicators “total phosphorous” and “nitrate in groundwater” (SDG 15) also serve the purpose of reducing nutrient inputs.

**Federal Government activities**

Eutrophication, that is, the increased growth of aquatic plants as a result of high nutrient inputs, is one of the major ecological problems in Germany’s seas, especially the Baltic. According to the national initial assessment carried out as part of the EU Marine Strategy Framework Directive (MSFD), both the North Sea and the Baltic Sea fail to meet a “good environmental status”. Eutrophication effects are one of the reasons for this.

**Previous measures**

Eutrophication is caused by excessive nutrient inputs through air and water. In order to attain a “good environmental status” as per the MSFD and a “good ecological status” as per the WFD, nutrient inputs into both of these marine areas.

**Content and process of indicators**

The indicators are calculated based on measured data regarding nitrogen concentrations and water discharge levels of the Rivers Eider, Elbe, Ems, Peene, Trave, Warnow and Weser, which the German Environment Agency compiles using information from the Länder and the river basin communities. The results are then used to calculate the nitrogen load that these rivers introduce into the North and the Baltic Sea. Since the calculation of both indicators involves aggregating the water discharge volume and the nitrogen loads of the rivers and then expressing the value in relation to one another, the value must not be confused with the average nitrogen concentration of these rivers. On the contrary, it represents a weighted average. Another substance that is carried by rivers into the North Sea and the Baltic Sea where it leads to eutrophication is phosphorous. This is covered by indicator 6.1.a “Total phosphorous in flowing waters”.

To ensure that damaging events such as flooding, which lead to very high nitrogen inputs on an off and on basis, do not distort the representativeness of the trend, the values are analysed as a moving five-year average that includes the five preceding years.

This analysis excludes nitrogen inputs from smaller inflows as well as inputs from Germany into the North and the Baltic Sea via rivers that do not enter these seas in Germany (such as the Rhine and the Oder). The underlying nitrogen input into the Baltic Sea from the Rivers Peene, Trave and Warnow used here, accounts for around 30 % of German inputs into the Baltic Sea via rivers and unmonitored coastal catchment areas in 2014.

The Peene, Trave and Warnow rivers exhibit very different nitrogen concentrations. Whereas the 5-year average concentration in the Warnow in 2014 was 3.1 mg/l, the concentration in the Peene was 4.0 mg/l and in the Trave 5.2 mg/l. The trend of nitrogen concentration in these rivers has also developed very differently over the past few years. In 2000, the Warnow, with 3.9 mg/l, displayed a higher and the Trave, with 6.6 mg/l, a still higher concentration. The development in the Peene points into the contrary direction. At 3.9 mg/l, its nitrogen concentration increased slightly compared with the five-year average for 2000.

A slightly different situation applies to the four selected rivers flowing into the North Sea. Here, all four rivers recorded a continuous decline in nitrogen concentrations. The values for the Elbe and Weser reduced in the comparison of 2000 with 2014 on average based in each case on the five preceding years from 4.9 and 5.3 mg/l to 3.6 and 3.8 mg/l respectively. Even the Ems, whose water catchment area includes regions with intensive livestock farming, saw a reduction from 7.6 to 6.0 mg/l. With that, it revealed the highest nitrogen concentration in the 5-year average of all rivers examined both in 2000 as well as in 2014.

Compared with the five-year average for 2000, the nitrogen concentration in the Eider reduced from 6.3 mg/l to 2.4 mg/l in the five-year average for 2014. Therefore, it not only recorded the largest reduction of the seven rivers analysed, it was also the only one of them whose five-year average for 2014 adhered to the corresponding management target. Overall, however, permanent and nationwide adherence to the target values has yet to be achieved.

**Planned additional measures**

Emission reduction measures are needed to reduce nutrient inputs through the air in the North Sea and Baltic. The existing obligations specified in the Gothenburg Protocol under the UNECE Air Convention and the EU Directive on National
Emission Ceilings (NEC Directive), as well as the obligations to be implemented as part of the future EU Directive on National Emission Reduction Commitments (NERC Directive) by 2030 in particular are relevant here.

Given that the Baltic is a semi-enclosed sea and exchanges only little water with the North Sea, it is particularly vulnerable to nutrient inputs. The nutrient inputs must therefore be further reduced in order to achieve the European quality targets and the targets of the HELCOM Baltic Sea Action Plan. To this end, Germany will take effective nutrient reduction measures by implementing the WFD. A further possible measure is to follow the 2016 HELCOM recommendation on aquaculture and not permit any aquaculture in marine nature reserves if this could jeopardise environ-

mental targets in these areas. As part of the Baltic Sea Action Plan (the aim is that the Baltic is not impaired by eutrophication), HELCOM derived ambitious nutrient reduction targets which Germany has committed itself to achieve by 2021.

On the federal level, the revision of the fertiliser regulations is to contribute to the reduction of nutrient inputs into water. However, additional efforts must be undertaken by the Federal Government and the Länder in order to achieve the targets of the Water Framework Directive and the Marine Strategy Framework Directive and thereby support the achievement of a good environmental status in German marine waters.

### 14.1.b Share of sustainably fished fish stocks in the overall number of fish stocks in the North Sea and Baltic

**Protecting the oceans – Protection and sustainable use of oceans and marine resources**

<table>
<thead>
<tr>
<th>Share of sustainably fished fish stocks in the North and Baltic Sea from all MSY stocks</th>
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<tbody>
<tr>
<td>in %</td>
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<tr>
<td>Total</td>
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<td>North Sea</td>
<td></td>
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<tr>
<td>Baltic Sea</td>
<td></td>
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<tr>
<td>MSY-investigated from all managed stocks</td>
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</tbody>
</table>

Target: 100

**Definition of the indicator**

The indicator specifies the share of sustainably managed fish stocks (according to the Maximum Sustainable Yield [MSY] approach) from the total number of managed fish stocks in the North and Baltic Sea.

**Target and intention of the indicator**

Biological diversity is fundamental to all human life. Only if the natural capital – for example, in the form of fish stocks in the North and Baltic Sea – is protected and maintained it can also provide future generations of humans with critical ecosystem services. The target of the indicator is to describe the extent to which the goal defined in the Regulation on the Common Fisheries Policy has been achieved. The goal states that fish stocks used for economic purposes must be sustainably managed in accordance with the MSY approach by 2020.
Content and progress of the indicator

Not all fish stocks are investigated with reference to their sustainable management. Therefore, the number of fish stocks that are sustainably managed according to the MSY approach should always be viewed in relation to overall fish stocks. Although an expansion of the investigation to include as many stocks as possible is desirable, the high cost of these investigations means that the prospect of recording all stocks, even those that are economically less relevant and less fished, is unrealistic.

Stocks are considered to be “sustainably managed” if the actual catch per year and fish stock does not exceed the scientific recommendation based on the MSY approach or meets the requirements of a long-term management plan deemed to be sustainable according to the MSY approach. In this context, a “fish stock” is defined as an independently reproducing population of a specific species of fish. A specific species can therefore have multiple stocks and, depending on the stock, can also have different guideline values regarding the catch quantities. As a rule, each stock is assigned a guideline value according to its previous development.

The guideline values for the managed stocks are calculated by the International Council for the Exploration of the Sea (ICES).

The annual calculation of sustainable catch quantities according to the MSY approach is based on stochastic predictions, which use calculations of historical stock trends. Information about fish quantities landed is based on reported catches. Random samples taken from these catches provide information about the demographic parameters of the stock, such as age and size.

Scientific surveys conducted on research ships independently of the fishing industry are another important source of information for estimating fish stocks.

Based on current estimates, a total of 58 stocks in the North Sea and 20 fish stocks in the Baltic Sea are used for economic purposes. The number of stocks investigated according to the MSY approach is currently 7 for the Baltic Sea; for the North Sea, a total of 21 stocks are taken into account from 2011 onwards (previous years: 20 stocks). As a result, just under a third of all managed stocks are fully analysed for sustainable management. All other stocks for which the currently available data is insufficient are still excluded from this indicator.

The share of stocks sustainably fished according to the MSY approach out of the number of stocks investigated according to the MSY approach was 53.6 % in total for the North and Baltic Sea in 2014. For the North Sea, this share was 57.1 % and for the Baltic Sea 42.9 %.

Regarding the development between 2009 and 2014, the overall pattern is positive. In 2012, however, the share of sustainably managed fish stocks was lower than the previous year. Nevertheless, it is difficult to estimate this indicator as it is influenced not only by the development of stocks, but also by the choice of stocks for investigation. In addition, the recommended catch quantities apply internationally and can only be fulfilled indirectly by the efforts of a single country alone.

Federal Government activities

The indicator assesses the condition of the commercially used fish stocks in the North Sea and the Baltic and is therefore an important element with regard to the sustainable use of these marine ecosystems, although this indicator is essentially insufficient for a comprehensive assessment of sustainable use. Sustainable use would lead not only to a good condition of the fish stocks used for economic purposes, but would also improve the condition of the species and marine habitats that are not used. However, as the EU has collected virtually no data on this matter so far, these indicators can cover at least an important subsegment.

The target described with the indicator corresponds to Article 2 of the Regulation on the Common Fisheries Policy: “In order to reach the objective of progressively restoring and maintaining populations of fish stocks above biomass levels capable of producing maximum sustainable yield, the maximum sustainable yield exploitation rate shall be achieved by 2015 where possible and, on a progressive, incremental basis at the latest by 2020 for all stocks.”

The necessary data are published by the Commission every year (prior to the allocation of quotas). In this context, it must also be taken into account that catch quotas are regulated not on a national level, but on EU level through resolutions made by the Council, in which Germany is just one of the political stakeholders.
Previous measures

Securing the sustainable management of fish stocks is a central concern of the Federal Government’s fisheries policy. A fundamental reform of the Common Fisheries Policy was therefore resolved together with the other 27 EU member states and the European Parliament in 2013. The reform stipulates that management on the level of maximum sustainable yield must be achieved for all stocks by 2020 at the latest. This new political direction is to be implemented by means of multi-species plans for the individual marine areas. A corresponding plan for the Baltic has been in effect since July 2016. A Commission proposal for a multi-species plan for the North Sea has been presented in the meantime. The introduction of the landing obligation for all fisheries that are subject to catch limits by 2019 at the latest also serves to improve fish stock management. What are known as discard plans have been prepared for this purpose.

Planned additional measures

A new version of the technical measures is also required as part of the reorientation. To this end, the Commission published a proposal that comprises all EU waters in March 2016.

In line with the new political approach, the total catches will be aligned with the principle of maximum sustainable yield in future. To implement this approach, the Community framework for the collection, management and use of data in the fisheries sector is currently undergoing a fundamental revision.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

a) Basic content and political priorities from the point of view of the Federal Government

Intact ecosystems are the indispensable basis for human existence and sustainable development. They are the basis required for securing a varied diet, they ensure that the air and drinking water are clean, and provide important raw materials. Ecosystems help to regulate the temperature and contribute to climate protection by reducing CO₂. Intact ecosystems with a natural diversity of species provide protection against environmental disasters such as flooding and landslides, and can adapt more easily to climate change. Natural goods and services are the capital and foundation of many economic sectors. Forests in particular are characterised by a high degree of multi-functionality. Bogs have developed into immense carbon sinks over the course of the millennia. However, nature is not preserved solely for the sake of humans. According to the Federal Nature Conservation Act, nature and landscape must be conserved “by virtue of their intrinsic value”. Effective measures such as conservation, protection and sustainable use must be taken in order to confront the loss of habitats and species, including the strain on finite resources that extends beyond the boundaries of our planet’s resilience.

Conservation of terrestrial ecosystems as a multidisciplinary issue of the 2030 Agenda

The conservation, protection and sustainable use of terrestrial ecosystems and their biological diversity is not limited to SDG 15, but can be found as a multidisciplinary issue in many other SDGs: SDG 2 (food security), SDG 6 (water), SDG 11 (sustainable urban development), SDG 12 (sustainable consumption and production patterns), SDG 13 (combat against climate change) and SDG 14 (oceans).

SDG 15 in the context of international agreements

The Convention on Biological Diversity (CBD) is an important foundation for the implementation of SDG 15, especially on the international level. It aims to ensure the conservation and sustainable use of biological diversity and to regulate access to genetic resources and the equitable distribution of the advantages that result from their use. The CBD’s Strategic Plan for Biodiversity 2011–2020 contains a comprehensive and ambitious programme for achieving this target that is implemented, for example, by means of various multilateral agreements and (UN) institutions. Efforts must be made to establish synergies with the United Nations Convention to Combat Desertification (UNCCD) and the Framework Convention on Climate Change (UNFCCC) in particular, and also with the work by the UN Environment Programme (UNEP) and the UN Food and Agricultural Organisation (FAO). In addition, the 2030 Agenda places the Strategic Plan in the context of global sustainable development. It provides the opportunity to promote the necessary integration of protection and sustainable use of terrestrial ecosystems in all important policy areas and economic sectors.

SDG 15 also pursues the global implementation of sustainable management as one of its most important global tasks. As a result of the decision to continue and strengthen the United Nations Forum on Forests (UNFF), this forum is now taking on an increasingly important international role in the context of the global promotion of sustainable forestry management and the creation of more coherence and synergies between the numerous international forest-related processes, and also with regard to the implementation of SDG 15.

The associated targets in detail

With its many associated targets, SDG 15 aims for the comprehensive protection, restoration and sustainable use of ecosystems. Target 15.1 focuses on the conservation of terrestrial and inland freshwater ecosystems, while target 15.3 addresses desertification and the protection of soil quality and target 15.4 deals with mountain ecosystems. The aim of target 15.2 is to achieve sustainable management of all types of forests, halt deforestation, restore degraded forests and
increase afforestation. Targets 15.5 to 15.8 are aimed in particular at confronting the loss of biodiversity, e.g. through the fair and equitable sharing of the benefits arising from the utilization of genetic resources (15.6), taking urgent action to end poaching and trafficking of protected species of flora and fauna (15.7) and preventing the introduction of invasive alien species (15.8). Finally, ecosystem and biodiversity values are to be integrated in decision-making processes (15.9).

The means of implementation envisaged in SDG 15 are the significant increase of financial resources to conserve and sustainably use biodiversity and ecosystems (15.a), as well as the mobilisation of significant resources to finance sustainable forest management in combination with adequate incentives for developing countries (15.b). In addition, the combat against poaching and trafficking of protected species is to be reinforced (15.c).

**Federal Government activities**

I. Measures in Germany

a) National Strategy for Biological Diversity

The “National Strategy for Biological Diversity” is especially important for the national implementation of the SDG’s biodiversity targets in Germany. It contains roughly 330 targets and 430 concrete measures in 16 areas of action. One of the targets is, for example, for the land share of forests with natural forest development to make up 5% of the forest land by 2020. The “Federal Biodiversity Programme” has been supporting the implementation of the strategy for biological diversity with up to EUR 15 million per year – it was EUR 18 million in 2016 – since the beginning of 2011. Other strategies such as the 2020 Forest Strategy (see below) and the Agrobiodiversity Strategy of the BMEL also contribute to protecting biodiversity.

b) Protected areas as indispensable instruments for protecting biodiversity

Protected areas are indispensable when it comes to conserving biological diversity. The number of nature reserves and national parks is increasing steadily. They currently account for roughly 4.3% of Germany’s land area. The Natura 2000 areas designated as per the Habitats Directive and the Birds Directive make up 15.5% of the terrestrial area. Some of these areas overlap with nature reserves, national parks and biosphere reserves. Germany has 15 UNESCO biosphere reserves and intends to apply for UNESCO status for two new biosphere reserves.

c) National Natural Heritage

The National Natural Heritage areas are nationally representative nature conservation areas that belong to the Federal Government. They are excluded from privatisation and transferred to the Länder, conservation foundations or conservation associations free of charge. So far, the prerequisites for securing the conservation of important ecosystems have been created on a total area of 156,000 hectares in Germany.

2. Protection and sustainable management of Germany’s forests

a) 2020 Forest Strategy

With the 2020 Forest Strategy, the Federal Government set out guidelines for the forest as a natural and economic space. The aim is to achieve a sustainable balance between the rising number of different demands on the forests and their capacity. As regards the implementation of the forest strategy, there is a strong focus on the protection targets of the National Biodiversity Strategy. Privately owned small and micro-forests are included in the development with suitable resources.

c) Forest Climate Fund

With the “Forest Climate Fund” that was started as part of the special “Energy and Climate Fund” (EKF) in 2013, the Federal Government is supporting measures for the conservation and expansion of the potential of forests and timber to reduce CO₂ and the adaptation of forests to climate change.

3. Protection and sustainable use of soil as a resource

The conservation and sustainable use of soil as a resource is also an important target on the national level. According to the Federal Government’s current 2015 Environmental Report, the consideration of topics relevant to soil is to be strengthened further, e.g. by including the soil-relevant requirements of the 2030 Agenda in the National Sustainable Development Strategy.

A new indicator for the observation of possible changes in soil quality is in preparation. It is to be based on a survey of land use in Germany and enable the assessment of the changes that took place in individual years. This is to allow the consequences of soil loss caused by the increase in settlement and traffic areas to be recorded and assessed, e.g. as losses in terms of the production of biomass, the ability to absorb rainwater or to fix greenhouse gases. The development of this indicator is also to support Germany’s contribution to implementing SDG target 15.3, “Land Degradation Neutrality”.

The increased observation of soil status is to accommodate the guiding principle of sustainable development in the area of soil to a greater extent, in the sense of a sectoral strategy.
4. Restoration of rivers and wetlands

The “Bundesprogramm Blaues Band” (Federal Blue Ribbon Programme) was developed in cooperation between the Federal Ministry of Transport and Digital Infrastructure (BMVI) and the BMUB and envisages the use of the sub-network of waterways, which is almost 2,800 km long and is no longer used for transporting goods, for the restoration of rivers and wetlands. The programme is to set a new course towards flood precaution, nature conservation and recreation.

5. Precautionary research on biodiversity and ecosystems

The Federal Government is improving the knowledge base and foundations for decision-making on the conservation of biodiversity and ecosystem services with the “Research for Sustainable Development” (FONA³) framework programme. The key issues are “Ecological and socioeconomic dynamics”, “Longterm data and data management”, “Natural capital” and “Land degradation”.

6. Integration of ecosystem and biodiversity values in decision-making processes

The results of the international TEEB Initiative (“The Economics of Ecosystems and Biodiversity” (2007–2010)) reveal that the protection and sustainable use of nature is profitable from an economic perspective as well. In order to further promote the appreciation of the value of ecosystems and their services as well as their consideration in national and local planning and development processes in Germany, too, the Federal Government has been supporting the “Natural Capital Germany – TEEB DE” study since 2012.

II. Measures by Germany

1. Protection and sustainable use of biological diversity and the forests, sustainable forestry management worldwide

a) Germany as an important financier of global forest and biodiversity conservation

Since 2013, Germany has provided more than EUR 500 million per year for the conservation of forests and other ecosystems all over the world and has thereby increased its commitment more than fourfold since 2007. This includes both bilateral pledges and multilateral payments made as part of the Forest Carbon Partnership Facility (FCPF) and the Global Environment Facility (GEF). The aim is to further increase these financial resources within the available budgetary ceiling over the coming years.

b) The New York Declaration on Forests and deforestation-free supply chains

In September 2014, Germany committed to implementing the “New York Declaration on Forests” (2014). The aim is to halt the loss of natural forests by 2030 and restore a total of 350 million hectares of deforested and degraded landscapes all over the world. By signing the Amsterdam Declaration in December 2015, Germany set itself the target of avoiding deforestation in the context of agricultural supply chains.

d) Illegal felling

Illegal felling of trees is one of the major causes of deforestation and forest degradation in tropical developing countries in particular. This not only results in the loss of biological diversity, but also runs counter to the efforts undertaken for the purpose of climate protection and poverty eradication.

Against the backdrop of the future requirements facing regulatory authorities throughout the entire EU, the Thünen Centre of Competence on the Origin of Timber was established as the central contact point for authorities, timber trade, consumers and conservationist organisations from both Germany and all over the EU.

The BMEL initiated the Global Timber Tracking Network (GTTN) partnership in 2015 to support global checks on the origin of timber. Not only international partners in the USA and Australia who, just like the EU, have introduced legal provisions against illegal timber trade, but also the World Resources Institute and the EU Commission were won over to the cause.

e) Restoration of forest landscapes: Bonn Challenge and AFR 100

Ever since the first Ministerial Conference of the internationally recognised platform for action “Bonn Challenge” in 2011, the Federal Government has supported the target of restoring 150 million hectares of destroyed forest by 2020. It also supports the African initiative “AFR 100”, which aims to restore 100 million hectares of forest landscape in Africa by 2030.

2. Protection and sustainable use of land as a resource

a) Degradation neutrality as the topmost priority

Germany campaigned strongly for the aim of a land and soil degradation-neutral world during the negotiations on the 2030 Agenda, partly because of the great importance of soil for the diversity of species and climate protection. A suitable national approach to the implementation of target 15.3, “Land Degradation Neutrality”, is currently in progress. The purpose of this is to record and assess damaging and positive changes to the quality of the soil as far as possible. This approach also supports the French COP21 Initiative for the enrichment of topsoil.

b) The Economics of Land Degradation Initiative

The international “Economics of Land Degradation (ELD) Initiative” presented its results on the economic use of soil and terrestrial ecosystems and the cost of advancing land degeneration with significant support from Germany in 2015.
c) Germany’s research activities on land management

The current support measures of the BMBF, “Sustainable Land Management” (A. Global interactions, B. Innovative system solutions) and “Transdisciplinary Innovation Groups for Sustainable Land Management”, aim to develop solutions and approaches for the sustainable use of land as a resource on the national and international levels.

d) The National Policy Strategy on Bioeconomy and the National Research Strategy Bioeconomy 2030

The sustainable management of land as a resource is one of the fundamental requirements for the provision of natural resources, which are the basis of the bioeconomy. In this context, we have to find solutions for the permanent preservation and improvement of the capacity of soils. This also includes the scientific understanding of soil ecosystems in connection with the productivity of soils. To this end, the BMBF launched the funding activity “Soil as a sustainable resource for the bioeconomy – BonaRes”.

3. The combat against poaching

The increasing illegal trade with ivory, rhinoceros horn and many other rare species and their products has considerable negative effects on biodiversity. It also constitutes a safety risk in the countries of origin, worsens the situation of the mostly poor population and the economic development in the countries affected. The combat against wildlife crime has become a priority of Germany’s environmental and development policy. The adoption of the first UN resolution against wildlife crime, which was initiated by Germany and Gabon in July 2015, represents a milestone for the urgent matter of overcoming the species protection crisis.

4. Access to genetic resources and fair benefit sharing

Germany ratified the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Access and Benefit Sharing, ABS) on 21 April 2016. Germany also supports the “Access and Benefit Sharing (ABS) Capacity Development Initiative”.

5. Guidelines on land use rights

The Federal Government provided significant support to the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests” adopted by the Committee on World Food Security (CFS) in October 2013. These guidelines are the first instrument under global international law that regulates the secure and fair access to natural resources and specifies standards for reliable investments in land in order to prevent what is known as “land-grabbing”.

6. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

By promoting research on biodiversity and ecosystems, the Federal Government is also supporting the work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). It provides objective and reliable information on the condition and development of biological diversity and its ecosystem services to policy-makers.

III. Measures with Germany

1. REDD+: Connecting forest and climate protection

The Federal Government has provided more than EUR 1 billion for Reducing Emissions from Deforestation and Forest Degradation (REDD+) since 2008. The International Climate Initiative (IKI) has also placed a focus on lowering emissions and reducing deforestation and destructive forest use. At the 2015 climate summit in Paris, Germany announced its intention to increase support for REDD+ to USD 1 billion per year by 2020 in cooperation with Norway and the United Kingdom.

2. Implementation of the EU FLEGT Action Plan

The BMZ supports the implementation of the EU Action Plan to fight illegal timber trade and felling (FLEGT Action Plan) via bilateral projects. The action plan involves the conclusion of voluntary partnership agreements between the EU and the partner countries. There are currently ongoing projects in Laos, Vietnam, Cameroon, Côte d’Ivoire and Honduras, and regional projects in the Congo Basin (COMIFAC) and Asia (ASEAN).

3. Deforestation-free supply chains

The Federal Government supports multiple partner countries of the German development, agricultural and environmental cooperation with setting up deforestation-free supply chains and promotes small family farms at the same time.

4. Access to genetic resources and fair benefit sharing

The main focus of the “Access Benefit Sharing (ABS) Capacity Development Initiative”, which is supported by Germany, is on supporting partner countries in Africa, Oceania and Latin America with the implementation of the Nagoya Protocol, the valorisation of genetic resources and the creation of value chains that observe the applicable ABS rules and contribute to the conservation of biodiversity through benefit sharing. As regards genetic resources for food and in agriculture, it is particularly important that the International Treaty on Plant Genetic Resources for Food and Agriculture (see above, ITPGRFA) be implemented and promoted in order to satisfy the special needs of this resource that is intensively traded on the international market.
5. Global network of protected areas

A global network of protected areas is to contribute to the conservation of biological diversity all over the world and to the protection of vital ecosystem services. Germany is working to provide substantial support to such a network of protected areas on a global scale. In the context of the international cooperation for the implementation of the Convention on Biological Diversity, the World Heritage Convention and the UNESCO-MAB Programme, Germany is supporting its partners with the establishment and sustainable management of natural world heritage sites, national parks, biosphere reserves and nature reserves. An overall area that is larger than France and Germany combined is supported with an ongoing funding volume of more than EUR 500 million in 40 partner countries. The European network of protected areas, Natura 2000, is an important building block for the global network of protected areas.

6. The global combat against desertification

In the context of the international cooperation for the implementation of the Convention on Biological Diversity, Germany has long been supporting the partner countries with the sustainable management of land resources. The special initiative “One World, No Hunger”, which was founded by the BMZ, started a programme for the “Soil protection and rehabilitation for food security” in five countries in 2015 with funding in the amount of roughly EUR 90 million.

b) Relevant national sustainability indicators and objectives/measures

15.1. Species diversity and landscape quality

Biodiversity – Conserving species – protecting habitats

Definition of the indicator

The indicator shows the population trend for 51 selected bird species in the form of an index.

Target and intention of the indicator

A wide diversity of animal and plant species is a fundamental prerequisite for a healthy natural environment and an essential basis for the human livelihood. To preserve biodiversity and at the same time the quality of life of humans, the preliminary target of the Federal Government is an index value of 100 by 2030 – this target was originally supposed to be achieved by 2015. It is foreseen to check the level of this target value by 2020 and to adjust it if necessary.

Content and progress of the indicator

The calculation of the indicator is based upon changes in the populations of 51 bird species, which together represent the most important types of landscape and habitat in Germany: ten species each for the sub-indicators for farmland, settlements, inland waters, coasts and seas as well as eleven species for forests. Due to...
the uncertain data situation, the Alpine habitat is currently not taken into account.

An expert committee has stipulated target population values for each bird species—originally for 2015. The population size per species is calculated annually from the results of bird monitoring programmes by the Federation of German Avifaunists (DDA) in cooperation with the Federal Agency for Nature Conservation (BfN) and is specified in relation to the size of the defined target value. The historical values for 1970 and 1975 are reconstructed.

A value for the sub-indicators and the overall indicator is calculated annually based on the degree to which the goals have been achieved. The target values for the sub-indicators and the overall indicator were applied to the target year 2030 unchanged on a preliminary basis. The level of these target values shall be checked by 2020 and adjusted if necessary.

In addition to birds, there are also other species that rely on a richly structured landscape with intact, sustainably used habitats, which means that the indicator also indirectly maps the development of a number of other species in the landscape and the sustainability of land use.

In 1990, the indicator for species diversity and landscape quality was significantly lower than the reconstructed values for 1970 and 1975. In the last ten reporting years (2003 to 2013), the value of the indicator has deteriorated further. In 2013, it was at just 68% of the target value. Should this development continue, the target set for 2030 is unlikely to be achieved.

During the course of the last ten years (from 2003 to 2013), however, the sub-indicators for the individual habitat types have developed differently. In this period, the sub-indicators for farmland (2013: 59.2% of the target value) as well as for coasts and seas (2013: 58.2% of the target value) experienced a downward trend that also has a significant impact on the overall indicator. The progress of the sub-indicators for forests, settlements and inland waters was inconsistent during the reference period.

Except for the sub-indicators for forests and inland waters, all sub-indicators also remained significantly below the comparative values for 1990. In terms of biodiversity and the landscape quality of forests, the situation appeared to have improved significantly recently in comparison with the other habitat types. In 2013, this habitat achieved 86.9% of the target value, which was the highest value compared with the other sub-indicators.

### Federal Government activities

The indicator “biodiversity and landscape quality” provides important information on the implementation of SDG 15 in Germany, and on the implementation of target 15.3 in particular. The “species diversity and landscape quality” indicator was developed as a key indicator for the sustainability of land use in the context of the Federal Government’s National Sustainable Development Strategy and was also included in the “National Strategy for Biological Diversity”. The continuing negative trend of this indicator reveals that, despite various measures, the endeavour to reduce the burden on the landscape as a whole to such a degree that species diversity and landscape quality can improve to the extent necessary has not been successful.

### Previous measures

With its National Strategy for Biological Diversity, the Federal Government presented a challenging national programme for implementing the Convention on Biological Diversity in 2007, which aims to halt the decline in biological diversity in Germany and reverse the negative trend. The measures are divided into 16 areas of action. They are addressed not only at governmental stakeholders, but at all parties responsible. A broad political and social process is under way for the purpose of implementing the strategy. A variety of measures for the conservation and sustainable use of natural and cultural landscapes, the protection of species diversity and the genetic resources of plant and animal species have already been performed. This also includes agri-environmental and climate-protection measures as well as conservation easements. The 2013 Report and the 2014 Indicator Report on the National Strategy for Biological Diversity provide more detailed information. One of the aims of the reform of the EU’s Common Agricultural Policy adopted in 2013 is to promote biological diversity in the agricultural landscape. It thus supports the implementation of the BMEL strategy for the conservation and sustainable use of biological diversity for the food, agriculture, forestry and fisheries sectors.

### Planned additional measures

The central challenge is to halt and reverse the downward trend. In order to achieve a positive trend for the overall indicator and all the sub-indicators, considerable additional efforts must be undertaken by the Federal Government, the Länder and at municipal level, if possible in all policy areas affected. The focus should be placed on farmlands, coasts and seas.
To improve biological diversity in farmlands, the EU’s agricultural policy and the law on the “Joint Task for the Improvement of Agricultural Structures and Coastal Protection” (GAK) as well as corporate grassland protection must be made more environmentally friendly and conducive to nature conservation. For example, the draft of the Fourth Amendment to the GAK Act resolved on 7 July 2016 intends to include measures for environmentally friendly farming that is adapted to the market and the location, including conservation easement and landscape management in the scope of funding of the GAK. Environmentally friendly farming that includes forestry management requires environmental and climate protection measures, including the adaptation to the effects of climate change, and nature conservation and landscape management measures insofar as they are part of the European Union’s Common Agricultural Policy.

As regards coasts and seas, the main focus is on ecologically sound fishing and ambitious management of the marine protected areas in the North Sea and the Baltic.

Better conservation easement programmes are important for the protection and the ecologically sound and sustainable use of forests, but it is also important that the targets for natural forest development specified in the National Strategy for Biological Diversity be implemented consistently. The Federal Government has already reached these aims for its own areas. However, the target of attaining a 2% area of large-scale wilderness in Germany must also be implemented in order to fulfil the wishes of a vast majority of the population. The management and the cooperation between the Federal Government and the Länder in particular must be intensified in order to realise these protected areas. The plan is to establish a functioning management system for all flora, fauna and habitat areas and many large protected areas by 2020. A biotope network that extends across the Länder and makes up at least 10% of the area of each Land is to be established as a central element of green infrastructure in Germany by the end of 2025. Renewable energies are to be expanded in an ecologically sound way.

Green and open spaces in residential areas provide a habitat for numerous plants and animals and allow people to experience nature right on their doorstep. More and higher quality natural spaces are thus needed in cities, and greater importance is to be assigned to communication on nature conservation. This must also apply to the migrants who have been living here for only a short time and those who have already been living here for a longer period. The joint commitment to preserving nature establishes connections that extend beyond cultural and religious borders.

Knowledge on the condition and development of nature and biological diversity also needs to be improved. Comprehensive biodiversity monitoring, information systems for fauna and flora, an improvement of taxonomy training and the foundation of a Red List Centre are further important steps. Ultimately, the central funding instrument for the implementation of the National Strategy for Biological Diversity, the Federal Biodiversity Programme, is to be refined. The continuing loss of biological diversity shows that the necessity to set up ambitious model projects to implement the strategy has further increased.
15.2. Eutrophication of ecosystems

Ecosystems – Protecting ecosystems, conserving ecosystem services and preserving habitats

Definition of the indicator

The indicator depicts the share of land containing sensitive ecosystems for which the critical ecological loads have been exceeded due to atmospheric nitrogen inputs, measured against the total evaluated land containing sensitive ecosystems.

Target and intention of the indicator

The critical ecological loads are a measure of the sensitivity of an ecosystem to the input of a pollutant. If the inputs of air pollutants are above the critical loads, this can cause long-term damage to the structure and function of ecosystems. Almost half of the ferns and flowering plants that are included in the red list in Germany are endangered by nitrogen inputs. By 2030, the share of land with an elevated input of nitrogen is to be reduced by 35% compared with 2005. This corresponds to a reduction on 37% of the land of all ecosystems.

Content and progress of the indicator

Nitrogen, which escapes into the atmosphere bonded in ammonia and nitrogen oxides is introduced into sensitive ecosystems in gaseous form, dissolved in rain, or as a component of particulate matter. In this context, forests, natural grassland, bogs, marshes and heaths are considered to be ecosystems.

In order to evaluate nitrogen inputs, ecosystem-specific critical loads are determined. Based on the latest knowledge available, long-term damage to the structures and functions as well as to the species communities of an ecosystem can occur if these loads are exceeded. Critical ecological loads are therefore a measure of the sensitivity of an ecosystem and enable spatially differentiated comparisons of the resilience of ecosystems by current atmospheric nitrogen inputs. In total, some 11 million hectares, almost one third of the entire land mass of Germany, are evaluated in this way. The effects of excessive nitrogen input often take several years to manifest themselves. Likewise, the positive effects of reduced input will become apparent only after an extended period.

The eutrophication of ecosystems is related to indicators 2.1.a “Nitrogen surplus”, 3.2.a “Emissions of air pollutants”, 6.1.b “Nitrate in groundwater” and 14.1.a “Nitrogen input via the inflows into the Baltic Sea and North Sea”. The indicator is currently calculated by the Coordination Centre for Effects (CCE) at intervals of several years based on two data sources. These are the time series for nitrogen inputs in Germany created by the European Monitoring and Evaluation Programme (EMEP) as well as the critical loads calculated nationally and provided by the German Environment Agency. The basic tools for determining critical loads include, among other things, the soil map overview of Germany, the map showing average annual percolation rates from the soil, and the map of land use distribution along with climatic data for Germany.
In 2010, the critical loads for harmful nitrogen input were exceeded on 54 % of the area of all evaluated sensitive ecosystems in Germany. In this instance, transgressions in parts of northern Germany are particularly high, as the agriculture here releases large quantities of reactive nitrogen compounds. Between 1990 and 2010, the share of areas on which critical loads for nitrogen were exceeded was reduced by 19 percentage points. This can be attributed in particular to the reduction in emissions caused by the downsizing of livestock numbers following the German reunification and measures to control air quality. If the reduction in nitrogen inputs of the previous reporting years continues, the targeted goal of a maximum of 37 % of polluted land in 2030 can be achieved.

**Federal Government activities**

Large inputs of reactive nitrogen are one of the causes for the strain on ecosystems and the threat to biodiversity. In 2009, the ecological limitations for nitrogen, which can lead to eutrophication, were exceeded in roughly 50% of the areas with vulnerable ecosystems in Germany. The indicator refers to the effects on ecosystems caused by air pollutants. It was introduced in addition to the emissions-related indicator “air pollution” and serves for the implementation of SDG targets 15.1 and 15.2. As part of the reporting on the National Strategy for Biological Diversity (NBS), a similar indicator for the same situation is published under the heading “eutrophying nitrogen inputs”. This indicator shows the areas in which the critical loads for nitrogen are not exceeded. Due to differing methods used for the underlying models and calculations, the NBS indicator arrives at different values in the time series.

**Previous measures**

In Germany, emission reductions implemented over the last decades have lowered pollutant inputs from the air, especially the input of sulphur compounds, significantly. This has helped to halt or slow down the acidification of ecosystems. Forest and aquatic ecosystems in particular have been stabilised in this way. However, there are still considerable and wide-ranging problems with regard to the pollution of ecosystems through nitrogen inputs and ozone.

**Planned additional measures**

The permanent and systematic reduction of nitrogen inputs is part of the target system of the National Biodiversity Strategy. According to this strategy, the limitations for vulnerable ecosystems are no longer to be exceeded by the year 2020. This corresponds to the long-term aim of the EU and UNECE air quality control policy to achieve levels of air quality that do not give rise to significant negative impacts on, and risks to, human health and the environment. In order to protect, preserve and improve the EU’s natural capital, the further reduction of air pollution and its effects on ecosystems and biological diversity is to be ensured by 2020; the long-term goal is not to exceed critical pollution levels and values.

Current scenario projections by the German Environment Agency show that the emission reduction commitments specified for 2030 in the NERC Directive suggested by the European Commission could indeed lead to a considerable reduction in areas affected by eutrophication to roughly 25% of the vulnerable areas. However, the long-term aim of the nationwide adherence to “critical loads” would not be achieved everywhere with the suggested emission reductions, not even by 2030; this is in part due to the transnational transport of air pollutants from neighbouring countries. In order to counteract this, the nitrogen inputs must be further reduced.
15.3. Payments to developing countries for the verified preservation or restoration of forests under the REDD+ rulebook

Forests – Preventing deforestation

Payments to developing and emerging countries for the verified preservation or restoration of forests under the REDD+ rulebook

in millions of euros

Financial contributions prior to 2013 were made in anticipation of the REDD+ rulebook.

Source: Federal Ministry for Economic Cooperation and Development

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Definition of the indicator

The indicator shows the payments by Germany to developing and emerging countries for the verified preservation or restoration of forests under the REDD+ rulebook.

Target and intention of the indicator

The prevention of deforestation and forest degradation (damage), the use of sustainable forestry management systems as well as the restoration of forests and afforestation contribute directly and indirectly to the reduction of CO₂ emissions and to the storage of carbon. The REDD+ rulebook envisages results-based payments for measurable and verified CO₂ emission reductions. The target is to increase these payments by Germany to developing and emerging countries by 2030.

Content and progress of the indicator

Reducing Emissions from Deforestation and Forest Degradation, (REDD+) is a financing instrument that is designed to protect forests and their biodiversity, and that was developed by the international community. REDD+ rewards governments and local communities financially for reducing deforestation and thereby demonstrably cutting emissions. The sums paid out are based on the scope of emissions reduced or of carbon stored. REDD+ funds are disbursed only if the reduction in deforestation has been verified – which means they are result-based. Consequently, the indicator may experience fluctuations over time even though the level of committed payments remains unchanged over the years.

The indicator includes only a part of the public development expenditure for the preservation, the sustainable management and the restoration of forests, since the Federal Government is involved in promoting sustainable forest development in developing and emerging countries not only as part of REDD+, but also through other programmes and initiatives.

Payments made under the REDD+ rulebook are also part of climate finance (indicator 13.1.b), as the preservation of forests serves primarily to limit emissions.

The data sources for the indicator are the financial reports compiled by the Federal Ministry for Economic Cooperation and Development and by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The data has been collected annually since 2008.

In the review period between 2009 and 2015, the indicator developed in a very uneven manner. Following a sharp increase from EUR 3.0 million in 2009 to EUR 20.0 million in 2010, the payments fell in 2011 to EUR 12.0 million, before increasing to their presently highest level of EUR 36.3 million in 2013. The ensuing years saw a fall-off in payments, and they reached EUR 15.7 million in 2015, well below the level of 2010. Of this amount, EUR 12.4 million flowed into multilateral
programmes, and EUR 3.3 million went to bilateral programmes. The development of the indicator since 2010 does not reveal a definitive trend. Following strong growth in payments up to 2013, they settled in 2015 at a level between the values of 2010 and 2011.

Federal Government activities

The REDD+ rulebook adopted under the aegis of the Framework Convention on Climate Change (UNFCCC), summarises measures that contribute indirectly and directly to the reduction of CO\(_2\) emissions and the storage of carbon. In addition to the prevention of deforestation and forest degradation, these measures also include sustainable forest management, the restoration of forests and afforestation. The rulebook envisages results-based payments for measurable and verified CO\(_2\) emission reductions. The indicator “payments to developing countries for the verified preservation or restoration of forests under the REDD+ rulebook” is to provide a suitable representation of the effects achieved through Germany’s commitment in future. Previously, the implementation of REDD was focused mainly on preparatory measures for REDD+.

Previous measures

The Federal Government is supporting the implementation of REDD+ with results-based payments via existing bilateral and multilateral programmes. The overall amount of funding provided since 2007 by the Federal Government for the World Bank’s Forest Carbon Partnership Facility (FCPF) is EUR 160 million. Germany is also contributing EUR 35 million to the “BioCarbon Fund”, a World Bank initiative that provides compensation for emission reductions in the agricultural context.

The Federal Government is already supporting results-based payments in Brazil, Ecuador and Colombia with a total amount of EUR 65 million in the context of the global “REDD Early Movers – REM” programme. For example, a total of EUR 25 million were provided for the REM programme in the Brazilian state of Acre. At the same time, Acre commits to achieving the same amount of emission reductions again by preserving the rainforest. The state of Acre can use the money to support indigenous peoples living in the rainforest and promote agricultural measures that create alternative sources of income without destroying the forest. In terms of bilateral cooperation, Germany is also supporting Brazil by providing results-based climate protection funding in the amount of roughly EUR 31 million via the Amazon Fund.

Planned additional measures

In cooperation with Norway and Great Britain, Germany will support other countries with the reduction of deforestation through results-based programmes until 2020. The Federal Government intends to provide a further EUR 100 million to the Amazon Fund by 2020. The Green Climate Fund, to which the Federal Government contributes an amount of EUR 750 million, is also to introduce results-based payments for emission reductions effected by REDD+ measures in future.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

a) Basic content and political priorities from the point of view of the Federal Government

Just as there can be no sustainable development without peace and good governance, there can be no peace and no life in dignity and freedom without sustainable development. From this follows the goal of the 2030 Agenda to significantly reduce all forms of violence – not only between countries but also in everyday life – to establish mechanisms to resolve conflicts peacefully and to promote the principles of the rule of law and good governance. Peace, legitimate government institutions and a constructive relationship between the state and society are crucial conditions for respecting, protecting and guaranteeing human rights. The prominent integration of the political dimension of sustainable development into the 2030 Agenda both in the Preamble and in its own SDG constitutes a significant step forward compared to the Millennium Development Goals.

SDG 16 as one of the key goals of the 2030 Agenda

SDG 16 is one of the basic requirements for the achievement of many other SDGs. Where war and violence dominate, where citizens are refused fundamental rights, public money is wasted and people are discriminated against, where administrations function poorly and participatory decision-making with everyone’s involvement is suppressed, sustainable poverty eradication (SDG 1), health (SDG 3), education (SDG 4), gender equality (SDG 5) and the conservation of our natural resources (SDGs 13–15) are also impossible.

Particular relevance in crisis prevention and post-conflict situations

The promotion of the rule of law and good governance is of central importance in civil crisis prevention and stabilisation and peace-building in post-conflict situations. A functioning constitutional democracy pre-emptively establishes the conditions required for resolving conflicts without violence and works to prevent the slide into crisis and conflict situations. In turn, functioning and legitimate institutions and legal security can foster the resumption of economic activity and contribute to conflict management and reconciliation. At the same time, democratic advancements and lasting peace can be achieved only if women and girls have the same opportunities and men and boys to shape developments at all levels of society and politics. This also applies to the specific situations in peace negotiations and rebuilding measures in post-conflict situations.

The associated targets in detail

Goal 16 includes targets regarding peace, security and good governance including transparency, accountability, the rule of law and political participation. Central requirements besides significantly reducing all forms of violence (16.1) and ensuring equal access to justice for all (16.3) are also ending the abuse and exploitation of children (16.2), combating illicit financial and arms flows and organised crime (16.4), substantially reducing corruption and bribery (16.5), providing legal identity for all through birth registration (16.9) and ensuring public access to information (16.10). Effective and accountable institutions should be developed (16.6) and responsive, inclusive, participatory and representative decision-making ensured (16.7) at all levels. The participation of developing countries in the institutions of global governance should also be strengthened (16.8). In order to achieve these targets, national institutions must have the necessary capacity (16.a) and non-discriminatory laws, policies and administrative procedures enforced (16.b). In line with the 2030 Agenda’s commitment to realising human rights for all, SDG 16 and its targets builds on universal human rights standards and principles and uses them as a benchmark for implementation.

Significance for Germany

Germany itself discovered how important lasting peace and effective, accountable and inclusive institutions at all levels are for development at the end of the Second World War. Economic prosperity and the establishment of a constitutional democracy would not have been conceivable without a stable and peaceful Europe. The goals en-
shrined in SDG 16 were one of the Federal Government’s four strategic topics in the process of negotiating the 2030 Agenda.

**Federal Government activities**

I. Measures in Germany

1. Participation and inclusion

Not only around the world, but also in Germany, the Federal Government is committed to protecting the rights of people with disabilities. Accessibility and inclusion will allow people with disabilities to determine their own lives and participate in society. Germany undertook to ensure this when it ratified the UN Convention on the Rights of Persons with Disabilities.

2. Protection of children and young people against (sexual) violence

The Federal Government develops and promotes prevention and intervention measures to protect children and young people effectively from sexual violence and exploitation. Important components of this are the training of specialist personnel and the establishment of protection concepts in institutions. Another priority is the “Frühe Hilfen” (Early help) support systems, whose services are targeted at expecting parents and families with babies and small children.

II. Measures by Germany

1. Germany’s commitment at all levels

Bilaterally, with EU partners, in multilateral forums and especially in the UN, Germany is campaigning emphatically for the promotion of good governance and for an end to violent conflicts, for crisis prevention, effective arms control, respect, protection and guarantee of human rights, the promotion of gender equality and especially of small and light weapons (small arms) trafficking, sexual slavery and child marriage, participation in development measures and support for children and young people, is an important aim of German development policy.

The Federal Government is also committed to protecting the rights of people with disabilities worldwide.

3. Strengthening practical arms export control, especially of small and light weapons (small arms)

In its Coalition Agreement, the Federal Government expressly commits itself to a restrictive arms export policy. The Federal Government decides whether to grant licences to export arms on a case-by-case basis and in light of the respective situation after careful deliberation involving foreign and security policy considerations. Current developments are included in the decision-making process. Each case is assessed on the basis of the Federal Government’s Political Principles, the EU’s Common Position of 2008 and the Arms Trade Treaty.

Thanks to extensive transparency (informing parliament of the Federal Security Council’s final licensing decisions, earlier presentation of the Military Equipment Export Report plus an interim report) and the establishment of a dialogue forum on German arms export policy with interested groups (namely churches, trade unions, industry, non-governmental organisations), the Federal Government has laid the foundation for well-informed parliamentary and public discussion about arms exports.

worldwide for the protection and promotion of human rights as a re-elected member of the Human Rights Council for 2016 to 2018.

Human rights are the guiding principle of German development policy. In addition to the comprehensive entrenchment of a human rights approach in all sectors and focus areas, specific human rights projects are also promoted, which are usually implemented by stakeholders in civil society in the affected countries.

The implementation of UN Security Council Resolution 1325 on women, peace and security plus the follow-up resolutions is particularly important here. In order to support women in conflict and post-conflict situations, it is necessary that more women with appropriate expertise are involved in field missions, observation missions and peace negotiations.

The Federal Government is campaigning throughout the world for the implementation of the UN Convention on the Rights of the Child. The Federal Government is therefore continuing to make significant contributions to the promotion, protection and participation of this very large and vulnerable group. The implementation of the UN Convention on the Rights of the Child, i.e. protection from all forms of violence, neglect, child trafficking, sexual slavery and child marriage, participation in development measures and support for children and young people, is an important aim of German development policy.
To improve control over small arms exports, the Federal Government has adopted principles for the granting of licences to export to third countries (all states apart from EU member states, NATO countries and the equivalent countries Switzerland, Australia, New Zealand, and Japan). According to these principles, no licences are granted for exporting components and technology that could open up new production lines for small arms and munitions in third countries. In addition, licences to export small arms and corresponding munitions to third countries are granted according to the “new for old” principle, which says that the recipients must destroy the small arms they are withdrawing due to the new delivery in order to prevent their dissemination. In cases in which the newly procured weapons meet a plausible greater requirement and old weapons are therefore not destroyed, the recipients must bindingly agree to destroy the new weapons after their withdrawal (alternative principle “new, destruction on withdrawal”).

In addition, the pilot introduction of post-shipment verification in third countries was resolved in July 2015, i.e. when licences are granted in the future, governmental recipients of small arms such as pistols, revolvers and sniper rifles in third countries must already consent to a later check to ensure that the armaments have remained in the intended recipient country. An on-site check can then be performed after the export as to whether the small arms supplied are still in the recipient country with the end user indicated in the end-use certificate. This improves the end-use security for armaments exported from Germany. By introducing this tool, Germany is taking a leading role at European and international level along with only a few other countries.

4. Crime/weapons, including practical action to combat proliferation

The Federal Government is campaigning for greater international cooperation to combat organised crime (including environmental crime) all over the world. Germany actively supports the implementation of the Arms Trade Treaty and advocates effective end-use verification for German arms exports and particularly stringent standards for licences to export small arms to countries outside NATO, the EU and the group of NATO-equivalent countries (Switzerland, Australia, New Zealand, and Japan). To combat the illegal weapons trade and its negative consequences for the stability of entire regions, Germany is financing a large number of arms control projects in affected countries. To implement the UN Convention Against Corruption (UNCAC), partner countries in the German development cooperation are given targeted support regarding the use of international legal aid, especially for the return of illegally acquired assets to their countries of origin. Germany is also taking effective measures to prevent and prosecute money laundering and the financing of terrorism, and also supports developing and emerging countries in these areas.

III. Measures with Germany

1. Priorities of cooperation with partner countries in the development cooperation

The Federal Government takes the dialogue with fragile states as part of the “International Dialogue on Peacebuilding and Statebuilding” seriously and aligns its cooperation with these states to the peacebuilding and statebuilding goals defined in the “New Deal for Engagement in Fragile States”. All development cooperation with fragile states is conflict-sensitive, i.e. it aims to “do no harm”. The promotion of equality, including gender equality, and non-discrimination by strengthening the rights of women and men belonging to disadvantaged and persecuted sections of society remains one of the priorities of the Federal Government’s project funding in the field of human rights. Cooperation with partner countries on good governance and the rule of law is also being strengthened. Good governance is promoted in the partner countries in the dimensions of human rights, gender equality, democracy and political participation, freedom of opinion and access to information, combating corruption, the rule of law, administrative reform, decentralisation, good financial governance and transparency in the raw materials sector. As well as strengthening civil society, improving the efficiency of the state and the legal and institutional conditions for constructive relationships between state and society are of critical importance.

2. Building the African Peace and Security Architecture

Germany supports the build-up of the African Peace and Security Architecture (APSA) at continental and regional level. With complementary contributions from various policy areas, particularly the civil, but also the police and military elements of the African Standby Force are strengthened through organisational consulting and support for training programmes, conflict early warning systems are established, mediation capacities are promoted and institutional structures reinforced. Germany is thus contributing to the African Union and regional organisations’ attempt to take more responsibility for peace and security on the continent.

3. Promotion of civil society

Strengthening pluralism, imparting the values of a liberal-democratic constitution, promoting dialogue and understanding and giving young people prospects are goals promoted in the Eastern Partnership. Transformation partnerships that support societal efforts for democratic change in North Africa and the Middle East are also a particular priority in the promotion of civil-society engagement.
b) Relevant national sustainability indicators and objectives/measures

16.1. Criminal offences

Crime – Further increasing personal security

**Definition of the indicator**

The indicator shows the number of criminal offences reported to the police per 100,000 inhabitants.

**Target and intention of the indicator**

A safe neighbourhood in which the citizens of a country can live without fear of ruthlessness and crime is an essential prerequisite for sustainable development. Therefore, the number of recorded criminal offences per 100,000 inhabitants is to be reduced to less than 7,000 by 2030.

**Content and progress of the indicator**

The indicator covers all criminal offences recorded in the Police Crime Statistics. These are criminal offences reported to the police and fully processed by them, provided that they do not involve crimes against the state, traffic offences (with the exception of violations of Articles 315, 315b of the German Penal Code (StGB) and Article 22a of the Road Traffic Act (StVG)) or violations of state criminal laws (with the exception of the relevant regulations in the state privacy laws). Likewise, criminal offences committed outside the Federal Republic of Germany as well as offences that are not within the area of responsibility of the police (e.g. financial and tax offences) or are reported directly to the public prosecutor and are processed exclusively by him/her (e.g. offences relating to testimony) are excluded from the calculations, too.

The Police Crime Statistics publications are compiled annually based on the data available from the criminal investigation offices and the Federal Criminal Police Office. To calculate the criminal offences per 100,000 inhabitants, the (back-extrapolated) population figures based on the 2011 census are used for the entire time series. This enables chronological comparisons as of 1993, although this results in differences in the comparison to the published data of the Police Crime Statistics prior to 2013. Changes in the Police Crime Statistics do not, however, always reflect changes in reality, as the statistics cover only what is called the “bright field”, i.e. criminal offences that officially come to the knowledge of the police. Since statistical data on the “dark field” – the crimes that remain unknown to the police – does not exist, such crimes cannot be represented in the Police Crime Statistics. If, for example, the population changes their behaviour with respect to reporting criminal offences, or if the intensity with which the police pursue particular crimes changes, the boundary between the bright and dark fields can shift without necessarily any change to the amount of actual crime committed.

Between 1993 and 2015, the number of criminal offences decreased by a total of 6.7% to 7,797 per
100,000 inhabitants in 2015. This trend, however, has not been a continuous one. For instance, it increased intermittently from 2000 to 2004, before entering a slight decline up until 2010. The large number of people who entered Germany in 2015 as refugees and asylum-seekers is also reflected in the Police Crime Statistics. For instance, breaches of immigration law (e.g. illegal entry) soared by 157.5% in 2015 compared to 2014. These accounted for 6.4% of all criminal offences. If the sharp increase in criminal offences involving immigration law is removed, the total number of criminal offences registered by police in 2015 is roughly at the same level as in the previous years.

In 2015, the total number of criminal offences was 6.3 million. Looking at examples from various subcategories, 2.6% of the offences registered by the police involved burglaries in homes, 15.3% involved cases of fraud and 2.0% involved serious and grievous bodily harm. While the number of burglaries in homes fell by 26.4% between 1993 and 2015, cases of fraud climbed by 82.9% and cases of serious and grievous bodily harm rose by 45.1%. But focusing exclusively on developments over the last five years only, they deviate from the trend. Between 2010 and 2015, the number of burglaries in homes increased again by a total of 37.7%, whereas cases of fraud fell by 0.2%.

Cases of serious and grievous bodily harm also declined between 2010 and 2015 by a total of 10.9%.

The clear-up rate for all offences registered by the police in 2015 was 56.3%, and was therefore roughly at the previous year’s level. Significant differences were apparent here depending on the type of criminal offence. The clear-up rate for burglary in homes, for example, was only about 15.2%. By contrast, 76.4% of fraud offences and 82.3% of cases of serious and grievous bodily harm cases were cleared up. The comparatively low clear-up rate for burglaries in homes is related to a high rate of reporting combined with comparatively infrequent solid leads pointing to the perpetrators. This is in sharp contrast to the cases of fraud and bodily injury. These crimes have high clear-up rates because in most cases the identity of the suspect becomes known to the police at the time the crime is reported.

Federal Government activities

An individual’s sense of security is a significant benchmark for their quality of life. It is also an essential prerequisite for a properly functioning social system and social cohesion. The criminal offences indicator allows an overall assessment of the development of crime and thus a more precise look at the goal of increasing personal safety.

Previous measures

To combat burglaries in homes – in which “traveling criminal groups” are currently active – the Federal Government developed a new concept for fighting organised crime. It is also increasingly involved in international bodies to combat organised crime and has joined forces with France to bring an initiative to combat burglaries in homes to the EU. As well as to the constant work of the police and the justice system, the decline in cases of serious and grievous bodily harm in recent years is also attributable to numerous preventative projects by governmental and non-governmental agents.

Planned additional measures

The Federal Government is working on fighting and preventing crime with the same high priority and is continuously enhancing its existing instruments.

EU-wide information programmes on preventing break-ins are planned in order to better prevent burglary.

In November 2015, the KfW launched the “Preventing Crime with Anti-Burglary Protection” programme, for which EUR 10 million is available in each of the years 2015 and 2016. In the 2017 fiscal year, the amount will be topped up from EUR 10 million to EUR 50 million. These funds can be used to finance investments in burglar-proofing for buildings. The programme is aimed at both owners and renters.
16.2. Number of projects to secure, register and destroy small arms and light weapons carried out by Germany in affected regions of the world

**Peace and security – Practical action to combat proliferation, especially of small arms**

**Definition of the indicator**

The indicator shows the number of projects to secure, register and destroy small arms and light weapons carried out in Africa, Eastern Europe, Latin America and Asia with German financial support.

**Target and intention of the indicator**

There can be no sustainable development without peace and no peace without sustainable development – this is emphasised in the preamble to the 2030 Agenda for sustainable development. With the measures recorded by the indicator, Germany is making a contribution towards peacekeeping in a concrete subcategory. The set target is to have at least 15 projects to secure, register and destroy small arms and light weapons carried out by Germany each year.

**Content and progress of the indicator**

In Germany, the Federal Foreign Office is responsible for the realisation of projects to control small arms and light weapons. In addition to the commitment within the United Nations, the group of interested states and the European Union, Germany is also active in a bilateral way – e.g. in a project to strengthen the national small arms commission in Côte d'Ivoire. The bilateral projects are implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH or non-governmental organisations. However, participation in a project says nothing about its scope or success.

Based on the analysed priority needs and the interest expressed by regional organisations and partner countries, the projects are allocated to the above-mentioned regions. An area of focus worldwide is the Sahel Zone, where small arms controls are being improved by, among other things, the strengthening of regional organisations such as the African Union. Projects are implemented by non-governmental organisations. In the Balkan region, in particular, a policy of destroying surplus weapons and of securing official inventories in order to limit the proliferation of small arms is being pursued. Here, Germany cooperates primarily with the Organisation for Security and Cooperation in Europe and with the United Nations development program. In Latin America and Asia, individual projects with a view on regulating private security services and to the universal implementation of the Arms Trade Treaty are financed.

It is worth noting that the projects are not financed solely by the Federal Foreign Office. In some cases, the projects are financed using funds from third parties. Consequently, the indicator does not take into account the scope of German involvement in these projects. Furthermore, note...
that the indicator maps the total number of projects in the respective year, which can result in projects of several years’ duration being counted twice.

In the period between 2006 and 2015, the number of projects processed per year rose from 8 to

26. The target that Germany should be involved in at least 15 projects annually was already achieved in 2012. Following a decline in 2013, the number of projects in 2015 once again met the target of 15. In the longer-term view, the development of the indicator reveals a positive trend.

Federal Government activities

Complementing arms export control, the control of small arms, light weapons and their munitions is a particular priority in the Federal Government’s efforts in the field of conventional disarmament. The Federal Government is focussing in particular on developing countries and societies with a high level of violence. National control mechanisms in these countries are mostly underdeveloped. Both post-conflict stabilisation and the prevention of illegal arms proliferation are at the fore here as preventative security policies.

Previous measures

With specific projects, the Federal Government is campaigning both in the context of international organisations such as the UN, the OSCE, NATO and the EU and bilaterally for the improvement of small arms control. In 2015, 19 projects and trust funds were supported with over EUR 5 million. Regional focus areas for the project work in recent years, which included the destruction of surplus weapons and munitions as well as their secure storage and management, were Africa’s crisis regions, especially the Sahel, and the EU’s neighbours to the east.

Planned additional measures

In the future, with the targeted stabilisation of funding for practical arms control projects, the networking of the numerous stakeholders and activities is to be intensified. The Federal Government wants the geographically responsible regional organisations, including the African Union and the Economic Community of West African States (ECOWAS), to be even more closely involved here. The further expansion of capacity in the field of small arms control, including through regional and bilateral education projects and the deployment of advisors and, in individual cases, experts from the German armed forces, remains a key tool for cooperation. The UN Office for Disarmament Affairs is an important partner here.
16.3. Corruption Perceptions Index (CPI) in Germany and in partner countries in the German development cooperation

**Good governance – Combating corruption**

**Definition of indicators**

The indicators provide the Corruption Perceptions Index (CPI) from Transparency International for Germany (16.3.a) as well as the number of partner countries in the German development cooperation, whose CPI has improved compared with 2012 (16.3.b). The CPI measures how strongly corruption in the public sector is perceived in a country.

**Target and intention of the indicators**

A further improvement in the CPI for Germany is targeted for 2030. In addition, the CPI in the majority of partner countries involved in German development cooperation should also improve. The base year in each case is 2012.

**Content and progress of indicators**

The CPI is a composite indicator that is based on various expert as well as corporate surveys on the perception of corruption in the public sector. Depending on the particular survey, different understandings of corruption may serve as a basis and the sources for the calculation may change over time. The index includes countries for which at least three selected surveys are available. As such, the CPI is the most comprehensive overview study on perceived public sector corruption.

The Joint Research Centre of the European Commission refers in its analysis of the CPI to the fact that when the results are interpreted, the statistical significance of the change must also be examined. It emphasizes that even in the case of statistically significant differences, the results of this indicator should be interpreted with caution.

Compared to 2012, Germany improved its position from 79 points to 81 points in 2015 and is therefore ranked 10th along with the UK and Luxembourg. Though, compared with 2014, this change should not be viewed as statistically significant (at a significance level of 5%).

The Federal Statistical Office also gathers information on the topic of corruption as part of its satisfaction survey on official services. According to this survey, during their contact with public facilities 4.7% of the population had the impression in 2015 that public service employees were susceptible to corruption. In the corresponding survey of companies, 3.6% of companies had the impression that public service employees were open to corruption.

The Police Crime Statistics record all criminal matters that become known to the police. In 2015, 1,076 cases of accepting/granting an advantage as well as corruptibility and corruption were recorded in the public sector. Furthermore, the Police Crime Statistics also list cases of corruptibility and corruption in commercial practice as well as so-called concomitant offences of corruption such as fraud and acts of embezzlement, document fraud, anti-competitive agreements during tendering procedures, obstruction of justice, incorrect certification and breaches of official secrets acts.
With reference to German development cooperation, a total of 41 of the 82 partner countries evaluated by the CPI improved in 2015 compared with 2012. The number of partner countries developing in a positive direction has increased in the review period each year. However, only one partner country of German development cooperation reported a statistically significant improvement (at a significance level of 5%) in 2015 versus 2012. Compared to that, in 2014 it had been six partner countries that reported a significant improvement.

Federal Government activities

The Federal Government recognises the central role of good governance for sustainable development. In Germany, too, transparent and accountable institutions are also crucial for citizens’ trust in the state and for a good investment climate. In the development cooperation, it is essential for the development of the partner countries and not least for the correct use of German taxpayers’ money that the partner countries’ government structures have integrity. The legitimacy of government agents and fair access to resources prevent internal conflicts. The promotion of integrity in partner countries means active crisis prevention.

Success in these areas also goes hand in hand with strengthening domestic resource mobilisation in developing countries (Goal 17) and with the achievement of the other goals, which underscores the integrative character of all the goals and the key role of Goal 16.

Previous measures

With the ratification of the UN Convention against Corruption (UNCAC) in 2014, the passing of the Anti-Corruption Act (2015), the Act against Corruption in the Healthcare System (2016) and Germany’s admittance to the Extractive Industries Transparency Initiative (EITI) for more transparency in the global raw materials trade (2016), the Federal Government has made important progress in the field of integrity in recent years. In the development cooperation, Germany is promoting measures to combat corruption as a cross-cutting issue. Existing projects of the development cooperation focusing on good (financial) governance, anti-corruption, illegal financial flows and money laundering already recognise the global dimension of the identified challenges. In addition, German expertise and experience in preventing and combating corruption is sought after and provided by the Federal Government in many international bodies.

Planned additional measures

Germany will continue to promote the issue of anti-corruption and integrity on an international scale during its presidency of the G20 in 2017.

Germany’s planned participation in the Open Government Partnership (OGP) offers new potential for integrity, transparency and the rule of law in Germany, including in connection with innovative technological approaches. This includes the increased disclosure of administrative data (open data). As part of its participation and with the involvement of civil society, the Federal Government will continue working on strengthening integrity for the long term in all relevant areas of society, such as business, administration, sport and politics. Germany can thus build further on its position in the leading group of countries that are considered “clean” to “very clean” in the Corruption Perceptions Index of the non-governmental organisation Transparency International.

Problems such as cross-border tax evasion, offshore tax havens, illegal financial flows and associated phenomena such as organised crime and corruption make it clear that questions of integrity must be addressed globally and comprehensively. The Federal Government will increasingly translate this insight into coherent political approaches in line with the 2030 Agenda.
17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development

a) Basic content and political priorities from the point of view of the Federal Government

The 2030 Agenda is underpinned by a Global Partnership that transcends the old donor-recipient mentality and assigns responsibilities to non-governmental stakeholders as well. The Agenda’s goals can only be achieved through such a Global Partnership – in mutual respect, with shared values and the combined efforts of all stakeholders.

Global Partnership

The key principles of the new Global Partnership are:

- Universality of goals – all must act
  
  In contrast to the Millennium Development Goals, the goals of the 2030 Agenda apply to developing, emerging and industrialised countries and to all policy areas. The diverse national circumstances, capabilities and development levels must be taken into account, as must national policy approaches and priorities.

- Shared responsibility – suitability of the contributions made by each individual

  All states and stakeholders bear a shared responsibility for global well-being, notably for such global public goods that can be maintained only through joint action by the international community, e.g. biodiversity, climate protection, a fair global trade system, social justice, peace and security, and for structural conditions conducive to development. This is reflected in contributions commensurable to each state or stakeholder.

- Effectiveness, transparency and monitoring – mutual motivation

  The international community needs information about the progress made in implementing the 2030 Agenda. The commitments made by states, the measures they have taken and the effectiveness of their actions are tracked and reported. The exchange of experience and mutual learning processes are intensified in order to foster developmental and transformational efforts.

- Multi-stakeholder approach – all are part of the team

  National governments alone will not be able to handle the challenges facing the international community. Successful implementation of the 2030 Agenda therefore requires new forms of cooperation, involving civil society, business and science at the local, national and global levels.

Addis Ababa Action Agenda

The “Addis Ababa Action Agenda” adopted by the UN in July 2015 redefined the principles of global development financing. It is an integral component of the 2030 Agenda and particularly relevant to SDG 17. While affirming the national-level ownership of development processes, the Addis Ababa Action Agenda underscores the key role of private and public national financial flows and the complementary role of development cooperation and South-South cooperation.

Structure of the SDG

SDG 17 is divided into five areas with a total of 19 targets:

- **Finance:** The mobilisation of domestic revenue in developing countries takes top priority. This includes international support for the establishment of tax systems and administrations and the fight against capital outflow. Tax avoidance and evasion by multinational companies and illegal financial flows cause developing and emerging countries to suffer heavy losses, meaning there are no funds for sustainable development. Due to the cross-border nature of these illegal financial flows, coordination at national, regional and international levels is needed to combat them. Other important action areas are the improvement of institutional capacity and the attainment of long-term debt sustainability. Better access to financial services as a foundation for sustainable economic development is just as important to stress as the central significance of the private sector for tackling global challenges. Private-sector activities shall be brought into line with the goals for sustainable development, e.g. for climate and environmental protection, productive and decent employment and investments in sustainable infrastructure. Official development cooperation is to increasingly support the poorest countries. In particular, many developed countries are committed to spending 0.7% of their gross national income (GNI) on development assistance and providing 0.15% to 0.2% of GNI to the least-developed countries.

- **Technology:** Science, technology and innovation are recognised as key factors for sustainable development. In particular, environmentally
friendly technologies shall be promoted and their propagation in developing countries expanded. The technology facilitation mechanism shall allow international communication and thus better access for developing countries to knowledge in the field of science, technology and innovation. The agreed technology bank for least-developed countries is set to be functional by 2017.

**Increasing capacity:** Within the framework of North-South, South-South and triangular cooperation, capacity and competence building in developing countries shall be bolstered in order to support the national plans to implement the goals for sustainable development. The 2030 Agenda also makes provision in target 17.19 to support the establishment of statistical capacities in developing countries.

**Trade:** An open and fair system of trade shall be promoted under the aegis of the World Trade Organization. This shall go hand in hand with a marked increase in exports from developing countries under fair production conditions, especially the doubling of least-developed countries’ share in exports by 2020. Easier market access shall also be permanently secured for least-developed countries.

**Systemic issues:** From a systemic perspective, improved policy coherence and coordination is especially required as a condition for sustainable development, whereby the sovereignty of every country shall be respected. Development cooperation measures are more effective when national and international stakeholders systematically coordinate their policies and activities with developing and emerging countries. The Global Partnership shall be expanded, multi-stakeholder partnerships shall be supported as regards mobilisation and knowledge sharing and public, public-private and civil-society partnerships shall be promoted. By 2020, developing countries shall receive greater support for capacity building with the aim of collecting considerably more high-quality and reliable data. Finally, measurements of progress on sustainable development shall be developed that complement gross domestic project as a measure of economic performance.

**Federal Government activities**

1. **Financing global sustainable development**

   *In two packages for the period from 2014 to 2019, Germany has pledged a total of EUR 10.3 billion in additional funding for development cooperation. These funds bring Germany ever closer to attaining the target of deploying 0.7% of gross national income for development cooperation.*

   Promoting and harnessing the private sector for pro-development investments has long been an element of German development cooperation, as has the establishment of financial markets and systems. This involves creating incentives for private-sector investors through guarantees, structured funds, PPs and building and resourcing microfinance institutions and digital financial services, introducing insurance instruments, e.g. for climate risks, supporting the creation of conducive settings for the promotion of sustainable economic growth and the build-up of capacity, and fostering companies’ inclusive and green business models.

   The mobilisation of domestic revenue in developing countries is not least fostered by the new Addis Tax Initiative (ATI). By initiating the ATI (together with the Netherlands, the USA, Great Britain and others), Germany has sent a clear political signal for the strengthening of domestic revenue in partner countries. Germany will double its engagement for the mobilisation and effective use of domestic revenue by 2020.

   To close tax loopholes, Germany has committed as a G20/OECD member to implementing the G20/OECD Action Plan on Base Erosion and Profit Shifting (BEPS) by multinational enterprises and has agreed a concrete roadmap with the EU Member States. Germany has campaigned for developing countries to be involved in the development and implementation of BEPS and the close international collaboration between the OECD, G20 and developing and emerging countries is further intensified even beyond the BEPS project.

2. **State insolvency**

   *The Federal Government has participated constructively in recent years in the UN debates on a state insolvency mechanism. It is now advocating the broader inclusion of contractual wording in government bond issues that permits rapid performance of debt restructuring should this become necessary. It continues to support the work on this being done by the International Monetary Fund (IMF) and the Paris Club.*

3. **Trade policy**

   *The German Government advocates for a fair and open world trading system. So that developing countries can make use of the opportunities associated with trade liberalisation and to ensure that trade liberalisation contributes to sustainable development and the fight against poverty, trade liberalisation must do justice to the requirements of developing countries. To enhance the coherence of agricultural, environmental, trade and development policy, the Federal Government advocates for the dismantling of trade-distorting subsidies, e.g. payments to farmers linked to production volume, at the level of EU agricultural and trade policy***
and at the multilateral level. The successful conclusion of the first WTO Ministerial Conference (MC 10) in Africa (Nairobi – December 2015) led to significant results for developing countries, especially the least-developed countries, in the areas of agriculture and development. A particular success was the international agreement to end all export subsidies and discipline measures with an equivalent effect. Germany is also continues to advocate a pro-development conclusion to the Doha Development Round.

Within the scope of the Aid for Trade (AfT) initiative, Germany provides targeted support for capacity-building with regard to trade and investment in developing countries. Germany also supports the Global Alliance for Trade Facilitation, which seeks to mobilise and integrate the private sector for development goals and to implement the Bali Package.

4. Technology

Germany promotes partnerships that enhance the transfer of environmentally sound and pro-development technologies and social and environmental innovations to developing countries. The creation of incentives, adapted financing instruments and beneficial conditions are intended to promote access to technologies and innovation and their application in developing countries. Germany therefore supports the process to establish a technology facilitation mechanism and a technology bank for least-developed countries.

5. International reform processes

Germany addresses international structural issues in pursuit of the 2030 Agenda in international institutions such as the IMF and WTO and in the G20 and G7 groups of states. In its capacity as a member of the UN, a member state of the EU and OECD, and a major shareholder of the World Bank and regional development banks, Germany supports reform and strategy processes within these organisations in order that they are able to make the best possible contributions to the 2030 Agenda within the scope of their respective mandates and comparative strengths.

6. New version of the Sustainable Development Strategy for more policy coherence and partnerships

The new version of the Sustainable Development Strategy also contributes to further enhancing policy coherence for sustainable development within the Federal Government and aligning all policy areas to the SDGs. With a view to the call to form partnerships, including within civil society, efforts to involve society in the formulation and implementation of the new Sustainable Development Strategy will be stepped up (see Chapter B. II. 4 b).

7. Dialogue processes with civil society

Dialogue processes such as the BMZ and BMUB’s dialogue forum for the 2030 Agenda, the Charter for the Future “ONE WORLD – Our Responsibility” and the BMZ’s “FutureTour” help to communicate the goals of the 2030 Agenda to the broader public and make them a part of society’s narratives.
b) Relevant national sustainability indicators and objectives/measures

17.1. Share of expenditure for official development assistance in gross national income

Development cooperation – Supporting sustainable development

Definition of the indicator

The indicator comprises public expenditure for development cooperation (Official Development Assistance or ODA) as a percentage of gross national income (GNI).

Target and intention of the indicator

Through their development cooperation, industrialised nations contribute to reducing poverty worldwide, securing peace, achieving democracy, shaping globalisation equitably and protecting the environment. In order to live up to this responsibility, the Federal Government aims to achieve the target originally set for 2015 to increase the share of public development expenditure out of gross national income to 0.7 % by 2030.

Content and progress of the indicator

The data basis for the indicator is the statistics on the payments of the German development cooperation, which are compiled by the Federal Statistical Office on behalf of the Federal Ministry for Economic Cooperation and Development.

The eligibility of a payment as ODA is defined by the relevant guidelines issued by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD). ODA mainly includes expenditure for financial and technical cooperation with developing and emerging countries, humanitarian aid as well as contributions for development cooperation to multilateral institutions such as the United Nations, the European Union (EU), the World Bank or regional development banks. Furthermore, expenditure for specific peace missions, waivers of debt as well as costs for specific development assistance provided in the donor country, such as the cost of studies for students from developing and emerging countries or expenditure for development-related research, can also be counted as ODA. In 2015, the calculation basis of the German ODA was adjusted to take greater account of the costs of housing, care and education of refugees. A group of independent experts is currently working for the DAC to suggest ways of making it easier to compare the methods used to record expenditure for refugees, as far as these expenditures are ODA-compatible.

The OECD and the DAC also define the list of ODA-compatible developing and emerging countries. This includes the least developed countries (LDCs) on the one hand as well as other countries with low and medium GNI per capita. Members of the G7 and Russia, the EU as well as EU accession candidates with a fixed accession date are excluded. The list is updated every three years. Changes in the indicator can also result from the fact that individual or several countries are added to or removed from the list.
In 2014, the share of public development expenditure of German GNI was 0.42 %. According to preliminary values, it rose to 0.52 % in 2015. Net ODA payments in 2015 were around EUR 16.0 billion (preliminary value), which marks an increase of 29.5 % year on year (EUR 12.5 billion).

In an international comparison, Germany was the third largest donor of ODA funds in absolute terms in 2014 after the USA and the UK. With reference to GNI, the rate of 0.42 % achieved by Germany in 2014 is precisely the average value of EU members of the OECD Development Assistance Committee. Viewed in relative terms, Germany as the tenth largest donor therefore only has a middle-ranking position. The international goal of 0.7 % was achieved in 2014 by Sweden, Luxembourg, Norway, Denmark and the UK. Corresponding data on donor comparisons for 2015 are not yet available.

In addition to official development cooperation, private organisations such as churches, foundations and associations also make contributions. This private development cooperation, which does not qualify as ODA, amounted to EUR 1.24 billion in 2015, equating to a share of 0.04 % of gross national income. Private direct investment in developing and emerging countries totalled EUR 15.0 billion in 2015 (preliminary value).

Federal Government activities

Only a strong Global Partnership for sustainable development can reduce poverty and inequality worldwide, make economic globalisation fair and protect the environment. The Federal Government is therefore committed to creating the conditions for sustainable development both in Germany and in its partner countries. Official development assistance (ODA) will therefore be geared substantially to the goals formulated in the Agenda. To encourage greater ownership of development, official development assistance according to the 2030 Agenda shall also be used in particular to support countries in the mobilisation of their own income and to catalyse private resources.

Previous measures

As part of the Council conclusions in May 2015, the EU renewed its commitment to spend 0.7% of its gross national income (GNI) on ODA. It also undertook collectively to achieve an ODA ratio of 0.15% of GNI for least-developed countries (LDCs) within a short time frame and an ODA ratio of 0.20% of GNI for LDCs within the time frame of the 2030 Agenda. This commitment was repeated in the Addis Ababa Action Agenda and the 2030 Agenda. In absolute terms, Germany has already been the world’s third largest ODA donor for years, behind the USA and Great Britain.

Planned additional measures

The German ODA payments are following a steady upward trend towards this relative target figure, which Norway, Luxembourg, Sweden, Denmark and Great Britain have already exceeded. As well as increasing this ratio, the Federal Government has also committed itself to using innovative financing instruments. For example, revenues derived from public sales of emissions certificates are used to finance development policy measures. To complement official contributions, further non-governmental stakeholders are to be given a greater role in the implementation of the 2030 Agenda in the interests of the Global Partnership.
17.2. Number of students and researchers from developing countries and LDCs per year (semester)

Knowledge transfer, especially in technical areas – Sharing knowledge internationally

Definition of the indicator

The indicator records the number of students and researchers from developing and emerging countries per year or semester. Here, the number of students and researchers from the least developed countries (LDCs) is listed separately.

Target and intention of the indicator

Knowledge is a key driver of sustainable development not only at national level but also in terms of the global benchmark. The strengthening of the international exchange of knowledge by Germany is an important measure in this context. For this reason, the target of the Federal Government is to increase the total number of students and researchers from developing and emerging countries by 10% from 2015 until 2020 and to stabilise the number at the same level thereafter.

Content and progress of the indicator

The data basis of the indicator is both, student statistics as well as statistics for university personnel conducted by the Federal Statistical Office. Both are complete surveys based on the administrative data at the institutions of higher education. The indicator includes the students in the winter semester of each year. Conversely, the researchers are recorded on the reporting date of 1st of December. Researchers in this context are understood to be full-time and part-time scientific personnel at German institutions of higher education (excluding undergraduate assistants). PhD candidates who are enrolled as students at an institution of higher education and who are also working as scientific personnel can lead to duplicate counting in the indicator.

The total number of all students and researchers from developing and emerging countries at German institutions of higher education in 2015 was 215,258. With 93.0%, students by far accounted for the largest share of the value of the indicator.

In the winter semester of 2015/16, 200,149 students from developing and emerging countries were enrolled in German institutions of higher education. This corresponds to 7.3% of all enrollees. The number of students from developing and emerging countries has increased steadily since 2005 (126,672 students) – the only decline recorded was during the crisis year of 2007. The increase in the winter semester of 2015/16, compared to the previous year (186,012 students in the winter semester of 2014/15), was around 7.6%. In the winter semester of 2015/16, a total of 9,746 students came from LDCs, thus 5.4% more than in the previous year.

Of the 200,149 students from developing and emerging countries who were enrolled at German institutions of higher education in the winter semester of
2015/16, 36,530 came from Turkey, 34,643 from China and 13,740 of the students came from India. In total, 43.8% of these were female students. Whereas the European developing and emerging countries at 48.7% send roughly equal numbers of women and men to study in Germany, only a quarter of the students from Oceania are women (25.2%). The proportion of women among students from LDCs was also roughly one quarter (24.2%).

In 2015, 15,109 researchers from developing and emerging countries were part of the scientific personnel at German institutions of higher education. They accounted for 3.9% of all scientific personnel at German institutions of higher education. Compared to the previous year, their numbers have increased by 5.4%, and have more than doubled since 2005. A total of 517 researchers came from LDCs in 2015 (0.1% of all scientific personnel). This compares with a figure of 500 researchers in the previous year. This matches an increase of 3.4%.

Overall, the number of students and researchers from developing and emerging countries has been continuously increasing since 2007. If this trend were continued as it has to date, the target for 2020 could be achieved.

Federal Government activities

Innovation and technology are increasingly being recognised as drivers of sustainable development. They therefore also played a central role at the Third International Conference on Financing for Development in Addis Ababa in July 2015 and are prominently positioned in the 2030 Agenda.

As well as improving developing countries’ access to technology and promoting capacity for innovation, these countries’ absorption capacity shall be enhanced so they can make effective use of the technology and deploy it for their own development goals. International knowledge sharing, especially in technical areas, plays a central role here. Germany wants to use its multifaceted skills and experience to help its partner companies sustainably strengthen their science and innovation and technology systems. Germany is therefore campaigning for greater international knowledge sharing and wants to create more opportunities to allow students and researchers, especially from LDCs, to study or conduct research in Germany. The focus here is on technical subjects.

Previous measures

In addition to various vocational and university education projects, Germany has established university partnership and scholarship programmes, e.g. via the German Academic Exchange Service (DAAD) and the Alexander von Humboldt Foundation (AvH). These promote access to and the quality of university education in partner countries and exchange among students and researchers across national borders.

Furthermore, Germany is already supporting developing countries with regard to innovation and technology in various initiatives. Some of these promote the development and use of climate-friendly technologies. Others, such as the “Green innovation centres for the agriculture and food sector”, aim to increase resource efficiency through the use of better technology. Further projects in the nexus of science, technology and innovation encourage the increase of capacity in the field of intellectual property rights and the improvement of access to technology, especially for the manufacture of essential medicines in partner countries. In turn, other initiatives aim to implement findings from local and international research in the manufacturing sector, especially in small and medium-sized enterprises. The successful implementation of all of these initiatives needs the partner countries to be better able to absorb new technologies.

Planned additional measures

Germany will reinforce and expand the ongoing projects and innovations in order to support innovation potential in partner countries and promote the development and use of new technologies, especially in technical areas. The Federal-Government-funded DAAD and AvH programmes will contribute to the achievement of the natural goal measured with this indicator.
17.3. Share of imports from LDCs in total imports to Germany

Opening markets – Improving trade opportunities for developing countries

**Definition of the indicator**

The indicator specifies the share of imports from the least developed countries (LDCs) out of all imports to Germany, measured in EUR.

**Target and intention of the indicator**

To promote global sustainable development, it is important to improve trading opportunities of developing and emerging countries. Developing and emerging countries need an open and fair trading system that will allow them to offer raw materials as well as processed products on the world market. The Federal Government has therefore set itself the target of doubling the share of imports from LDCs between the years 2014 and 2030.

**Content and progress of the indicator**

Information about imports to Germany is compiled from the foreign trade statistics of the Federal Statistical Office. In this case, the type of the imported goods is also recorded in detail in addition to their country of origin, their value and weight.

In addition to the total import figures, imports of processed goods are shown separately. These include all goods not classified as “raw materials” in the classification according to product groups of the food and industrial economy (EGW). Accordingly, goods extracted from nature that undergo no or virtually no processing, which function as source materials for the creation of industrial goods, such as crude oil, ores, logs or vegetable textile fibres, are excluded. Conversely, cereals, fruit, live animals, meat and milk are classified as processed products.

The various countries are classified as LDCs based on the list of recipients of official development assistance from the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD). The classifications valid in the respective year are used. If the status of a country changes, this will impact the indicator even if the value of imports from this country remains unchanged. However, changes in the status of countries are scarcely relevant to the development of the indicator in the period shown.

With regard to the value and development of the indicator, various factors can play a role. These can include technology transfers or changes in customs duties, but also the political stability of a country or the infrastructure. The focus on processed products here should address, at least to some extent, the question as to whether Germany mainly uses the LDCs as sources of basic materials for industrially created products or whether the LDCs themselves are able to gain benefits from the value added by participating in the production process. However, this is only partially
represented by the indicator, as exporting processed products from an LDC does not allow any conclusions on the extent to which an LDC was involved in the value added of these exported goods. Conversely, LDCs can certainly also participate in the value added chain of goods that Germany ultimately imports from a country that is not actually an LDC.

Due to reimports the chance of duplicate counting in the numerator and denominator of the indicator cannot be excluded. The fact that the imports from LDCs are viewed in relation to all German imports must also be taken into account. This means that the value of the indicator depends not only on the absolute quantity of imports from LDCs, but also on the value of all imports.

The share of imports from LDCs out of all imports to Germany in 2014 was 0.71 % or EUR 6.5 billion. This is an increase of almost two thirds compared with 2002, when the share was just 0.44 %. However, the positive development has been observed since 2008. The share of imports of processed products from LDCs rose even more sharply between 2002 and 2014 (+85 %). It has now reached 0.66 % of total imports to Germany (2002: 0.36 %), which equates to a value of around EUR 6.0 billion.

Closer analysis of the various countries of origin reveals that almost three quarters of imports from LDCs in 2014 came from Bangladesh (58.63 %) or Cambodia (14.74 %). This can be primarily attributed to the production of clothing there.

Considering not only the LDCs, but all developing and emerging countries, their share of total imports to Germany in 2014 was 20.39 %, and the share of processed products from total imports was 17.72 % (from 13.67 % and 12.17 % in 2002). Consequently, the imports from LDCs both in terms of all goods as well as processed goods accounted for only a very small share of imports from developing and emerging countries. As is shown above, their share of total imports has increased more strongly over time. China plays the most important role among all developing countries. The share of imports from this country alone relative to all German imports was 8.77 %, and 8.73 % for processed goods.

Federal Government activities

For their economic and social development, developing countries are dependent upon an open and fair system of trade. In addition, brisk commercial exchange helps to lower the risk of conflict between the trading states. However, developing countries with low incomes and least developed countries (LDCs) in particular are still faced with major difficulties for their integration into global value chains and cannot exploit the opportunities that international trade can offer. The Federal Government is therefore working to encourage exports from developing countries, especially LDCs, in fulfilment of an obligation that is also ascribed great importance by the Addis Ababa Action Agenda. The Federal Government is focusing in particular on imports of processed products to Germany.

While the indicator previously charted German imports from all developing countries, it now focuses on the share of imports from LDCs. This revision accounts for the fact that a major portion of the import growth of recent years is attributable to the sharp rise in imports from China and other emerging countries, which are also classified as developing countries. However, the indicator is supposed to measure the access to the global market of those countries with the greatest difficulties in this regard. Imports of processed products are particularly worthy of support and must be looked at separately. A focus on the share of imports from LDCs also prioritises boosting LDCs’ competitiveness. This is crucial for them using the potential of international trade for their development. The indicator is linked to SDG 17.11 of the 2030 Agenda, which calls for the least-developed countries’ share of global exports to be doubled.

Previous measures

Germany is involved in the Aid for Trade initiative, which was created in 2005 and aims to increase developing countries’ trading capacity, as one of the largest bilateral donors. The initiative aims not only to improve developing countries’ opportunities on global markets but also to help developing countries meet social, labour and environmental standards. It therefore contributes not only to a fair, but also to a sustainable, system of trade. As an EU member, Germany also grants all LDCs duty- and quota-free market access for all product groups besides weapons, munitions and accessories as part of the “Everything but Arms” (EBA) initiative.

Planned additional measures

Germany can help improve the integration of LDCs into the global system of trade, especially by supporting them in a more targeted manner
within the framework of “Aid for Trade”. In particular, Germany’s “Aid for Trade” strategy will place greater emphasis on the establishment of production capacity in LDCs, especially as regards processed products, so that these countries can participate more effectively and sustainably in international trade.
III. Next steps

Just as sustainability policy is an ongoing task, the sustainable development strategy must be continuously reviewed and updated in collaboration with social stakeholders.

The start of a process – not the end

The Federal Government will continuously update the indicators and goals. The next step is already scheduled for 2018, when the goals set are to be reviewed and decisions are to be made about adding new indicators and adapting the management rules. The review will account for any outcomes of discussions in the German Bundestag and Bundesrat regarding the adopted Strategy – which will be formally delivered once the resolution is passed.

**Timetable.**

- **2017**  
  Review of an update to the management rules by the Sustainable Development Council

- **2018**  
  Federal Statistical Office’s Indicator Report
  Federal Government decision about adding new indicators/amending goals/changing management rules

- **2020**  
  Next progress report

- **2021**  
  Germany reports at the next High-Level Political Forum of the United Nations

**Statement from the Dialogue on Sustainability**

“We are actually at the beginning of the discussion about sustainable development, or are just now taking the step of making it tangible and the subject of comprehensive and regular reports. We must not now make the mistake of standing still with the Sustainable Development Strategy. Instead, it must be turned into a constant process and widely discussed in the public eye. The target must be set much higher in order to achieve a decent result.”

**E-mail to the Dialogue on Sustainability**

**Review of new indicators**

Not all important subject areas on which national goals could reasonably be included in the German Sustainable Development Strategy currently already have suitable indicators. For this reason, the development of new indicators and the definition of targets for 2030 are currently being reviewed for the following areas central to sustainability policy:

- **Avoidable food losses in Germany**
  Globally and in Germany, the waste or loss of food is a serious problem. From a global perspective, such losses reduce the availability of foodstuffs – with stark effects for the use of resources, including in developing countries.

  Not enough data is available yet, but a rapid improvement in data availability/exi is very important.

- **Germany’s contribution to ending hunger and malnutrition worldwide and realising the right to food**
  Ending hunger and malnutrition worldwide by 2030 is central to the 2030 Agenda. The Federal Government is committed to this goal in particular and supports a human-rights-based approach to implementing the Voluntary Guidelines on the Right to Food. It is examining how to express the German contribution to the international achievement of the target realisation of the right to food in the form of an indicator.

- **Consideration of sustainability criteria in public procurement**
  The public sector’s procurement volume is estimated at around EUR 260–400 billion a year. By reinforcing sustainability criteria in public procurement, the state is not only fulfilling its function as a role model, but can also act as an important lever to increase the supply of sustainable products. As the Länder also emphasise in their contribution (Chapter D III.), opportunities for the strategic management of sustainable procurement are currently unsatisfactory with regard to the data situation. There is still no data on the consideration of sustainability criteria in general in the field of public procurement (including the Länder and local authorities). Therefore, it is soon to be examined with the involvement of the Alliance for Sustainable Procurement to what extent at least one indicator regarding sustainable procurement with a focus on agencies and institutions of the federal administration can be integrated into the Sustainable Development strategy.
• **Education for sustainable development**

Sustainability becomes tangible when it affects individuals, when it is implemented in daily decisions: What shall I eat? What shall I buy? How shall I travel? What effects will my actions have on other countries? The necessary know-how is more than just knowledge, because it is about finding innovative ways to develop solutions independently and apply new methods. Education for sustainable development, as explicitly called for in target 4.7, aims to enable people to recognise and thus solve problems of unsustainable development.

This task, which cuts across issues and institutions, is currently lacking a measuring instrument. In order to make target 4.7 measurable, a suitable indicator set will be developed soon that accounts for the global indicator for SDG target 4.7 developed on behalf of the United Nations Statistical Commission.

• **Soil protection**

Soil is a non-renewable and limited resource. It is therefore necessary to sustainably safeguard its functions.

Soils provide diverse ecosystem services. Besides their production function, they also have filtering, buffering, regulating and other functions. These services are being substantially restricted in particular by the loss of natural soil as a result of the expansion of built-up areas and transport infrastructure. Furthermore, the functions of soil are influenced by the type of use and form of management. Unsustainable soil management has negative effects on soil fertility, food production and the climate. Important criteria here are the humus content and carbon sequestration in the soil. Damage to soil also reduces its ability to provide ecosystem services, including its role as a source of biodiversity, so a new indicator is being developed to observe soil quality.

• **Effect of research investments**

The National Sustainable Development Strategy’s existing innovation indicator measures investments in research and development. In the future, it shall also be able to make assertions regarding the effect of research investments.
Chapter D.
Sustainable Development
– All are Partners

I. Sustainability in the German Bundestag
– Contribution of the Parliamentary Advisory Council on Sustainable Development

Resolution of 27 April 2016

For over twelve years, sustainable development has had a permanent place in the German Bundestag. The Parliamentary Advisory Council on Sustainable Development (PBnE) works to ensure that German policies consistently pursue the goal of sustainable development. This guiding principle requires long-term political responsibility and is therefore also reflected in its mode of operation. For example, the Advisory Council largely takes its decisions in consensus with all parliamentary groups in the German Bundestag. This often results in extensive and complicated coordination processes, but its decisions therefore stand the test of time and are largely supported by the entire Bundestag.

The PBnE sees the adoption of the pact on the world’s future, the “2030 Agenda for Sustainable Development”, as an opportunity to realign German sustainable development policy and architecture. It regularly makes recommendations to the Federal Government or takes a position with discussion papers. At the same time, the PBnE uses the stimulus provided by the global “Sustainable Development Goals” (SDGs) for political work in the parliamentary groups, committees and plenary debates in the German Bundestag. The Advisory Council thus supports the implementation of the SFGs in Germany, for Germany and by Germany in the rest of the world.

In response to the increasing significance of sustainability in the German Bundestag, the PBnE should be reinforced institutionally. Its aim is to be enshrined in the German Bundestag’s Rules of Procedure as a permanent body.

1. Sustainable development policy: goals and structure

The Sustainable Development Strategy is a strategy for the future that must be accounted for and implemented as a joint effort. The PBnE is therefore working towards the general principle of sustainability to be more firmly anchored institutionally and realised in political practice. Sustainability is recognised as the objective of political action by all the political parties. However, the principle of sustainable development must also not be abandoned in the day-to-day reality of politics because of short-term considerations. As the guiding principle of German politics, sustainability must be consistently applied in its ecological, economic and social dimensions.

National structures

With the State Secretaries’ Committee for Sustainable Development, an independent department for sustainable development at the Federal Chancellery, the PBnE and the Sustainable Development Council, the institutions of sustainability are well positioned at federal level for an ambitious implementation of the SDGs to succeed. It will be crucial to further strengthen and design the sustainable development architecture such that the cross-cutting principle of sustainability is translated into coherent, shared policy both within and between the ministries.

Cooperation between the Federal Government and the Länder will also play a crucial role in this implementation. Here, the new “Regional Hubs for Sustainability Strategies” offer an opportunity to strengthen collaboration between the Federal Government, the Länder and civil society.

Europe

The PBnE supports the Federal Government’s efforts to revitalise the European Sustainable Development Strategy. It explained this in detail in

The PBNÈ believes that the European Sustainable Development Strategy must be continued despite the existence of the “Europe 2020” strategy. The strategy must be updated in line with the global Sustainable Development Goals (SDGs). Although “Europe 2020” also considers sustainability aspects, it is committed less to sustainable development in all policy areas and more to the goal of creating growth. At its heart, “Europe 2020” is a strategy for economic development. The European Sustainable Development Strategy goes far beyond the goals of “Europe 2020”.

The PBNÈ welcomes the positive signal sent by the appointment of Director-General Karl Falkenberg as Senior Adviser for Sustainable Development at the European Political Strategy Centre. It would be make sense to further support the issue within the Commission organisationally and with personnel. In addition, the establishment of a mirrored Advisory Council at the level of the EU Parliament should be considered.

2. **Position papers and resolutions on specific topics**

The Advisory Council deals with all dimensions of sustainability, of which only a small selection can be shown here. All position papers, resolutions and briefings of the Parliamentary Advisory Council on Sustainable Development can be accessed online at: http://www.bundestag.de/bundestag/gremien18/nachhaltigkeit/beschluesse

**Sustainable business: ensuring opportunities in life**

In the long term, prosperity and quality of life for all can be promoted only if we all consistently align our day-to-day activities and business with the principle of sustainability. Sustainable development that allows social improvement and economic progress within the planetary boundaries ensures opportunities in life for current and future generations. This requires prosperity and quality of life to be decoupled from environmental consumption, and the latter to be reduced absolutely.

A social and ecological market economy offers a good framework for harmonising the economic, ecological and social dimensions of sustainable development. For this purpose, there must be serious discussion of how so-called external costs, arising for example from the extraction of fossil fuels and raw materials, or potential environmental impacts can be “priced in” globally and socially compatibly. Sustainable policy must face up to this important organisational task.

**Bundestag transport service: sustainable mobility trailblazer**

Prompted by the reallocation of the German Bundestag’s transport service, the PBNÈ is working for a consistent implementation of sustainable mobility. The Bundestag must act as a trailblazer here. The members of the PBNÈ are demanding implementation with ambitious climate targets guided by the EU’s applicable CO_2_ targets. According to the current EU Regulation, cars’ CO_2 emissions should be reduced to 95 g per kilometre by 2020. This figure should at least be prescribed as a fleet average in order to lay down the marker for sustainable development.

In addition, at least 20% of all vehicles should be equipped with entirely electric motors. In order to ensure an appropriate selection of vehicles, the vehicles of the “upper mid-size category” currently used should be supplemented by the “mid-size category”. The same standards must also be set for the acquisition of new vehicles for the Federal Government. This will ensure that the most efficient technology is available.

**Budgetary and subsidy policy: strengthening sustainability**

A state requires a sound budget in order to take action. The PBNÈ therefore welcomes of the anchoring of the sustainability principle in the Federal Government’s subsidy-policy guidelines.

Expanding these guidelines to include the sustainability dimension is an important step in the right direction. The sustainability impact assessment should be carried out by an independent institution, as many subsidies are still unsustainable. The PBNÈ is calling for the elimination of contradictory policy measures. Sustainable subsidy policy must aim to use public money consistently to promote sustainable economic development that is therefore fit for the future.

The PBNÈ welcomes the Federal Government’s efforts to accelerate the consolidation of public budgets. However, sustainable budgetary policy is about even more than this. In particular, it
strengthens public spending important for economic, ecological and social, and hence sustainable, development of the economy and society. The public sector must take a leading role here and promote sustainable and innovative procurement.

3. **Sustainability impact assessment as part of the regulatory impact assessment**

The obligatory sustainability impact assessment that has been enshrined in the Joint Rules of Procedure of the Federal Ministries since the beginning of the 17th legislative period is a tool for keeping the goal of intergenerationally equitable, sustainable policies in mind throughout all stages of policy formation. The sustainability impact assessment is intended to ensure that the long-term impact of draft bills and regulations is more transparent, and potentially conflicting targets and alternatives are visible in order to facilitate prioritisation. The PBnE examines the sustainability impact assessments compiled by the ministries and, where necessary, calls for corrections and additions at the respective ministries.

The issue of updating the sustainability impact assessment has its own devoted reporting group, which communicates with the ministries about potential improvements to the regulatory impact assessment and examines and develops concepts for reviewing the content of central sustainable development policies and strategies.
II. Sustainability as a Social Process – Contribution of the German Sustainable Development Council

The new

We are now standing where no generation before us has stood. Our ability to cause harm to nature has never been greater. The resources necessary for all our lives have never been so precariously dependent on humanity’s influence on the climate. Financial crises have never been able to economically derail so many people as they do today. Worlds of digital data have never before caused us to guess at the singularity of man and machine. We have never had more reason to speak of the Anthropocene epoch.

But we have also never looked harder for ways to be sustainable. Prosperity and a good life have never been more within everyone’s grasp as they are today. Never before have such catalysing concepts as universal sustainable development goals, decarbonisation and “do no harm” in land use found their way into political commitments at the highest level.

The question is what we will make out of the coincidence of risk and opportunity. International diplomacy showed the way in Addis Ababa, Paris and New York in 2015. Germany, too, pledged for itself and multilaterally with all the others to make an ambitious and substantial contribution to sustainable development and climate production. The universality of the issue brings a new quality; global and German thinking are coming into direct accord. Consequently, the political conception of the Sustainable Development Strategy must be reorganised and reshaped. For this purpose, we have recommended approaches and reforms to the Federal Government in an early and extensive analysis. Above all, the German sustainable development goals should be structured in line with the global ones and follow the triple approach (measures within Germany, positive impact on the world by domestic measures and with German assistance in partner countries).

This must now be converted from paper to practice, from a good concept to a creative force. Competing goals arise here. This does not speak against, but for, sustainable development strategies. Whether in government, local authorities or businesses, they must be coordinated and managed in a learning manner. This applies – at the appropriate level – to all acting levels of the Federal Republic. Politically, it is about the management of public things; individually, it is about daily decision. Everyone decides. Everyone is part of a generation that bears responsibility for its future and all life on earth by respecting ecological limitations. It is important to use social and financial resources respectfully and fairly to avoid burdens and risks and increase opportunities and degrees of freedom in the global context. Insofar as loads must be unburdened onto the future, these should be minimised pre-emptively and subsequent solutions sought by way of innovation and better approaches. This must become the basic principle of sustainability.

The force

There has been a Sustainable Development Strategy in Germany since 2002. It is hardly known among the general public. This is a political shortcoming that must be taken seriously – especially as sustainable development strategies have long proven their usefulness and innovative force in interested circles and among a specialist audience.

On the text:

We do not bring up any previously unimplemented demands or criticisms here – we will use more effective opportunities for that. Neither is our contribution a simple admonition or encouragement – the same applies. Instead, we attempt to express what concerns us as people and in the now fifteen-year history of the Sustainable Development Council.

Thank you for this opportunity.

This is demonstrated by our dialogues with experts and target groups such as the one hundred youngest local politicians, universities and scientists from social and ecological research projects, but above all with businesses and branches of industry.

Also, the basic initiatives have started a positive trend. Every year, we distinguish the tip of a large iceberg as Workshop N projects and document their initiatives. They underline the fact that sustainability has become a part of the reality of life
to which the creative political culture is directing its attention.

**A selection of the latest SDC projects**

* Sustainability Code
* Lord Mayor Dialogue on “Sustainable Cities”
* German Sustainability Action Days
* Workshop N Award
* Universities and Sustainability Dialogue
* Vision 2050 Dialogue
* “Generation Carlowitz” Dialogue
* 100 Youngest Local Politicians Dialogue
* The Sustainable Shopping Basket (reissue, app, Turkish-language version)
* RENN, Regional Hubs for Sustainability Strategies
* ‘BodenWertSchätzen’ competition with the German Federal Environmental Foundation
* Support of the German Sustainability Award

It is an encouraging response when increasing numbers of people in businesses, local authorities and science all take a sustainable approach at the same time. There are certainly not as many as needed or even as possible, but their involvement in the German Sustainability Award, for example, shows that they can no longer be overlooked.

Overall, there is a great deal of room for improvement. This is why we are establishing regional hubs for sustainable development strategies. We are campaigning for the establishment of sustainable development strategies in local authorities, businesses and in science, and encouraging industries and non-governmental organisations to adopt additional and more ambitious sustainability standards for value chains with regard to coffee, textiles, palm oil, cocoa, soya, biomass, etc. We support new thinking on preventing food waste, on sustainable recycling management and sustainable corporate governance, and on sustainability in general.

The aim of sustainable cities and settlements is a key condition for committed climate and resource protection and will combine them with democratic public services available to all. Over 30 Lord Mayors participating in the “Sustainable Cities” dialogue have committed to this.

We have been conducting the “Sustainable Shopping Basket” project since 2001, recently also in Turkish. The clear decision-making guide to product labelling speaks to us all as consumers. We are updating it continuously. This shows policymakers that the measurement of sustainable consumption using indicators is possible and feasible.

The Sustainable Development Council has successfully established the Sustainability Code, which offers a great opportunity to weave sustainable business into the market. It enjoys a high reputation as a novel and practical transparency initiative and has many renowned adopters in business and politics. For all the success, the main task has not yet been addressed: sustainability is still far from becoming a normal part of decision-making and operating. In the future, financial transactions should be based on the sustainability profiles of customers and contractors, lenders and investors. This would reduce risks and increase opportunities for a sustainable economy.

15 years of SDC

The review: A personal and always political look over 15 years


The timeline: The interactive timeline shows political impetus, effective projects and unusual dialogue formats

http://www.nachhaltigkeitsrat.de/15jahre/chronik/

After 15 years

The Sustainable Development Council has been around for 15 years this year. This is cause to be amazed and impatient. The concept of sustainability has become established in society. This may amaze those who insisted 15 years ago that we were backing a buzzword and were little more than an alibi for governmental inaction. Environmentalists feared that their concerns would be short-changed in the reconciliation of interests with social and economic goals. Practical action belied these reservations and prejudices. Today, the sustainability debate touches on concrete goals, planetary boundaries, the Anthropocene and the global sustainable development agenda as a matter of course.

Back then, we were some of the first people to try to bring quantitative targets and indicators
into the policy-making process. It resisted with fundamental reservations. Today, the principle is recognised and is a more or less accepted policy-making format even at the global level. More and more people are aware of sustainability and are guided by it in daily life and when shopping, or at least try to be.

But is sustainability really the cross-party consensus everyone is talking about? And is it already an established social consensus? What will be its involvement in the formation of the Federal Government to be elected in 2017? Will it drive innovation and reform, or will it be administrated away? Will sustainability really be given the constitutional status it deserves as a design principle of the future? Will we be able to build on our institutional beginnings?

Right now, the political impact of the concept is at risk of flagging. Right now, when sustainability and climate protection must be pushed forward globally, the political momentum is posing us a conundrum. What does it mean politically if, although many people voluntarily eschew plastic bags for their shopping, every book is sold in its own plastic wrapper, and packaged food is preferred to unpackaged? If fear of the risk of poverty has a higher political weight than the fight against actual poverty? If the energy transition can rely on broad public support, but even the first steps for transforming other important areas have not been taken?

Especially on the back of the relative successes, neither satisfaction nor patient deference is advisable. It is now imperative to look closely at what is and to think creatively about what may and shall come. In our Republic, every consensus on values has the political effect that it brings together both the despondent and afraid and the creative and brave. The reflexes of resistance and conservatism meet the will to change and the necessity of structural impetus, such as in car manufacturing and coal-based power generation.

In sustainable development, a successful increase in distributive justice should be achieved. But it must be more important to us to tackle the roots of crisis, discontent and despondency in Europe. This requires powerful ideas for the conversion of energy systems to renewable energy, for a waste-free closed-loop economy, for care and retirement for the common good, for sustainable construction in the building stock, and for public transport. These examples show the way when it comes to the sharing economy and the digital agenda, to competitiveness and living well.

It goes without saying that there must be no “business as usual”. It is good that so many are committing to this. But the maxim is trivial if it is not made clear what the “usual” actually is and what is really meant by “business”. We have a long way to go, that is certain. Our republican constitution must enable democracy and the market to practise integration and ambition. Despite the generally good conditions, many things will probably be difficult. But there will also be opportunities, ones we already know about and many more that will surprise us. Let’s be ready to use whatever presents itself to us.

In April 2016: Marlehn Thieme and Olaf Tschimpke, Chairwoman and Deputy Chairman of the Council, Prof. Alexander Bassen, Vera Gäde-Butzlaff, Alois Glück, Walter Hirche, Kathrin Menges, Alexander Müller, Prof. Lucia A. Reisch, Dr Imme Scholz, Max Schön, Prof. Wolfgang Schuster, Michael Vassiliadis, Prof. Hubert Weiger, Prof. Harald Welzer as a co-opted member of the Council, Prof. Günther Bachmann, Secretary-General of the Council
III. Sustainability in the Länder – Contribution of the Länder

Resolution of the Conference of the Heads of Government of the Länder, Berlin, 17 March 2016 – contribution of the Länder to the implementation of the guiding principle of sustainable development and the global Sustainable Development goals

1. The Länder’s shared responsibility

With the adoption of the 2030 Agenda for Sustainable Development by the United Nations General Assembly in September 2015, sustainability policy gained new momentum and new impetus at global, national and sub-national level. The 2030 Agenda advances the guiding principle of sustainable development agreed at the Rio Earth Summit in 1992, which is also recognised and accepted at the level of the German Länder.

In resolutions of the Heads of Government of the Länder of 12 June 2014 and the Bundestag of 6 February 2015 (document 622/14), the Länder stated that the progression towards global Sustainable Development Goals driven by the 2030 Agenda represents a paradigm shift towards a profound transformation of business and society in both the North and the South in order to take joint responsibility for making the world sustainable and just.

The Länder therefore emphatically welcome the fact that the United Nations has created an ambitious sustainable development framework with the 2030 Agenda and especially with the 17 global Sustainable Development Goals. The Länder are convinced that the implementation of the 2030 Agenda requires coordinated, shared action, both between the Federal Government and the Länder and in cooperation with local authorities, civil society, business and churches. Many of the global Sustainable Development Goals also touch on the responsibilities of the Länder. Germany’s international responsibility for global sustainable development can therefore be fulfilled only if the 2030 Agenda is also implemented via coordinated contributions from the Federal Government and the Länder.

The Länder have already made an important contribution to the sustainable development process in the past, i.e. to the achievement of the previous Millennium Development Goals. They are determined to continue this with regard to the implementation of the SDGs in Germany and in the international context.

They see key action areas in the issues of inequality within and among countries, the sustainable management and efficient use of natural resources, increasing the share of renewable energies, substantially increasing energy efficiency and strengthening resilience and adaptive capacity to climate-related hazards. The Länder are conscious of their international responsibility. They campaign for the globally responsible use of the available natural resources and sustainable production and consumption patterns while adhering to global social standards.

In recent years, all the Länder have taken great efforts to promote sustainable development, namely with laws, strategies, support programmes and communication and participation activities regarding important sustainability issues such as climate protection and climate change adaptation, the energy transition, biological diversity, resource protection, education and science, sustainable consumption, food and mobility, social cohesion and social change. Two thirds of the Länder have now adopted sustainable development strategies.

In the last four years since the last Länder contribution to the Progress Report on the National Sustainable Development Strategy, there have been new developments in many Länder, some of which are based on the impetus of the Rio+20 Conference in 2012. For example, sustainable development strategies have been reframed in Baden-Württemberg (2012), Bavaria (2013), Hesse (2014) and Rhineland-Palatinate (2015), new strategies drawn up in Saxony (2013), Brandenburg (2014) and North Rhine-Westphalia (2016) and sustainable development reports compiled in numerous Länder (including Thuringia 2012, Berlin 2014, Saxony-Anhalt 2015). The first Länder have now taken up the SDGs and their implementation as central elements of their sustainable development strategies (Rhineland-Palatinate, North Rhine-Westphalia), are working on new strategies accounting for the SDGs (Berlin, Saarland) or are integrating the SDGs into their existing strategies. Some of the Länder’s sustainable development strategies or analogous strategy documents cover a broad range of issues (similar
to the National Sustainable Development Strategy), but others are more focused thematically. The range of instruments (sustainability impact assessments, interdepartmental coordination, dialogues with stakeholders, advisory councils, etc.) included in the strategies is varied. Some Länder strategies are closely based on the national strategy, while other Länder have developed their own set of instruments (e.g. with sustainable development conferences that bring members of the government and stakeholders together or formats for involving young people). Cooperation with local authorities and civil society plays an important role for the Länder. Some Länder have established special forms of cooperation with business. The sustainability strategies of some Länder focus particularly heavily on the issue of raising public awareness, e.g. with a Sustainability Week or Sustainability Day.

2. Selected priority issues in cooperation between the Federal Government and the Länder

a) Education for Sustainable Development (ESD)

Building on the experiences and following the existing structures of the implementation of the UN Decade of Education for Sustainable Development (2005 to 2014), the Länder are stabilising their efforts on the basis of the current (2015 to 2020) Global Action Programme on Education for Sustainable Development (ESD). ESD is concerned with global contexts and challenges and the associated complex ecological, economic and social consequences. ESD helps to raise society’s awareness of sustainable lifestyles. Alongside political accords, financial incentives and technological solutions, ESD is therefore a key tool on the road to sustainable development. To implement the Global Action Programme, some Länder have developed their own ESD strategies and measures.

In line with the priorities of the Global Action Programme, the holistic transformation of the learning and teaching environment and the competency development of teachers and multipliers in early childhood, school, vocational and university education will be increasingly brought to the fore of Länder activities in the future. Strengthening and mobilising young people to give them their own creative freedom and responsibility also plays a special role. In addition, the political support and promotion of sustainable development at local level, especially through support for civic engagement and participative and cooperative processes, remain central elements.

The Länder supported the Federal Government in the national implementation of the Global Action Programme and the development of a National Action Plan on ESD by cooperating on the National Platform, the expert panels and partner networks. In view of the large role played by formal education, the Länder point to the necessity of complementary, close political communication between the Federal Government and the Länder in order to involve non-formal and informal areas of education equally in the preparation and implementation of the National Action Plan.

b) Sustainable public procurement

In recent years, sustainable public procurement has been an important priority of cooperation between the Federal Government and the Länder on sustainability issues. Many Länder also worked in the “Alliance for Sustainable Procurement” initiated by the Federal Government. The Alliance enabled shared conclusions on important topics such as the procurement of vehicles for public transport and electric vehicles and sustainable construction standards. The data basis regarding sustainable procurement, which would allow the strategic management of procurement processes, is not yet satisfactory in practice. The 2015/2016 reform of federal procurement law will allow environmental and social aspects to be considered at all stages of the procurement process and simplify the consideration of environment and fair trade labels, for example.

All of these sustainability aspects are designed at federal level as discretionary provisions and thus allow contracting authorities the freedom to account for these aspects in whichever phases of the procurement process are appropriate. Some Länder have established sometimes far-reaching sustainability regulations with their own procurement laws or administrative regulations. The Länder also expect the Federal Government to create a positive framework for sustainable procurement practices in the future.

c) Sustainability indicators

The issue of sustainability indicators has also been a priority in the sustainability cooperation
between the Federal Government and the Länder in recent years. Many sustainable development strategies and/or reports of the Länder include catalogues of indicators, some of which are closely based on the indicators of the National Sustainable Development Strategy, but often also include additional Länder-specific priorities. The work on a shared catalogue of Länder sustainability indicators was continued during the period relevant to this report under the aegis of the Conference of the Head of the Federal Chancellery with the Heads of the State and Senate Chancelleries of the Länder (CdS).

Some Länder’s strategies also include concrete, quantified and timed goals that can be determined and measured with these indicators. Given the challenge of implementing the reporting on the 17 SDGs and the associated targets and indicators in Germany, greater efforts will be required on the part of the Federal Government and the Länder in future to achieve the highest possible compatibility of the indicator systems. In the interests of vertical integration, the Länder expect intensive consultation with the Federal Government in order to ensure that indicator calculations at federal level are, if possible and meaningful, also valid at Länder and ideally at municipal level as well. If the goal and indicator systems are compatible, so that developments at the federal level and in the Länder can be compared, there is a better chance that the activities of the Federal Government and the Länder will complement each other and that shared sustainable development goals will be achieved. This may require political prioritisation, but this will not affect Germany’s ability to completely fulfil its reporting obligations from the 2030 Agenda. In addition to this strategic task, communicating the sustainable development goals and the measures and instruments used to achieve them is also a task shared by the Federal Government and the Länder. It may be important for sustainability communication to give prominence to selected indicators. Composite indices such as the Welfare Index can likewise play an important role.

3. **Future cooperation between the Federal Government and the Länder on sustainable development**

The established cooperation in the context of the communication between the Federal Gover-
IV. Sustainability at the Municipal Level – Contribution of the German Association of Municipal Umbrella Organisations

(Association of German Cities, Association of German Counties, and German Association of Towns and Municipalities)

I. Principle of sustainability: central decision-making criteria in administrative action

Cities, districts and municipalities in Germany ascribe particular significance to the issue of “sustainability”. Beyond the field of environmental policy, the goal of sustainable development touches nearly all sectors of municipal action: finances, social life, urban development, climate protection, climate change adaptation, intelligent networking and in light of current events the integration of refugees in Germany seeking protection from war and political persecution. However, this also requires the cooperation of the populace, society as a whole and their opinion leaders.

The concept of “sustainable development” has had a special status since before the United Nations Conference in Rio de Janeiro in 1992 and the Agenda 21 adopted there. Cities, districts and municipalities and their residents have also been committed to the environment and climate protection, social cohesion and economic development, i.e. the three dimensions of sustainable development, since before the adoption of the 2030 Agenda and the Sustainable Development Goals (SDGs) adopted by the United Nations on 27 September 2015. They set differing priorities depending on their locality or region’s starting point or local, human resources or financial challenges.

Local authorities play a leading role as sole and responsible agents, but also through inter-municipal cooperation, and good opportunities to act as a role model for the public and for local businesses. Cities, districts and municipalities are the engines for making a concrete and independent contribution according to the them “think globally – act locally”. Through their anchor function in sustainable government, they and their citizens have brought the issue of “sustainability” to the fore. This is demonstrated by the many successful municipal sustainable development concepts and processes, the Sustainable Development Council’s “Sustainable Cities” dialogue, the German Sustainability Award for municipalities and the German Local Sustainability Award “Zeitzeichen(N)”. The significance of cities, districts and municipalities as central stakeholders for sustainable development has been acknowledged and underscored by the United Nations’ global Sustainable Development Goals. In particular, municipal umbrella organisations welcome the inclusion of the “city goal”, SDG 11, to “make cities and human settlements inclusive, safe, resilient and sustainable”. This is to be brought to life through municipal participation and responsibility and at the same time comprises an ambitious task for municipalities for the years to come.

II. Sustainable development through cooperation

Continuous sustainable development especially requires close cooperation on an equal footing between all levels of the state. The United Nations’ universal Sustainable Development Goals in particular oblige all institutions to contribute decisively. The municipal umbrella organisations therefore actively support and assist the interdepartmental working group “Sustainable Urban Development from a National and International Perspective” set up by the Federal Government in September 2015. As the United Nations’ Sustainable Development Goals can be successfully implemented only at local and regional level, the working group aims to highlight the importance of sustainable development policy at global, European and national level for current and future urban development. The working group, led by the Federal Ministry for the Environment and Building, is to strengthen communication within the Federal Government and provide tangible support for municipalities’ sustainable development.

At Länder level, too, there are initiatives and projects for sustainable development strategies, in the drafting of which the cities, districts and mu-
nicipalities are involved at differing levels of intensity. A good example is the close involvement of the municipal umbrella organisations of North Rhine-Westphalia in drafting and implementing the NRW Sustainable Development Strategy. This dialogue allows local authorities to make a value contribution to sustainable policy-making with their multifaceted experience.

The Federal Government and the Länder have thus clearly recognised that the goals for climate protection and sustainable development cannot be achieved without the cities, districts and municipalities and their citizens.

III. Sustainable development at local level

The crucial role played by the cities, districts and municipalities in the implementation of the Sustainable Development Goals is obvious. In particular, it is the task of local authorities as the level closest to the public to raise their awareness of the issue of “sustainability” and to encourage and promote civic engagement. Municipal stakeholders have the most direct and citizen-oriented scope for creativity. They can therefore implement measures more flexibly. Within the framework of local self-government, they have sovereignty in matters regarding personnel, finance, organisation, planning, territory and tasks.

- Sustainable integration

Cities, districts and municipalities also offer an immense diversity of quality of life, which must be preserved and enhanced so that all may participate. General participation must succeed, especially against the backdrop of the successful and sustainable integration of the refugees and asylum seekers who came to Germany in 2015 and will keep coming. Although direct integration occurs locally, it is crucial for its immediate success that the integration challenge is seen as a task for society as a whole, which also includes in particular sufficient and viable financing from the Federal Government and the Länder.

- Sustainable urban and municipal development

Local authorities have an interest in sustainable urban and municipal development. They contribute to urban development, housing, mobility and infrastructure being seen together as key aspects of local public services. The city of short distances, in which it is possible to live, work and shop in the same neighbourhood, is a guiding principle that must always be reconceived in a mobile, interconnected society and business. Attractive urban neighbourhoods are inclusive and sustainable.

Brownfield development in order to create compact cities and towns must be given preference over greenfield development for ecological, economic and social reasons. Decentralised brownfield development in particular also results in better integration of the migrants remaining in Germany than long-term accommodation in collective centres at the edge of the city. At the same time, however, existing obstacles must be taken down in order to promote brownfield development. For example, this could be achieved by creating flexible mixed-use developments for living and working (“urban residential area”). By increasingly mixing different housing types, including the better compatibility of residential and commercial, and through careful redensification, additional living space can be created in inner cities and town centres in a sustainable manner.

- Environmental protection, energy efficiency, building renovation

Climate change has already been affecting cities, districts and municipalities for a long time. Local authorities are increasingly having to deal with heat waves or extreme weather events such as torrential rain, storms and river flooding. The local authorities’ numerous climate protection concepts and climate change adaptation strategies are an expression of sustainable action with regard to climate change. The finiteness of resources is a call to use them prudently. Wherever possible, resources should therefore be used only as quickly as they can be replaced. Resources and energy efficiency are thus becoming ever more important in local sustainable development strategies.

Local authorities ensure local acceptance for the achievement of sustainable development goals. This can be illustrated with the example of renewable energy, the importance of which in the electricity sector has increased significantly. Since the introduction of the Renewable Energy Sources Act in 2000, the share of renewable energy in gross electricity consumption grew from 6% in 2000 to 32.5% in the first half of 2015. The goal is still to produce 40% to 45% of the electricity consumed in Germany solely from renewable energy by 2025. Local authorities are actively
supporting the achievement of these goals, such as in land use planning and with investments in the construction of wind, solar or biogas power plants. At the same time, municipal power supply companies are stepping up their investment in renewable energy plants.

Local authorities especially contribute to greater acceptance for the planning and location of such plants, especially wind farms. The support and promotion of local energy cooperatives and of value-added models in which citizens can also participate in renewable energy through non-cash benefits are just some of many good examples.

On the other side of the coin to the expansion of renewable energy, the improvement of energy efficiency and promotion of energy saving is vital, for the best energy is energy that is not produced at all.

With potential for a reduction of around 40%, buildings are a priority for the improvement of energy efficiency and energy saving. In this respect, local authorities with their approximately 176,000 buildings (schools, preschools, offices, etc.) and their municipal housing companies with around 2.5 million homes are major stakeholders. Throughout Germany, local authorities spend around EUR 4.1 billion on energy every year. The majority of these costs are attributable to buildings. Targeted programmes by the Federal Government, Länder and local authorities for investment in energy-saving renovation, as in the second Economic Stimulus Package several years ago, will still be necessary in the future in light of the often poor condition of the building stock. In addition, local authorities have the most direct contact with the people, and thus with private building owners and their tenants. Large potential savings can still be generated in particular through local authorities’ individual advice (energy advice etc.) to the people regarding energy-saving renovation.

- Using the potential of digitalisation as a driver of sustainable development

Cities, districts and municipalities use innovative information and communication technology to make their populaces’ quality of life more sustainable. Intelligent networking optimises the use of energy, improves mobility, offers holistic building services and facilitates participation by the people.

The locally operating municipal utilities play a particular role here. They are increasing developing new information and communication technology for networks and innovative storage technologies such as smart grids and smart meters. Municipal utilities also have an obvious advantage over global corporations: they have local roots and are seen by the public as more trustworthy. The municipal economy has an opportunity to use the public’s trust to establish new, intelligent services that also meet the high standards for data protection.

IV. Conclusion

Local authorities are essential stakeholders and a driving force behind the achievement of the Sustainable Development Goals. They can overcome the associated challenges, be they financial or personnel-related, only together with all other stakeholders from politics, business and the public.

Although many Federal Government and Länder programmes to support local authorities have been initiated in recent years, they often cannot shoulder the necessary investments for continuous sustainable development policy alone. Therefore, support for local sustainability measures from the EU, the Federal Government and the Länder continues to be indispensable.
Chapter E.
Outlook

The cultural historian Ulrich Grober described sustainability as “a kind of navigation concept for the journey into the future.” He believes we should see sustainability “as a quest, not as a recipe book with ready-made solutions. As a compass, as our navigation device for a journey into unknown territory – the future.” Sustainable development must ultimately be the result of a cooperative social process, in the sense of a task shared by all of society.

In the last Progress Report on the Strategy in 2012, ahead of the United Nations Conference on Sustainable Development in Rio de Janeiro, the Federal Government expressed the hope that people in 2050 might look back on the Conference as a milestone on the road to a sustainable world order. And it really was followed by a series of important steps forward for sustainable development. This is especially true of 2015, which former Federal Minister Prof. Klaus Töpfer, with an eye on the upcoming conferences, described as the “Year of Sustainability”.

This new version of the German Sustainable Development Strategy is an important step on the road to the implementation of the 2030 Agenda. We must now continue on this path. The next stage of the further development of the Strategy is scheduled for 2018.
Overview: Content and management of the German Sustainable Development Strategy (sustainability management system)

I. **Significance, basis and scope of sustainability as an instrument of control**

1. Sustainable development (sustainability) is a guiding principle of the politics of the Federal Government. As a goal and yardstick of government action at national, European and international levels, it must be observed in all measures and all policy fields.

2. Sustainability aims at the achievement of intergenerational equity, social cohesion, quality of life, and the acceptance of international responsibility. In this spirit, economic performance, the protection of natural resources, and social responsibility are to be united so that developments will be permanently sustainable.

3. The German Sustainable Development Strategy is a revised version of the Strategy of 2002 according to this resolution. It describes a process of policy development for the longer term and offers guidance with regard to this process.

4. The main responsibility for sustainable development at the national level rests with the Federal Chancellery in order to emphasise the significance for all policy areas and assure cross-departmental monitoring and control.

5. Making sustainability a reality depends strongly upon the interplay of all relevant stakeholders. Additional stakeholders in the field of sustainability are:

   a) **International level**

      Germany campaigns for progress on sustainability from within the United Nations (especially in the High-Level Political Forum, HLPF) and bilaterally.

   b) **European level**

      Germany

      - is committed to strengthening sustainability at the European level, especially the EU Sustainable Development Strategy as well as the links between the EU Strategy and the national strategies; and,

      - cooperates closely with other European countries on sustainable development issues.

   c) **Länder and municipalities**

      The Federal Government and the Länder communicate regularly in the appropriate forums with the aim of improving the coordination of activities and goals. Municipal umbrella organisations are also involved.

   d) **Civil society (citizens, trade unions, science, churches and associations)**

      Stakeholders from civil society are required for the realisation of sustainability in many different ways and are continuously involved. Among other things, consumers make individual contributions by selecting products and using them in an ecologically compatible and economically useful manner.
e) Private sector

Businesses, chambers of commerce and associations are called upon to do their bit for sustainable development. For example, businesses are responsible for their production and their products. Informing consumers about the health- and environment-related properties of the products and about sustainable production methods is part of this responsibility.

II. Sustainability management concept

1. For the assessment and development of measures in their areas of responsibility, the ministries employ the concept of sustainable development management. This concept contains the following three elements:
   - Management rules (see 2.)
   - Indicators and goals (see 3.)
   - Monitoring (see 4.)

2. Management rules for sustainability
   - Basic rules -
     (1) Each generation is required to solve the challenges facing it and must not unload them onto future generations. It must also make provisions for foreseeable future problems.
     (2) In order to achieve intergenerational equity, social cohesion, quality of life, and the acceptance of international responsibility and to implement human rights and maintain peaceful societies, economic performance, the protection of natural resources, and social responsibility are to be united so that developments will be permanently sustainable.
     (3) The shared responsibility for sustainable development requires that economic, social and political stakeholders be appropriately involved in political decision-making processes.
   - Rules of sustainability for specific action areas -
     (4) Renewable natural goods (e.g. forests or fish populations) should, on a long-term basis, be used only within the bounds of their ability to regenerate.

Non-renewable natural goods (such as mineral raw materials or fossil fuels) should, on a long-term basis, be used only to the extent that their functions cannot be replaced by other materials or fuels.

The release of materials into the environment should, in the long run, not exceed the adaptability of the eco-system – e.g. the climate, forests and oceans.

(5) Dangers and unjustifiable risks to human health should be avoided.

(6) Structural change triggered by technical developments and international competition should be shaped in a way that is economically successful as well as ecologically and socially sustainable. For this purpose, political fields should be integrated so that economic growth, high employment, social cohesion, respect, protection and the guarantee of human rights and environmental protection go hand in hand.
(7) Energy and natural resource consumption and the provision of transport services should be decoupled from economic growth. At the same time, we should aim for growth-related increases in demand for energy, resources and transport to be more than offset by efficiency gains.

(8) Public authorities are obliged to take into account intergenerational equity. This requires compliance with the constitutional debt restrictions on the part of the Federal Government, Länder and local authorities. In a further step, the debt ratio should be continually reduced to a fair level from an intergenerational perspective.

(9) Sustainable agriculture needs to be productive and competitive while compatible with nature and the environment and must take into account the requirements of livestock farming in a way that is fair to the animals and provides consumer protection, particularly concerning health matters.

(10) In order to strengthen social cohesion and leave no one behind,
- poverty and social exclusion should be prevented to the greatest possible extent and inequality reduced,
- opportunities for participating in economic development should be open to all sections of society,
- necessary adaptations to demographic change should take place at an early stage at the political and economic level and in society, and
- everybody should take part in social and political life.

(11) All decisions must take the latest scientific findings and the necessary research into account. The necessary qualifications and competence should be enshrined in the education system in order to create “education for sustainable development”.

(12) Our actions in Germany must consider the burdens they create in other parts of the world. General international conditions should be shaped jointly in a manner which ensures that people in all countries can lead a life worthy of a human being and according to their ideas and in unison with their regional environment while at the same time profiting from economic developments. Environment and development form a unit. Sustainable global action is based on the 2030 Agenda for Sustainable Development of the United Nations. An integrated approach should link the fight against poverty and hunger with
- the respect of human rights,
- economic development,
- environmental protection, and
- responsible action by governments (good governance).

3. Sustainable development is measured in 36 areas using the following key indicators:
<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator field</th>
<th>Sustainability postulate</th>
<th>Indicators</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG 1. End poverty in all its forms everywhere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.a</td>
<td>Poverty</td>
<td>Reducing poverty</td>
<td>Material deprivation</td>
<td>Keeping the proportion of people who are materially deprived significantly below the EU-28 level up to 2030.</td>
</tr>
<tr>
<td>1.1.b</td>
<td>Severe material deprivation</td>
<td>Keeping the proportion of people suffering from severe material deprivation significantly below the EU-28 level up to 2030.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.a</td>
<td>Farming</td>
<td>Environmentally sound production in our cultivated landscapes</td>
<td>Nitrogen surplus</td>
<td>Overall nitrogen surpluses for Germany to be reduced to 70 kilograms per hectare of utilised agricultural land in the annual average from 2028–2032.</td>
</tr>
<tr>
<td>2.1.b</td>
<td>Organic farming</td>
<td>Share of organic farming on land used for agriculture to be increased to 20% in coming years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.a</td>
<td>Health and nutrition</td>
<td>Living healthy longer</td>
<td>Premature mortality (Cases of death per 100,000 residents under 70): women</td>
<td>To be reduced to 100 per 100,000 residents (women) by 2030</td>
</tr>
<tr>
<td>3.1.b</td>
<td>Premature mortality (Cases of death per 100,000 residents under 70): men</td>
<td>To be reduced to 190 per 100,000 residents (men) by 2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.d</td>
<td>Smoking rate among adults (15 years and older)</td>
<td>To be reduced to 19% by 2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.e</td>
<td>Obesity rate among young people (11- to 17-year-olds)</td>
<td>Increase to be permanently halted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.f</td>
<td>Obesity rate among adults (18 years and older)</td>
<td>Increase to be permanently halted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.a</td>
<td>Air pollution</td>
<td>Keeping the environment healthy</td>
<td>Emissions of air pollutants (index of national emissions of air pollutants SO2, NOx, NH3, NMVOC and PM2.5)</td>
<td>Emissions of 2005 to be reduced to 55% (unweighted average of the five pollutants) by 2030</td>
</tr>
<tr>
<td>3.2.b</td>
<td>Share of the population with increased exposure to PM10 in Germany</td>
<td>WHO particulate matter benchmark of an annual average of 20 micrograms/cubic metre for PM10 to be achieved as widely as possible by 2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.a</td>
<td>Education and training</td>
<td>Continuously improving education and vocational training</td>
<td>Early school leavers (18- to 24-year-olds without a school leaving certificate)</td>
<td>To be reduced to less than 10% by 2020</td>
</tr>
<tr>
<td>4.1.b</td>
<td>30- to 34-year-olds with a tertiary or post-secondary non-tertiary level of education</td>
<td>To be increased to 42% by 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2.a</td>
<td>Prospects for families</td>
<td>Improving the compatibility of work and family life</td>
<td>All-day care provision for children 0- to 2-year-olds</td>
<td>To be increased to 35% by 2030</td>
</tr>
<tr>
<td>4.2.b</td>
<td>All-day care provision for children 3- to 5-year-olds</td>
<td>To be increased to 60% by 2020 and 70% by 2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG 5. Achieve gender equality and empower all women and girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.a</td>
<td>Equal opportunities</td>
<td>Promoting equal opportunities in society</td>
<td>Gender pay gap</td>
<td>To be reduced to 10% by 2020, maintained until 2030</td>
</tr>
</tbody>
</table>
## SDG 6. Ensure availability and sustainable management of water and sanitation for all

<table>
<thead>
<tr>
<th>6.1.a</th>
<th>Water quality</th>
<th>Phosphorous in flowing waters</th>
<th>The benchmark values for specific types of water to be met or beaten at all monitoring points by 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.b</td>
<td>Nitrate in groundwater – proportion of monitoring points in Germany at which the threshold of 50 mg/l for nitrate is exceeded</td>
<td>“≤50 mg/l” of nitrate in groundwater to be complied with by 2030</td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Clean water and sanitation</td>
<td>Number of people gaining access to drinking water and sanitation from Germany</td>
<td>10 million people a year to gain access to water up to 2030</td>
</tr>
</tbody>
</table>

## SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all

<table>
<thead>
<tr>
<th>7.1.a</th>
<th>Resource conservation</th>
<th>Final energy productivity</th>
<th>Final energy productivity to be increased by 2.1% per year from 2008 to 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1.b</td>
<td>Renewable energy</td>
<td>Share of renewable energies in gross final energy consumption</td>
<td>To be increased to 18% by 2020, to 30% by 2030 and 60% by 2050</td>
</tr>
<tr>
<td>7.2.b</td>
<td>Share of renewable energy sources in gross electricity consumption</td>
<td>To be increased to at least 35% by 2020, to at least 50% by 2030, to at least 65% by 2040 and to at least 80% by 2050</td>
<td></td>
</tr>
</tbody>
</table>

## SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

<table>
<thead>
<tr>
<th>8.1</th>
<th>Resource conservation</th>
<th>Total raw material productivity; (GDP+imports)/raw material input (RMI)</th>
<th>Trend of 2000–2010 to be maintained until 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2.a</td>
<td>Government debt</td>
<td>General government deficit</td>
<td>Government deficit less than 3% of GDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.2.b</td>
<td>Structural deficit</td>
<td>Structural deficit</td>
<td>Structurally balanced public spending, total national structural deficit of no more than 0.5% of GDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.2.c</td>
<td>Government debt</td>
<td>Government debt</td>
<td>Ratio of government debt to GDP no more than 60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.3</td>
<td>Provision for future economic stability</td>
<td>Gross fixed capital formation in relation to GDP</td>
<td>Appropriate development of the ratio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To be maintained until 2030</td>
</tr>
<tr>
<td>8.4</td>
<td>Economic output</td>
<td>Gross domestic product per capita</td>
<td>Steady and appropriate economic growth</td>
</tr>
<tr>
<td>8.5.a</td>
<td>Employment</td>
<td>Employment rate (total) (20- to 64-year-olds)</td>
<td>To be increased to 78% by 2030</td>
</tr>
<tr>
<td>8.5.b</td>
<td></td>
<td>Employment rate (older people) (60- to 64-year-olds)</td>
<td>To be increased to 60% by 2030</td>
</tr>
<tr>
<td>8.6.</td>
<td>Global supply chains</td>
<td>Number of members of the Textile Partnership</td>
<td>To be significantly increased by 2030</td>
</tr>
</tbody>
</table>

**SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation**

| 9.1 | Innovation | Private and public spending on research and development | At least 3% of GDP by 2030 |

**SDG 10. Reduce inequality within and among countries**

| 10.1. | Equal educational opportunities | Foreign school graduates | Proportion of foreign school leavers with at least a Hauptschule certificate (lower secondary schooling) to be increased, with their diploma rate to be raised to that of German school leavers by 2030 |
| 10.2. | Distributive justice | Gini income coefficient after social transfers | Gini income coefficient after social transfers to be below the EU28 figure try 2030 |

**SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable**

| 11.1. a | Land use | Built-up area and transport infrastructure expansion | To be reduced to 30 ha minus x per day by 2030 |
| 11.1.b | | Loss of open space in m²/inhabitant | Reduction in the loss of open space per inhabitant |
| 11.1.c | | Inhabitants by area occupied by built-up areas and transport infrastructure (settlement density) | No reduction in settlement density |
| 11.2.a | Mobility | Final energy consumption in freight transport | Reduced by 15 to 20% by 2030 |
| 11.2.b | | Final energy consumption in passenger transport | Reduced by 15 to 20% by 2030 |
| 11.2.c | | Population-weighted average travel time with public transport from each stop to the next medium-sized/large city | Reduction |
| 11.3. | Housing | Housing cost overload | Proportion of the population to decline to 13% by 2030 |

**SDG 12. Ensure sustainable consumption and production patterns**

| 12.1. a | Sustainable consumption | Market share of goods certified by independently verified sustainability labelling schemes (future perspective: market share of products and services with trustworthy and ambitious eco- and social labels) | Increase to 34% by 2030 |
| 12.1. b | | Energy consumption and CO₂ emissions from consumption | Continuous reduction of energy consumption |
| 12.2 | Sustainable production | EMAS eco-management | 5,000 organisation locations by 2030 |

**SDG 13. Take urgent action to combat climate change and its impacts**

| 13.1. a | Climate protection | Greenhouse gas emissions | To be reduced by at least 40% by 2020, by at least 55% by 2030, by at least 70% by 2040 and by 80% to 95% by 2050, in each case compared to 1990 |
| SDG 13.1.b | Germany's contribution to international climate protection funding | International climate protection funding for the reduction of greenhouse gases and adaptation to climate change | Financing to be doubled by 2020 compared to 2014 |
| SDG 14. | Conserve and sustainably use the oceans, seas and marine resources for sustainable development |
| 14.1. aa | Protecting the oceans | Protection and sustainable use of oceans and marine resources |
| 14.1. ab | Nutrient inputs in coastal waters and marine waters – nitrogen input via the inflows into the Baltic |
| 14.1. b | Nutrient inputs in coastal waters and marine waters – nitrogen input via the inflows into the North Sea |
| SDG 14. | Conserve and sustainably use the oceans, seas and marine resources for sustainable development |
| 14.1. b | Share of sustainably fished fish stocks in the North Sea and Baltic Sea |
| SDG 15. | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss |
| 15.1. | Species diversity |
| 15.2. | Ecosystems |
| 15.3. | Forests |
| SDG 16. | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |
| 16.1. | Crime |
| 16.2. | Peace and security |
| 16.3. a | Good governance |
| 16.3. b | Corruption |
| SDG 17. | Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development |
| 17.1. | Development cooperation |
| 17.2. | Knowledge transfer, especially in technical areas |
| 17.3. | Opening markets |
4. **Monitoring**

   a) The progress made in implementing the Strategy and planned further measures are reported and the Strategy is enhanced regularly:

   Every two years, the Federal Statistical Office publishes an *Indicator Report*. The Federal Statistical Office is responsible for the technical analysis of the indicators and their development.

   The *enhancement of the Strategy* as part of comprehensive *reporting on the Strategy (Progress Report)* is carried out once every legislative period. The Progress Reports evaluate the state of the implementation of the Strategy, contain concrete measures for the achievement of the stated goals, and further develop the Strategy in selected focal areas.

   The reports are made available to the German Bundestag for information purposes.

   b) The public is comprehensively involved in the enhancement of the Strategy at an early stage.

   c) In addition, the various ministries represented in the State Secretaries’ Committee on Sustainable Development regularly report on current sustainability issues in their own fields of business and activity.

### III. Institutions

1. The **Federal Cabinet** adopts changes in and further developments of the Sustainable Development Strategy.

2. The **State Secretaries’ Committee on Sustainable Development**

   a) updates the details of the National Sustainable Development Strategy,

   b) regularly monitors the development of the indicators of sustainability,

   c) is the contact for the Parliamentary Advisory Council on Sustainable Development, for the Länder and for municipal umbrella organisations, and

   d) acts as an advisor on current topics of Federal Government work related to sustainability.

   All ministries are represented in the Committee. The State Secretaries’ Committee is chaired by the Head of the Federal Chancellery.

3. The meetings of the State Secretaries’ Committee on Sustainable Development are prepared by a *working group* under the direction of the Federal Chancellery in which all of the ministries are represented by the directors in charge of the respective matter.

4. The **Interdepartmental Sustainability Indicators Working Group**, under the direction of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and with the participation of the Federal Statistical Office, performs preparatory work with regard to the technical monitoring and improvement of the sustainability indicators.

5. In the German Bundestag, the *Parliamentary Advisory Council on Sustainable Development* monitors sustainable development policy at the national and international levels.

6. The **German Sustainable Development Council** (decision of the Federal Cabinet of 26 July 2000, as amended on 4 April 2007)

   a) advises the Federal Government with regard to questions of sustainable development,

   b) contributes to improving the Sustainable Development Strategy,
c) publishes statements concerning particular topics, and
d) contributes chiefly to raising public awareness and to the public Dialogue on Sustainability.

The members of the Council are appointed by the German Chancellor.

IV. Procedures within the Federal Government for the implementation of the Strategy

1. The ministries share responsibility for implementing the German Sustainable Development Strategy. In order to achieve the targets of the Sustainable Development Strategy and the global goals for sustainable development, they work together interdepartmentally and coordinate their projects with Länder and local authorities.

2. On the basis of the Sustainable Development Strategy, the ministries organise their activities, including their administrative practices, based upon the necessity of sustainable development. In the legislative process, the impact the act or decree to be passed has on sustainable development is examined and the results are presented. They present competition between the achievement of the sustainable development goals transparently and in light of the expected progress. The assessment is performed within the framework of the regulatory impact assessment by the Ministry responsible for the legislative project. The ministries demonstrate various alternatives for achieving a sustainable development target and check their projects for coherence and against other projects within the ministry and against measures by other ministries.

3. The ministries constantly monitor the implementation of measures under the Sustainable Development Strategy and, when needed, inform the State Secretaries’ Committee on Sustainable Development about problems that arise. They regularly reconcile existing projects to the goals of the Sustainable Development Strategy and check whether the latter could also be achieved by adjusting or terminating these projects.

4. In the framework of their own communication, the ministries take care to highlight any links to the Sustainable Development Strategy.

5. The Federal Government makes clear through appropriate cross-departmental projects that it acts on the basis of sustainability. The State Secretaries’ Committee on Sustainable Development is responsible for the approval of projects.
Abbreviations

10 YFP 10-Year Framework of Programmes on Sustainable Consumption and Production
ABS Access and Benefit Sharing
AfNB Alliance for Sustainable Procurement
AfT Aid for Trade
AG (Aktiengesellschaft) public limited company
AIDS Acquired Immune Deficiency Syndrome
AMIS Agricultural Market Information System
APSA African Peace and Security Architecture
AREI Africa Renewable Energy Initiative
ASEM Asia-Europe-Meetings
ATI Addis Tax Initiative
AUKM Agri-environmental and climate measures
AvH Alexander von Humboldt Foundation
BA Federal Labour Office
BAföG Federal Training Assistance Act
BBNE Vocational training for sustainable development
Bill. Billion
bff Federal association of rape crisis centres and women’s counselling centres in Germany
BK-Amt Federal Chancellery
BKM Federal Commissioner for Cultural and Media Affairs
BLE Federal Office for Agriculture and Food
BLE-NHK Bund-Länder-Erfahrungsaustausch zu nachhaltiger Entwicklung (exchange of experience between the Federal Government and the Länder on sustainable development)
BMAS Federal Ministry of Labour and Social Affairs
BMBF Federal Ministry of Education and Research
BMEL Federal Ministry of Food and Agriculture
BMF Federal Ministry of Finance
BMFSFJ Federal Ministry for Families, Senior Citizens, Women and Youth
BMI Federal Ministry of the Interior
BMUB Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BMVI Federal Ministry of Transport and Digital Infrastructure
BMZ Federal Ministry for Economic Cooperation and Development
BNB Sustainable Construction Rating System
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNE</td>
<td>Education for Sustainable Development</td>
</tr>
<tr>
<td>BÖLN</td>
<td>Federal Organic Farming Scheme and other forms of sustainable agriculture</td>
</tr>
<tr>
<td>BTF</td>
<td>Bilateral Trust Fund</td>
</tr>
<tr>
<td>FTIP</td>
<td>Federal Transport Infrastructure Plan</td>
</tr>
<tr>
<td>BZfE</td>
<td>Federal Centre for Nutrition</td>
</tr>
<tr>
<td>CAP</td>
<td>Common Agricultural Policy</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CdS</td>
<td>Konferenz der Chefinnen und Chefs der Staats- und Senatskanzleien der Länder (conference of the heads of the state and senate chancelleries of the Länder)</td>
</tr>
<tr>
<td>CDU</td>
<td>Christian Democratic Union</td>
</tr>
<tr>
<td>CEDAW</td>
<td>UN Convention on the Elimination of All Forms of Discrimination against Women</td>
</tr>
<tr>
<td>CO$_2$</td>
<td>Carbon dioxide</td>
</tr>
<tr>
<td>COP 21</td>
<td>21st UN Climate Conference in Paris 2015 (Conference of the Parties)</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>CSU</td>
<td>Christian Social Union</td>
</tr>
<tr>
<td>DAAD</td>
<td>German Academic Exchange Service</td>
</tr>
<tr>
<td>DAFI</td>
<td>German Academic Refugee Initiative</td>
</tr>
<tr>
<td>DAS</td>
<td>German Climate Change Adaptation Strategy</td>
</tr>
<tr>
<td>DCGK</td>
<td>German Corporate Governance Code</td>
</tr>
<tr>
<td>DEG</td>
<td>Deutsche Investitions- und Entwicklungsgesellschaft</td>
</tr>
<tr>
<td>DEU</td>
<td>Germany</td>
</tr>
<tr>
<td>DGE</td>
<td>German Nutrition Society</td>
</tr>
<tr>
<td>DNK</td>
<td>German Sustainability Code</td>
</tr>
<tr>
<td>DNS</td>
<td>German Sustainable Development Strategy</td>
</tr>
<tr>
<td>EBA</td>
<td>Everything but Arms</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Union of West African States</td>
</tr>
<tr>
<td>EEAC</td>
<td>European Environmental Advisory Council</td>
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<tr>
<td>EEG</td>
<td>Renewable Energy Sources Act</td>
</tr>
<tr>
<td>EEWärmeG</td>
<td>Renewable Energy Heat Act</td>
</tr>
<tr>
<td>EEZ</td>
<td>German Exclusive Economic Zone</td>
</tr>
<tr>
<td>EITI</td>
<td>Extractive Industries Transparency Initiative</td>
</tr>
<tr>
<td>EKF</td>
<td>Energy and Climate Fund</td>
</tr>
<tr>
<td>ELD</td>
<td>Economics of Land Degradation</td>
</tr>
<tr>
<td>EMAS</td>
<td>Eco-Management and Audit Scheme</td>
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<tr>
<td>EnEV</td>
<td>Energy Conservation Ordinance</td>
</tr>
<tr>
<td>eq</td>
<td>Equivalent</td>
</tr>
<tr>
<td>ESDN</td>
<td>European Sustainable Development Network</td>
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<tr>
<td>ESDW</td>
<td>European Sustainable Development Week</td>
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<tr>
<td>ESF</td>
<td>European Social Fund</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>ESG</td>
<td>Energy Efficiency Strategy for Buildings</td>
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<tr>
<td>ESMAP</td>
<td>Energy Sector Management Assistance Program of the World Bank</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EUA</td>
<td>European Environment Agency</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FCPF</td>
<td>Forest Carbon Partnership Facility</td>
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<tr>
<td>FFH-RL</td>
<td>Fauna-Flora-Habitat Directive</td>
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<tr>
<td>FHK</td>
<td>Association of Women’s Shelters</td>
</tr>
<tr>
<td>FINA</td>
<td>Forschungs- und Innovationsagenda Zukunftsstadt</td>
</tr>
<tr>
<td>FLI</td>
<td>Friedrich-Loeffler-Institut</td>
</tr>
<tr>
<td>FONA</td>
<td>Rahmenprogramm Forschung für Nachhaltige Entwicklung des BMBF</td>
</tr>
<tr>
<td>G20</td>
<td>Group of Twenty (Argentina, Australia, Brazil, Canada, China, EU, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the UK, the USA)</td>
</tr>
<tr>
<td>G7</td>
<td>Group of Seven (Canada, France, Germany, Italy, Japan, the UK, the USA)</td>
</tr>
<tr>
<td>GAK</td>
<td>Joint Task for the Improvement of Agricultural Structures and Coastal Protection</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GER</td>
<td>Gemeinsamer Europäischer Referenzrahmen zur Beschreibung von Sprachkompetenzen (Common European Framework of Reference for Languages)</td>
</tr>
<tr>
<td>GFMD</td>
<td>Global Forum on Migration and Development</td>
</tr>
<tr>
<td>GFP</td>
<td>Common Fisheries Policy</td>
</tr>
<tr>
<td>GG</td>
<td>Grundgesetz (German Basic Law)</td>
</tr>
<tr>
<td>GGO</td>
<td>Joint Rules of Procedure of the Federal Ministries</td>
</tr>
<tr>
<td>GHD</td>
<td>Business, trade and services</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
</tr>
<tr>
<td>GKV</td>
<td>Statutory health insurance</td>
</tr>
<tr>
<td>GTTN</td>
<td>Global Timber Tracking Network</td>
</tr>
<tr>
<td>GVFG</td>
<td>Community Transportation Financing Act</td>
</tr>
<tr>
<td>ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>HABITAT</td>
<td>United Nations Human Settlements Programme</td>
</tr>
<tr>
<td>HELCOM</td>
<td>Helsinki Commission (to protect the Baltic Sea)</td>
</tr>
<tr>
<td>HLPF</td>
<td>High-Level Political Forum on Sustainable Development</td>
</tr>
<tr>
<td>IASS</td>
<td>Institute for Advanced Sustainability Studies</td>
</tr>
<tr>
<td>IDDRI</td>
<td>Institute for Sustainable Development and International Relations</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>IKI</td>
<td>International Climate Protection Initiative</td>
</tr>
<tr>
<td>IKZM</td>
<td>Integrated Coastal Zone Management</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>IMA</td>
<td>Interministerial Working Group</td>
</tr>
</tbody>
</table>
IMB  International Seabed Authority – ISA
IMF  International Monetary Fund
INDC  Intended National Determined Contribution
IntG  Integration Act
IPBES  Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC  Intergovernmental Panel on Climate Change
IPEG  International Programme on the Elimination of Child Labour
IRECs  Renewable Energy Conferences
IT  Information technology
ITPGRFA  International Treaty on Plant Genetic Resources for Food and Agriculture
KdB  Kaufhaus des Bundes
KfW  Kreditanstalt für Wiederaufbau
kg  Kilogram
KiföG  Child Support Act
KJP  Child and Youth Plan
SME  Small and Medium-sized Enterprise
KNB  Competence Centre for Sustainable Procurement
l  Litre
LDC  Least-Developed Countries
m²  Square metre
MAB  Men and Biosphere
Mbit  Megabit
MdB  Member of the Bundestag
MDG  Millennium Development Goal
MENA  Middle East and North Africa
mg  Milligram
Mill.  Million
MINT  Mathematics, Informatics, Natural Science, Technology
MSFD  EU Marine Strategy Framework Directive
NAP  National Action Plan
NAPE  National Action Plan on Energy Efficiency
NATO  North Atlantic Treaty Organization
NE(R)C-RL  Directive on the reduction of national emissions of specific air pollutants
NH₃  Ammonia
NMVOC  Non-Methane Volatile Organic Compound
NOₓ  Nitrogen oxides
NRW  North Rhine-Westphalia
NS  National Socialism
OB  Lord Mayor (Oberbürgermeister)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
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<td>OGP</td>
<td>Open Government Partnership</td>
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<td>OSPAR</td>
<td>Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic</td>
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<td>OSCE</td>
<td>Organisation for Security and Cooperation in Europe</td>
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<td>Partnership for Action on Green Economy</td>
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<td>Schools: Partners for the Future</td>
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<td>Programme for the International Assessment of Adult Competencies</td>
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