

# SUSTAINABLE DEVELOPMENT IN GERMANY

Indicator Report 2014



Federal Statistical Office of Germany



Nachhaltigkeits-  
strategie  
für Deutschland

---

**Published by**

Statistisches Bundesamt (Federal Statistical Office), Wiesbaden

**Layout and graphics**

Statistisches Bundesamt (Federal Statistical Office)

Published in October 2014

Status of indicators: April 2014

Order number: 0230002-14900-1

**Photo copyright**

© iStockphoto.com / radoma

Printed on RecyStar Polar, 100% recycled paper,  
Blue Angel certified.

© Statistisches Bundesamt (Federal Statistical Office), Wiesbaden 2014

Reproduction and distribution, also of parts, are permitted provided  
that the source is mentioned.

Sustainability policy is a long-term objective and should be independent of short-term, day-to-day political agendas. Continuity is a priority. In fact, Germany's national strategy for sustainable development has now been in place for twelve years. The Federal Statistical Office presents its fifth report on the development of the sustainability indicators in the Indicator Report 2014.

Sustainability by now is established as a central principle across the political community and the general public. The Federal Statistical Office's indicator report is now a reference standard and therefore a product increasingly in demand. By describing the development of indicators it provides an overview of the successes or failures in implementing the political strategy.

Tasks are distributed between politicians and statisticians in the sustainability strategy so that the Federal Government determines the topics, the indicators and the target values, while the Federal Statistical Office reports independently on the indicators by way of data provision and statistical analyses, and calculates target achieve-

ment levels. The Federal Statistical Office operates within its area of responsibility on the principle of neutral, transparent and independent reporting and insists on upholding this principle when working together with the Federal Government. Most of the data on the indicators are derived from official statistics, especially from environmental-economic accounting and from national accounts.

As a means of providing at-a-glance information on the status of the sustainability indicators, in the report every indicator is assigned one of four possible *weather symbols*. This symbol is neither a political appraisal nor – if the target year has not yet been reached – a forecast. It is merely the result of a simple forward projection to the target year on the basis of development in the past. The symbols represent a reading aid and serve to give a first impression of developments, but do not replace a study of the texts with its background information and analyses.

In order for the statistics to provide this evaluation, quantified political targets, characteristic for the national sustainability

strategy, are required. For some indicators, the originally adopted target years have now been reached or will be in the near future; for others, certain updated target formulations have now become too vague to allow a mathematical evaluation. Further development will be needed prior to any future updates.



Roderich Egeler

President of the Federal Statistical Office

# Contents

---

## I. Intergenerational equity

---

### Resource conservation

1a, b Energy productivity, Primary energy consumption . . . . . 6

1c Raw material productivity . . . . . 8

### Climate protection

2 Greenhouse gas emissions . . . . . 10

### Renewable energy sources

3a, b Share of renewable energy sources in final energy consumption, Share of renewable energy sources in electricity consumption . . . . . 12

### Land use

4 Built-up area and transport infrastructure expansion . . 14

### Species diversity

5 Species diversity and landscape quality . . . . . 16

### Government debt

6a, b General government deficit, Structural deficit . . . . . 18

6c Government debt . . . . . 20

### Provision for future economic stability

7 Gross fixed capital formation in relation to GDP . . . . . 22

### Innovation

8 Private and public spending on research and development . . . . . 24

### Education and training

9a 18- to 24-year-olds without a school leaving certificate . . . . . 26

9b 30- to 34-year-olds with a tertiary or post secondary non-tertiary level of education . . . . . 28

9c Share of students starting a degree course . . . . . 30

## II. Quality of life

### Economic output

10	Gross domestic product per capita . . . . .	32
----	---	----

### Mobility

11a	Intensity of goods transport . . . . .	34
11b	Intensity of passenger transport . . . . .	36
11c, d	Share of rail transport and inland freight water transport . . . . .	38

### Farming

12a	Nitrogen surplus . . . . .	40
12b	Organic farming . . . . .	42

### Air pollution

13	Air pollution . . . . .	44
----	-------------------------	----

### Health and nutrition

14a, b	Premature mortality . . . . .	46
14c, d	Smoking rates amongst young people and adults . . . . .	48
14e	Proportion of adults suffering from obesity . . . . .	50

### Crime

15	Criminal offences . . . . .	52
----	-----------------------------	----

## III. Social cohesion

### Employment

16a, b	Employment rate . . . . .	54
--------	---------------------------	----

### Prospects for families

17a, b	All-day care provision for children . . . . .	56
--------	---	----

### Equal opportunities

18	Gender pay gap . . . . .	58
----	--------------------------	----

### Integration

19	Foreign school leavers with a school leaving certificate . . . . .	60
----	--	----

## IV. International responsibility

### Development cooperation

20	Share of expenditure for official development assistance in gross national income . . . . .	62
----	---	----

### Opening markets

21	German imports from developing countries . . . . .	64
----	--	----

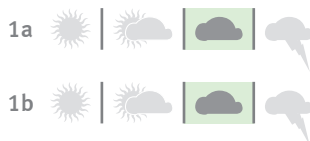
## Annex

	Indicator status summary . . . . .	66
	Definitions of the indicators . . . . .	72

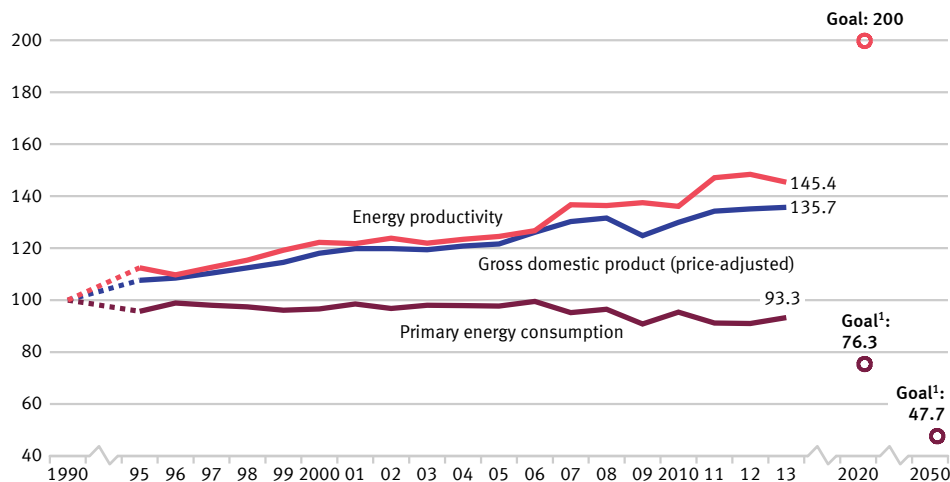
# I. Intergenerational equity

## Resource conservation

*Using resources economically and efficiently*



**Energy productivity and economic growth**  
1990 = 100



<sup>1</sup> These goals correspond to a reduction of primary energy consumption from 2008 levels of 20 % (76.3) in 2020 and 50 % (47.7) in 2050 (Energy Concept).

Source: Federal Statistical Office, Working Group on Energy Balances

## 1a Energy productivity

## 1b Primary energy consumption

The use of energy occupies a key position in the economic process because almost every production activity is associated with the consumption of energy. Private households use energy particularly for heating their homes and providing hot water, for electrical appliances and to run motor vehicles. Energy consumption is associated with numerous environmental burdens such as impairment of the landscape, ecosystems, soil and water, by means of extraction of energy resources, and emissions of pollutants and climate-active greenhouse gases. Last but not least, the consumption of non-renewable resources is of great importance in terms of maintaining the basis for life for future generations.

The aim of the sustainability strategy is to double energy productivity (price-adjusted gross domestic product per unit of primary energy consumption) by the year 2020 compared to 1990. At the same time, the aim is to reduce primary energy consumption by 20% between 2008 and 2020 (corresponding to a value for 2020 of 76.3 % relative to

1990 = 100) and by 50 % between 2008 and 2050 (corresponds to 47.7 % where 1990 = 100).

Energy productivity increased by 45.4 % in Germany between 1990 and 2013. The increase in productivity may signal a more efficient use of energy, but only corresponds to a conservative decrease in primary energy consumption of 6.7 % by 2013. The savings from efficiency increases are, on the whole, compensated by economic growth of 35.7 %. Continuation of the average development over the last five years will not be sufficient in terms of energy productivity, and even less in terms of primary energy consumption (no statistically significant trend), to achieve the defined targets by 2020.

Energy productivity fell by 2.0 % in 2013 compared to the previous year. Energy use increased by 2.5 % and the gross domestic product by 0.4 % compared to the previous year.

The increase in energy use is predominantly the result of the cooler weather in 2013 compared to the previous year. Based on the temperatures on the heating days in

2013 it was around 6 % colder in Germany than in the year before. In temperature-adjusted terms, the increase would have been substantially lower, at 1 %.

Energy use in private households (without fuels) increased by 2 % between 1990 and 2012, but fell by 5.9 % between 2000 and 2012. The increased demand for energy services increases energy use. Larger living areas govern space heating. However, savings in households and improved thermal insulation on buildings have considerably lowered fuel consumption. In the case of electricity, increases in the equipment of private households with electrical appliances has tended to increase consumption. From 2010 onwards a clear drop in consumption can be observed here too, which is probably related to savings resulting from the sharp price rises for electricity.

Industry's energy use increased between 2000 and 2012 by 7.3 %, while its output increased by 30.2 %. Energy productivity therefore increased by 21.3 % during this period. Energy use in the transport sector increased overall by 8.1 % between 1990 and 2012, but fell by 6.5 %, in contrast,

between 2000 and 2012. Decreasing consumption can be observed for road traffic (–10.3 % between 2000 and 2012; also see Indicators 11a and 11b), while air traffic reveals a large increase (of 24.4 % between 2000 and 2012).

The domestic energy industry is characterized by a high dependency on energy imports. The proportion of net imports (imports minus exports minus bunker) in the primary energy consumption increased in the period from 1991 until 2012 from 66.4 % to 68.3 %. Since the highest value of 73 % was recorded in 2006 the import ratio has been decreasing thanks to the increasing use of renewable energy sources.

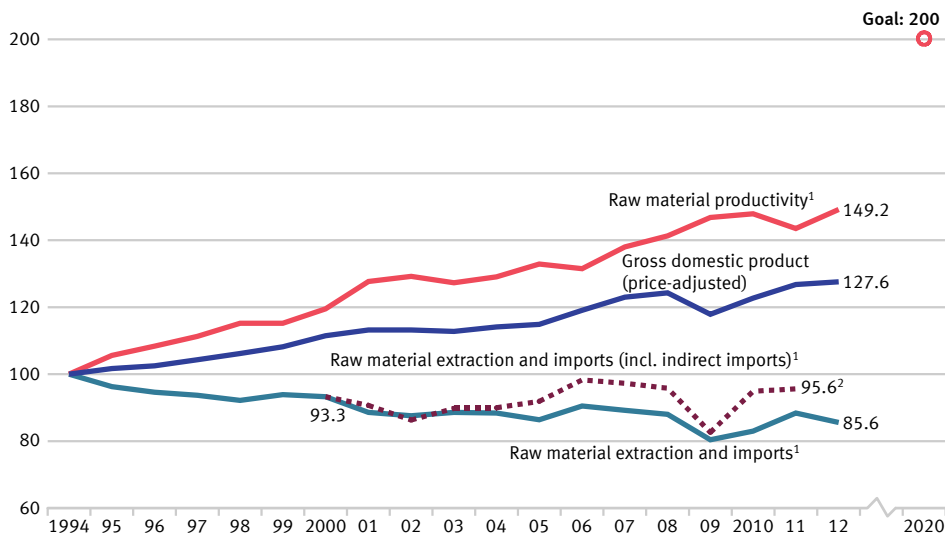
# I. Intergenerational equity

## Resource conservation

*Using resources economically and efficiently*



**Raw material productivity and economic growth  
1994 = 100**



<sup>1</sup> Abiotic. <sup>2</sup> Preliminary results.

### 1c Raw material productivity

The use of raw materials is crucial to many business processes. However it also has environmental implications. Moreover, the non-renewable natural resources consumed today will no longer be available to future generations. For many companies, raw materials are important input factors, and therefore cost factors. Economical and efficient use of raw materials is therefore in the interest of all social groups. With the national sustainability strategy the Federal Government has defined the objective of doubling raw material productivity by 2020 compared to the 1994 base year.

Raw material productivity expresses how much gross domestic product (in euros, adjusted for price) is obtained per tonne of abiotic primary material used. Abiotic primary material include raw materials withdrawn from the domestic environment – not counting agricultural and forestry products – as well as all imported abiotic materials (raw materials, semi-finished and finished products).



Raw material productivity increased by 49.2% between 1994 and 2012. While use of materials decreased (–14.4%), the gross domestic product went up by 27.6%. Following a comparatively clear increase in productivity between 2008 and 2009 (+5.4 percentage points), it only increased slightly in 2010 (+1.1 percentage point) and even decreased in 2011. In 2012 productivity increased again by 5.7 percentage points compared to the previous year, meaning that the 2010 level has now been exceeded. The effects of economic development during recent years are revealed here. Overall, the indicator progressed in the desired direction. However, the speed of the increase during the last five years would not be sufficient to achieve the defined target. This means that by the target year 2020 the indicator would have covered around 69% of the necessary ground to the target value, corresponding to the *cloudy* status.

The increase in raw material productivity between 1994 and 2012 is primarily the result of the decreasing use of construction

raw materials by 31.5% or 251 million tonnes. In contrast to this, the quantitative use of fossil fuels increased slightly during this period (+1.2%) and that of ores and their products substantially, by 40% or almost 35 million tonnes. The described increase in productivity was a result of an overall decrease in material usage at a time rising gross domestic product.

Also relevant to interpreting the development of the raw materials indicator is the fact that the abiotic material input is increasingly covered by imports (referred to as direct imports). The proportion of imported goods in the overall primary material input increased from 26% in 1994 to 38% in 2012. In particular, the increased imports of metallic semi-finished and finished products (+92%), and fossil fuels (+32%), are quantitatively relevant in this shift.

This development gave cause to provide the raw materials indicator with additional information, which also includes the *indi-*

*rect imports*, in addition to raw materials extraction in Germany and *direct imports*. The direct and indirect imports together comprise all raw materials used abroad to manufacture German imported goods (for example ores to manufacture machines or the fuels used in the production of steel). In 2011 around 616 million tonnes of goods (biotic and abiotic) were imported directly. Around 1,660 million tonnes of raw materials were used abroad in their production. Of this, around 1,500 million tonnes were abiotic raw materials. Abiotic raw materials input, as the sum of domestic raw materials extraction and imports, including indirect imports – shown in the graph as the dashed line – increased by 2.4% between 2000 and 2011. Abiotic primary material input – shown in the graph as the blue line – fell by 5.3% during the same period.

# I. Intergenerational equity

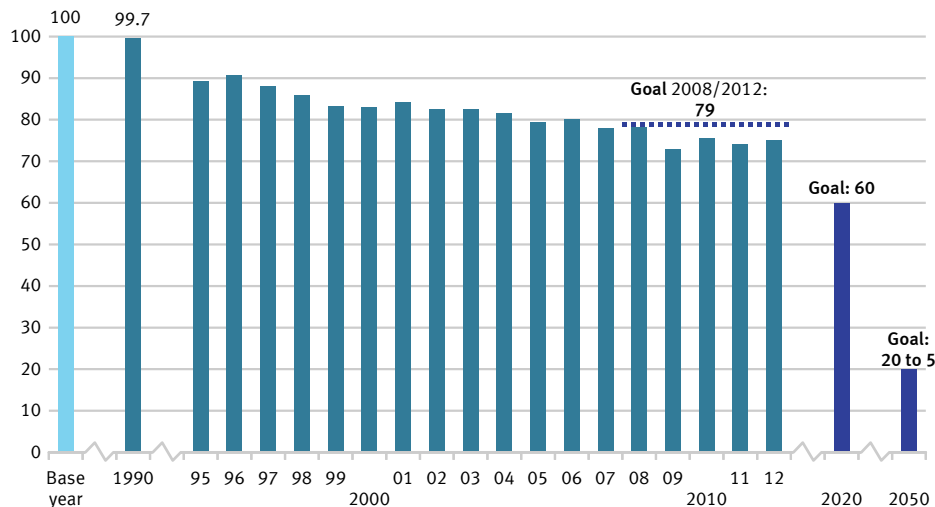
## Climate protection

### Reducing greenhouse gases



#### Greenhouse gas emissions (six Kyoto gases) in CO<sub>2</sub> equivalents

Base year = 100



Source: Federal Environment Agency

## 2 Greenhouse gas emissions

Climate change is an enormous challenge for mankind. Germany has thus committed itself to an average reduction of 21 % in emissions of the six greenhouse gases and greenhouse gas groups referred to under the Kyoto Protocol by 2008–2012 compared with the base year 1990. The Federal Government has set the advanced target of reducing emissions by at least 40 % by 2020 to below the 1990 level. The long-term objective of the Federal Government's energy concept is to reduce greenhouse gases by 80 to 95 % by 2050 compared to 1990.

According to the Kyoto Protocol, the following are regarded as greenhouse gases: Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide = laughing gas (N<sub>2</sub>O), partly halogenated hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulphur hexafluoride (SF<sub>6</sub>). These gases are mainly emitted on a quantity basis during the combustion of fossil energy sources, such as coal, crude oil and natural gas. Furthermore, they occur in other activities not involving energy sources, such as when producing

iron and steel, in the use of solvents, in the employment of mineral fertilisers, in animal husbandry and on disposal sites. Since 1990 Germany has substantially reduced its greenhouse gas emissions. Relative to the Kyoto Protocol base year (1990/1995; excluding emissions arising from land use changes and forestry), the total CO<sub>2</sub> equivalent emissions fell on average by 23.6% for the years 2008 to 2012 compared with the base year. This means that Germany more than achieved its Kyoto target. However, the next target for 2020, a reduction of 40% compared to 1990, will not be achievable without reinforced efforts.

By far the largest proportion of greenhouse gas emissions in 2012 was carbon dioxide, at 87.5%; in 1990 it was 83.5%. Methane at 5.2%, nitrous oxide at 6.0% and the fluorinated hydrocarbons at 1.0%, also contribute to greenhouse gases. Between 1990 and 2012 carbon dioxide alone fell by 220 million tonnes of CO<sub>2</sub> equivalents, or 21.1%. Around half of this reduction occurred in the first five years after 1990, predominantly as a result of company closures. In contrast, recent years have seen stagnation. Compared to the previous year,

the 2012 emissions even increased again slightly. According to the German Federal Environment Agency, this is the result of increased input of lignite and hard coal, as well as mineral oil, for power generation, and the weather (heating energy), but also of problems in conjunction with European emissions trading.

The results of Environmental-Economic Accounting reveal that German greenhouse gas emissions in 2011 primarily originated in the production sector at 59%, followed by private household consumption at 19.4%, the service sector at 15.1% and agriculture at 7.6%. Some of the high emissions of the production sector *Generation and distribution of electricity and gas* must be additionally attributed to the private households as a result of their use of electricity. The greenhouse gas emissions saved in 2011 compared to 1995 can be attributed to 59% to production and to 41% to private household consumption (including emissions from the use of biomass). In line with the *domestic model*, these calculations consider emissions of German residents abroad, but not those of foreigners in Germany.

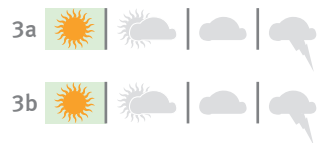
According to the European Environment Agency, greenhouse gas emissions in the EU 15 (excluding land use changes and forestry) fell by 11.8% between the base year and the obligation period (average of years 2008 to 2012). The target for the EU 15 for this period was a reduction of 8%. Of the 3.62 billion tonnes of CO<sub>2</sub> equivalents produced by the EU 15 in 2012, Germany was the largest emitter at 0.94 billion tonnes, followed by the United Kingdom at 0.58 billion tonnes, France at 0.49 billion tonnes and Italy at 0.46 billion tonnes.

The indicator has many cross-references, for example, to Indicators 1a, b, 3, 4, 5, 8, 11 and 12.

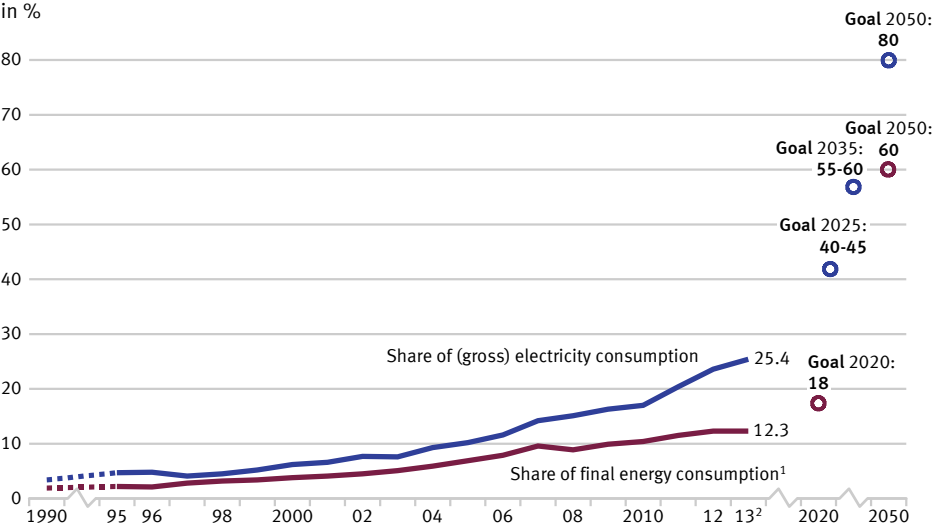
# I. Intergenerational equity

## Renewable energy sources

Strengthening a sustainable energy supply



Share of renewable energy sources in total energy consumption  
in %



1 Gross final energy consumption.  
2 Preliminary results.

Source: Working group on Renewable Energies-Statistics, Centre for Solar Energy and Hydrogen Research  
Baden-Württemberg, Federal Ministry for Economic Affairs and Energy; February 2014

3a Share of renewable energy sources  
in final energy consumption

3b Share of renewable energy sources  
in electricity consumption

The reserves of important fossil energy sources such as oil and gas are limited, and their use is associated with greenhouse gas emissions. A switch to renewable energies that constantly regenerate as natural energy sources, reduces energy-related emissions and consequently the extent of climate change. It reduces the dependency of energy imports, reduces the consumption of resources, can improve the security of supply, promotes technical innovation and leads to gains in efficiency. Renewable energies include, among others, hydropower, wind power on land and at sea, solar energy and geothermal energy, but also biomass, for example biogenic solid fuels, biogas and biogenic wastes. The aim of the Federal Government's sustainability strategy is to promote the development of renewable energy sources.

Progress in the use of renewables is measured by two sustainability strategy indicators. The share of renewables in total gross

final energy consumption (3a) is supposed to increase to 18 % by 2020 and to 60 % by 2050. According to the coalition agreement for the 18th legislation period, the share of electricity from renewable energy sources in (gross) electricity consumption (3b) will be increased to 40–45 % by 2025, 55–60 % by 2035 and at least 80 % by 2050.

Between 1990 and 2013 the share of renewable energy in final energy consumption rose from 2 % to 12.3 %. If development continues as in the last five years the 2020 target will be more than achieved. The percentage of electricity consumption rose significantly between 1990 and 2013 from 3.4 % to 25.4 %. The positive trend was reinforced as a result of legal measures such as the updated German Renewable Energy Sources Act (EEG) and the Renewable Energies Heat Act (EEWärmeG). The former obliges the producers of electricity to give precedence to renewable energy sources when buying electricity. Since January 2007 all businesses which place fossil fuels into circulation continue to be obliged to market a specified minimum quantity of biofuels. The endeavours of the sustainability strategy gain additional political and

financial support from the objectives of the energy turnaround.

The share of the different renewable energy sources in total final energy consumption from renewable energies varies greatly. In 2013 bioenergy achieved 62 %, wind energy 17 %, photovoltaics 9 % and hydro-power 7 %. In line with the structure of the total energy produced from renewable energies in 2013, 48 % related to electricity generation, 42 % to heat generation and 10 % to biogenic fuels.

The share of renewables in electricity generation has increased since 2000, in particular due to the increasing use of wind energy and photovoltaic installations. For example, electricity generation from wind energy increased from 9.5 terawatt hours in 2000 to 53.4 terawatt hours in 2013 (share of total renewable electricity: from 26 % to 35 %). The share of wind energy at sea in wind energy as a whole in 2013 was 1.8 %. Photovoltaic electricity generation increased between 2000 and 2013 from 0.060 terawatt hours to around 30 terawatt hours (share of total renewable electricity: 20 %). Biomass electricity generation has

increased tenfold during the same period. Heat generation from biomass renewables reached 88 %.

As a result of the reduced emissions, the indicator has a positive impact on the development of greenhouse gas emissions (Indicator 2). According to calculations by the Federal Environment Agency the use of renewable energies in 2013 avoided greenhouse gas emissions of approximately 148 million tonnes CO<sub>2</sub> equivalents. Positive cross-relationships can also be seen to air quality and to economic indicators. However, the cultivation of energy crops may be accompanied by negative consequences for landscape quality and biodiversity, impair the appearance of the landscape and lead to land competition on limited agricultural land (see Indicators 5, 12b).

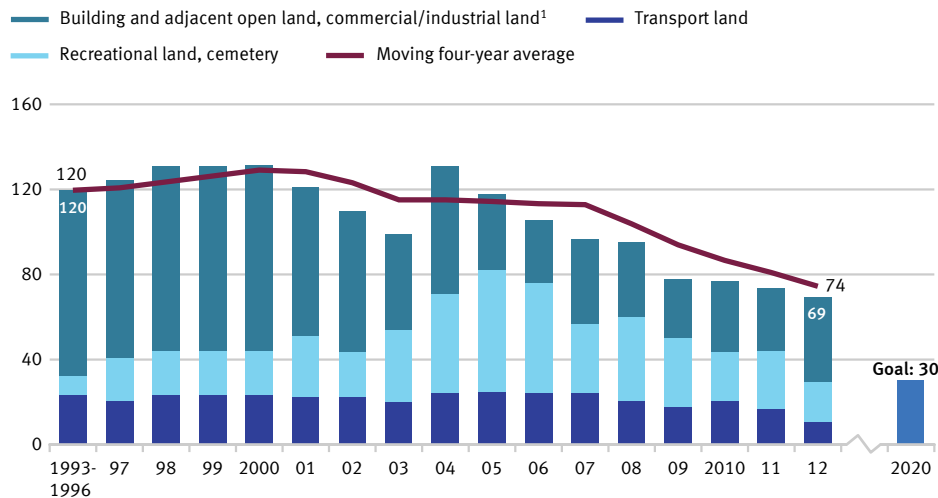
# I. Intergenerational equity

## Land use

### Sustainable land use



#### Built-up area and transport infrastructure expansion in ha per day



<sup>1</sup> Except mining land.

#### 4 Built-up area and transport infrastructure expansion

Undeveloped land, which is intact and not affected by large-scale housing development, is a limited but very much sought-after resource. There is competition for its use for example from agriculture and forestry, housing and transport, nature conservation, resource extraction and energy generation. The housing and transport areas in particular are continually expanding.

The direct environmental consequences of the expansion of housing and transport areas include the loss of natural soil functions through sealing, the loss of fertile agricultural land or the loss of areas still close to their natural state with their biodiversity. In addition to this each new instance of the preparation for development of land abutting urban areas or land outside present settlement clusters entails further traffic and area fragmentation. This leads to consequential damage such as noise and pollutant emissions, and also to an increased expenditure for providing the necessary infrastructure.

The Federal Government's goal is to limit the use of new areas for housing and transport purposes to an average of thirty hectares per day by 2020.

The increasing development of housing and transport areas has slowed down in recent years with a recognisable trend. The moving four-year average for greenfield sites used for housing and transport was 74 hectares per day in 2012. Continuing the average annual trend of the last few years would still not be sufficient, however, to reach the proposed reduction goal by 2020.

The housing and transport area includes *building and adjacent open area, operating area (except exploitation area), recreation area, cemetery and transport area*. Housing and transport area and sealed area cannot be considered identical since housing and transport area may also include areas that are neither housing nor sealed. Estimates reveal a degree of sealing of 43 % to 50 % for housing and transport areas. Even recreation areas have sealed areas, for example sports grounds.

Calculating the rise in the housing and transport area as a moving four-year

average – represented as a line on the graph – currently supplies more solid information than that related to details for individual years. This is related to methodological reorganisation of the public land survey registers on which the area statistics are based. The moving four-year average shows an ongoing reduction in the growth of the housing and transport area between 2000 (129 hectares per day) and 2012 (74 hectares per day). Development corresponds to gross fixed capital formation in construction, which has fallen, price-adjusted, by 9.7 % over the period. If the details of this development are studied, it can be seen that following continuous reduction until 2005, gross fixed capital formation in construction began to rise and fall. Whether or not this is reflected in a mid-term increase in housing and transport area remains to be seen.

If the housing and transport area situation is considered over an extended period, the following result can be seen: between 1993 and 2011 the housing and transport area increased by 19.0 %. Housing area increased by 25.6 %, transport area by 9.4 %. In the *Road, path, square* use category, the

increase was only 6.3 %. In contrast, the kilometres travelled by road have increased by 22.3 % during this period. Existing roads, then, are being more intensely used.

It can be seen from the graph that housing area in the years 2005, 2006, 2008 and 2009 is temporarily dominated by an increase in the use category *Recreation area, cemetery*. This was caused, among other things, by the previously discussed land register reorganisation. In 2012 the proportion of recreation areas and cemeteries in housing and transport area was 9.4 %.

The indicator has cross-relationships, in particular to sustainability strategy Indicators 7, 11a, 11b and 11c.

# I. Intergenerational equity

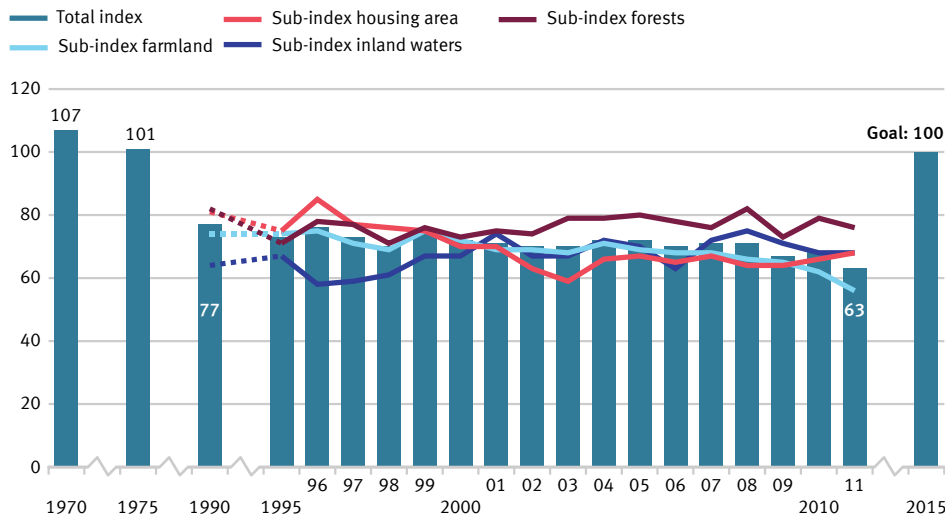
## Species diversity

*Conserving species – protecting habitats*



### Species diversity and landscape quality

Index 2015 = 100



The total index for the time series is presently calculated without the sub-index for the Alps.

Source: Federal Agency for Nature Conservation, February 2014

### 5 Species diversity and landscape quality

A wide diversity of animal and plant species is a fundamental prerequisite for an efficient natural environment and is an essential basis for our human livelihood. Nature and the landscape in Germany bear the marks of centuries of use. Small-scale protection of species and habitats alone will not be sufficient to preserve the diversity which has been created by use and has also arisen naturally. What is required instead are sustainable forms of land use throughout the entire landscape, restrictions on emissions and a gentle way of dealing with nature. In this way species diversity can be preserved and at the same time the quality of human life can be secured.

The indicator supplies information on species diversity, landscape quality and on the sustainability of land use. The calculation of the indicator is based upon the development of the stocks of 51 bird species which represent the most important types of landscape and habitat in Germany (agricultural land, forests, settlements, inland waters, coasts and seas and currently not including



the Alps for methodological reasons). The size of the bird population (based on the numbers of territories or breeding pairs) reflects the suitability of the landscape as a habitat for the selected bird species. This indicator also indirectly reflects the development of a number of other species in the landscape and sustainability of land use, since there are also other species besides birds that rely on a richly structured landscape with intact, sustainably used habitats. A body of experts has determined target population values for 2015 for each individual species, which could be reached if the European and national legal provisions relating to nature conservation and the guidelines on sustainable development were implemented quickly. Every year a value for the overall indicator is calculated based on the degree to which the goals for all selected bird species have been achieved.

The value of the indicator for species diversity and landscape quality in 1990 was clearly below the reconstructed values for 1970 and 1975. In the last 10 years under consideration (2001 to 2011) the indicator value has shown a statistically significant deterioration. In 2011 it was only 63 % of

the target value and has thus fallen to its lowest value for the time series represented. Considerable additional effort is necessary by federal and state governments, as well as at the municipal level, in almost all political fields in terms of nature and landscape conservation, in order to reverse this trend.

This is predominantly the case in rural areas, because the negative course of the overall index is primarily influenced by the sub-indicator for agricultural land. Since 2011 it has fallen to 56 % of the target value and statistically it has deteriorated significantly in the last ten years, similar to the sub-indicator for coasts and seas, which fell to 61 % of the target value by 2011. The sub-indicators for inland waters and housing were both 68 % of the target value; at 76 % of the target value the sub-indicator for forests had the most favourable value of the sub-indicators in 2011 (no statistically significant trend).

Some of the chief causes of the decline in species diversity are – with regional differences – an intensification of farming use and forestry, the fragmentation and urban sprawl, the sealing of areas and the

depositing of substances (such as acidifiers or nutrients). In housing areas the loss of near-natural areas and village structures because of building activities and soil sealing is having a negative effect. Endangering factors for habitats on the coast include disturbances due to increased recreational use and overbuilding (such as from coastal protection measures or wind turbines).

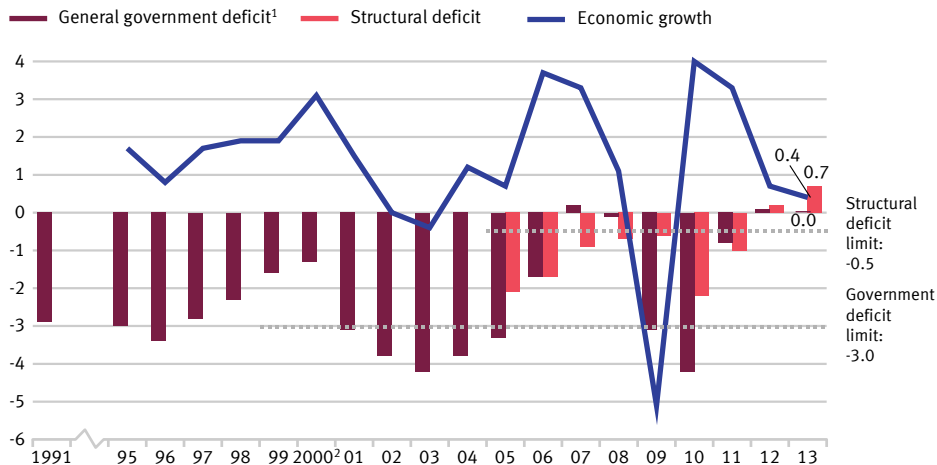
The climate change caused mainly by greenhouse gas emissions is today already leading to a shift in the distribution areas of many species and is beginning to alter landscapes in Germany. Climate change caused by human activity could in the future considerably alter both species diversity and the range of species through the migration and extinction of animal and plant species. Grassland ploughing and the increasing cultivation of fuel crops can also have a negative impact on the quality of the landscape and species diversity. This indicator has direct and indirect cross-references to many indicators of the strategy, including 1c, 2, 3, 4, 11, 12 and 13.

# I. Intergenerational equity

## Government debt

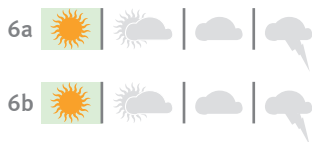
*Consolidating the budget –  
creating intergenerational equity*

**Ratio of government deficit  
to gross domestic product in %**



1 Overall balance of public finances in % of GDP. 2 Excluding revenue from the sale at auction of UMTS licenses.

Source: Federal Statistical Office, Federal Ministry of Finance, February 2014



## 6a General government deficit

### 6b Structural deficit

Robust national finances represent an important contribution to sustainable fiscal policy. Any policy financing national expenditure by excessively increasing the national deficit and leaving repayment for future generations would not be sustainable.

The government deficit indicator is oriented to the *Maastricht criteria* introduced at the European level. It only allows the annual government deficit of the Eurozone member states to remain below the reference value of 3 % of gross domestic product (GDP). In the mid-term, a structurally balanced budget or a surplus is aimed for. The structural deficit was therefore incorporated as an additional indicator in the sustainability strategy. The structural financial deficit is a measure of the financing shortfall in public budgets and reflects the government budget deficit over and above the economic cycle. Germany will achieve this mid-term target if it adheres to a federal structural deficit, i.e. a deficit adjusted for cyclical and non-recurring effects, of 0.5 % of GDP

maximum. To determine this boundary, future burdens on public budgets as a result of population ageing are also taken into consideration, in addition to the debt-to-GDP ratio.

The federal and state deficit regulations embodied in the German constitution aim to ensure that the national stipulations in the stability and growth pact are also nationally implemented. They state that neither expenditure increases nor tax reductions may be permanently financed by borrowing. By 2016, the Federal Government must limit its structural net borrowing in uniform steps to a maximum of 0.35 % of GDP. The German states may no longer show any structural deficits at all from 2020.

Public finances in Germany were also heavily affected by the financial and economic crisis. Following a marginal deficit in 2008, the general government financial balance deteriorated in 2009 to a 3.1 % deficit in relation to GDP. In 2010 the Maastricht reference value was clearly exceeded with a deficit of 4.2 % (corresponding to Euro

104.3 billion). The structural deficit in 2010 was 2.2 % of GDP. The mid-term target of a maximum general government deficit of 0.5 % was exceeded as a result of expansive fiscal policy measures aimed at overcoming the crisis.

From 2010 on both the government deficit and the structural deficit were substantially reduced. Nationally, it was even possible to achieve slight financial surpluses in 2012 and 2013. After 2010 all levels of government contributed to reducing the financial deficit. Communities and social security even achieved surpluses from 2011 and 2010 onwards, respectively. The Federal Government reduced its deficit by 2013 to Euro 6.8 billion; the states reduced theirs to Euro 3.0 billion. Both the Maastricht reference value and the structural deficit target value were adhered to in 2013.

Large revenue increases, in particular from taxes and social security contributions, and only minor increases – until 2012 – in expenditure contributed to the deficit reduction in the years 2011 to 2013. In 2011 expenditure even fell by 1.3 % com

pared to 2010. However, at 2.7 % compared to the previous year, expenditure increased more rapidly than revenues (2.5 %) once again in 2013. Tax revenues increased in 2011 by 7.8 %, in 2012 by 4.2 % and in 2013 by 3.0 %, in each case in comparison to the previous year. Social security contributions increased as a consequence of increasing employment. With regard to unemployment insurance, the drop in the number of unemployed and short-time workers even led to an absolute reduction in expenditure.

# I. Intergenerational equity

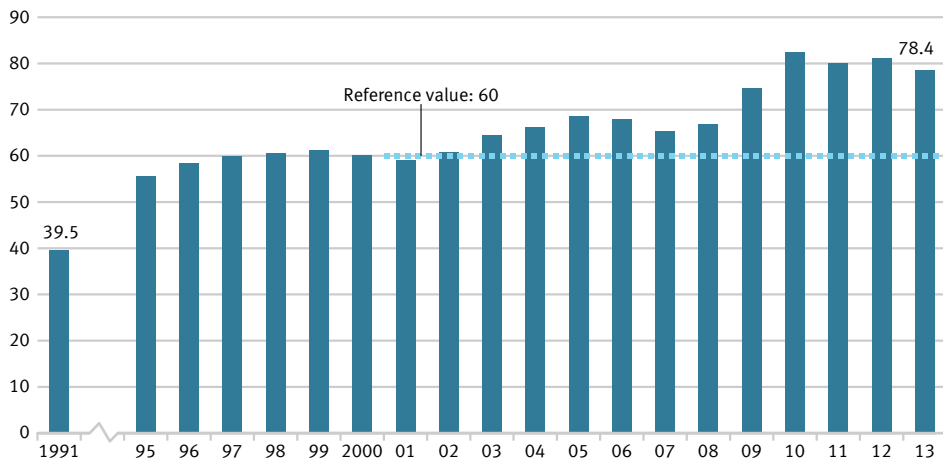
## Government debt

*Consolidating the budget –  
creating intergenerational equity*



### Ratio of government debt to GDP

Government debt (Maastricht) in % of GDP



Source: Federal Statistical Office, German Central Bank, April 2014

### 6c Government debt

Besides the government deficit, the general government debt is another important indicator of robust national finances. Among other things, state expenditure for interest payments depends on the level of general government debt. The question of up to what general government debt the finances of a state may be regarded as sustainable, is impossible to answer in general terms. The answer to that can vary extremely from state to state and depends, among other things, on long-term economic developments, i.e. on the growth potential of the respective state. The debt-to-GDP ratio is the predominant factor for the sustainability of public finances, that is the debt relative to the gross domestic product. The debt-to-GDP ratio is a measure of the relative debt burden on the government budget.

In the European Union's stability and growth pact the reference value for the maximum debt-to-GDP ratio is defined as 60%. This is also the relevant national indicator target value for the report. The deficit regulations embodied in the German constitution aim to ensure that the debt-to-GDP ratio is sustainably reduced.

Since 2002, the debt-to-GDP ratio in Germany has remained above, and is now even substantially higher, than stipulated for the European Union. After it had dropped in the middle of the last decade to 65.2 % in 2007 as a result of the consolidation of public budgets, it increased to a new high of 82.5 % in 2010. The increase is related to the financial and economic crisis. The large increase from 74.6 % in 2009 to 82.5 % in 2010 is predominantly the result of the newly formed deconsolidated environments for the banks Hypo Real Estate and WestLB being allocated to the *State* sector and their liabilities being incorporated in the general government debt. This alone increased the general government debt in 2010 by Euro 237 billion. In total, the crisis on the financial markets increased the general government debt by Euro 309 billion (12.4 % of GDP) by 2010. However, at the same time this increased the government's financial assets. No payments have yet been made from public budgets for this purpose. This part of the new debts therefore did not lead to higher interest payments in the budgets.

Following the previous highest level of debt in 2010 the consolidation course of

the local authorities and reduced burdens arising from the crisis on the financial markets, for a simultaneous strong increase in gross domestic product, initially led to a slight decrease in 2011. Despite a further decrease in the government budget deficit, new burdens arising from the sovereign debt crisis in the Eurozone in 2012 led to a renewed deficit increase – in particular at the federal level. The impacts of the European sovereign debt crisis increased the federal deficit by Euro 85 billion by 2013. In contrast, the burdens arising from the financial markets crisis have fallen by Euro 53 billion until 2013 since the highest level in 2010.

In 2013 government debt was around Euro 2,147 billion. This amounts to Euro 26,200 per person.

Following a large increase in debt of Euro 73 billion in 2012, it was possible to reduce the 2013 debt by Euro 14 billion. The federal debt at the end of 2013 increased to around Euro 1,362 billion. The states' debts fell in 2013 by Euro 17 billion to Euro 645 billion. Similar to previous years, social security achieved a budgetary surplus and had assets of around Euro 3 billion in 2013. 63.4 % of

the total debt are allocated to the Federal Government, 30.0 % to the state governments and 6.7 % to the municipalities.

In the financial statement, the government debt is on the assets side, balancing the assets – tangible assets and financial assets. Only when debts and assets are balanced is a meaningful economical statement on the burden on future generations possible. The largest item of national assets is structures (roads, schools, public buildings). The Federal Statistical Office tangible assets balance sheet reveals that they had an asset value (after depreciation) of Euro 1,154 billion in 2012. The second largest asset value are the securities, due to the stakes in what are referred to as the deconsolidated environments.

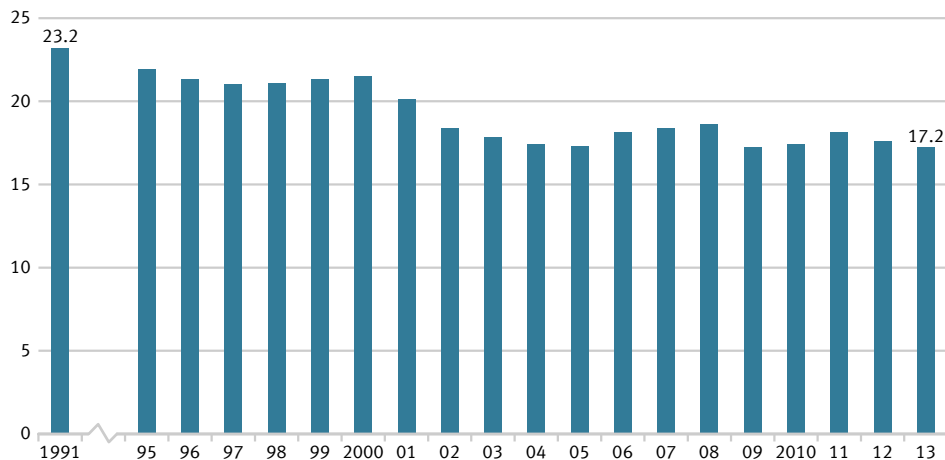
## I. Intergenerational equity

### Provision for future economic stability



*Creating favourable investment conditions – securing long-term prosperity*

**Gross fixed capital formation in relation to GDP**  
in %



### 7 Gross fixed capital formation in relation to GDP

Economic performance and the competitiveness of a national economy crucially depend on business and state investment. In particular, investments in new equipment and intangible assets lead to innovations being implemented and markets – and thus also jobs – being secured or expanded. At the same time investments can contribute to increasing the energy and resource efficiency, for example, via energy saving measures in buildings, introducing more environmentally efficient production technologies or manufacturing more environmentally efficient goods. On the other hand, gross fixed capital formation in construction involves considerable use of materials, insofar as they are expansions, and additional exploitation of housing and transport areas (see the environment-related indicators, e. g. 1c and 4). The aim of the Federal Government's sustainability strategy is to increase the proportion of gross fixed capital formation in gross domestic product (investment ratio). The Federal Government aims for a total investment ratio above the OECD average (coalition agreement for the 18th legislative period).

Gross fixed capital formation includes buildings (residential and non-residential), equipment (machinery, vehicles, tools) and other assets (intangible assets, such as software and copyrights, property transfer costs, production livestock). Investments in research and development also make an important contribution to sustainable economic development (see Indicator 8). However, they will only be listed as investments in the future – in the review of the national accounts.

The indicator has moved against the desired direction in both the long- and the mid-term. Where the ratio at the beginning of the time series, in 1991, was still a comparatively favourable 23.2%, it fell to 17.2% in 2013. Since 1991 it has only been as low as this in 2009. During the last five years, which serve as the baseline for evaluation, the indicator has fallen by an average of 1.5 % per annum (no statistically significant trend). Germany's investment ratio between 2009 and 2012 averaged less than the OECD ratio (17.6 % to 19.5 %).

A look at the time series reveals an investment ratio dropping in waves with down-

ward steps in 2001 and, following a slight recovery, in 2009 as a consequence of the 2008/2009 economic and financial crisis.

Investment activity recovered slightly by 2011 and fixed capital formation reached the level of the year prior to the crisis, only to fall again since then. Gross fixed capital formation in machinery and equipment, in particular, has been falling since 2011. It fell (price adjusted) in 2012 by 4.0 % and in 2013 by 2.4 % (compared to the respective previous year). Following the boom of the 1990s after German reunification, gross fixed capital formation in construction fell from 1999 until 2005 and increased again following the 2009 crisis year, primarily driven by above average investments in dwellings. The latter increased (price adjusted) until 2013 by 16.1 % compared to 2009. In 2012 gross fixed capital formation in construction fell slightly (–1.4 % compared to the previous year) and stagnated in 2013.

Between 1991 and 2012 investment activity was heavily displaced away from the production sector to services. While 27.5 % of new investment came from companies in

the manufacturing sector in 1991, this was a mere 18.5 % in 2012. In contrast, 79.7 % of 2012 investments came from the services sector. In 1991 this was still 70.7 %. The largest investing sector was real estate and residential properties. In 2012 this sector accounted for 35.2 % of total new investment.

The total net fixed assets (sum of fixed capital formation minus depreciation) in 2012 were around Euro 8,681 billion. This means that fixed assets increased by 87.1 % compared to 1991. When determining total assets, the value of land and financial assets are added to tangible assets (also see Indicator 6b).

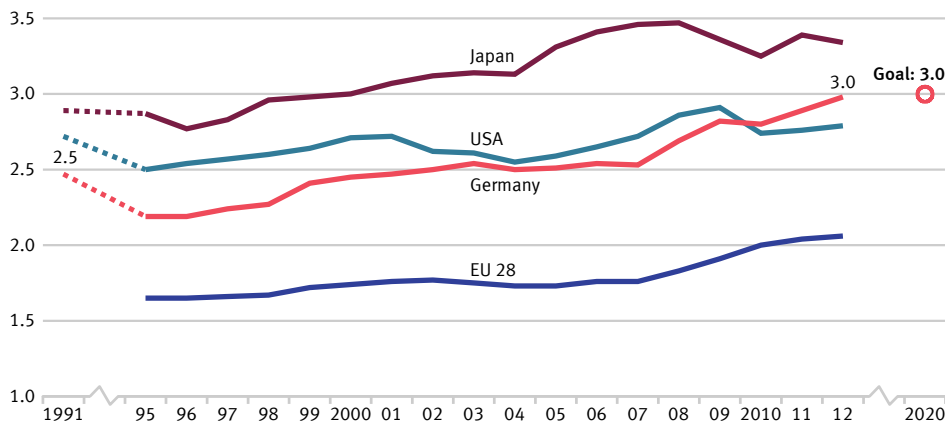
# I. Intergenerational equity

## Innovation

*Shaping the future with new solutions*



**Private and public spending on research and development**  
Spending as % of GDP



Source: Federal Statistical Office, Organisation for Economic Co-operation and Development (OECD)

## 8 Private and public spending on research and development

Spending on research and development (R&D) is a significant parameter in determining the pace of innovation of an economy, although not the only one. The higher the spending, the better the prospects of a more dynamic development of productivity, stronger economic growth, improved competitiveness and, last but not least, the chances of our production and consumer patterns developing further in the direction of sustainability.

This present indicator includes spending on R&D by industry, public institutions and institutions of higher education as a percentage of gross domestic product (GDP). In 2002 the Council of Barcelona set a European goal for the share of expenditure for R&D of 3 % by 2010, and the Federal Government incorporated this goal for Germany early on as part of its national sustainability strategy. In 2012 it was agreed, compliant with the EU target, to aim for a share of expenditure for research and development of 3 % of GDP by 2020 (instead of by 2010, as previously) in the framework of the EU 2020 Strategy.



According to provisional figures, overall R&D expenditure in Germany in 2012 amounted to Euro 79.4 billion. This corresponds to a GDP share of 3.0%. By comparison this value stood at 2.8% in the USA in 2012 and at 3.3% in Japan. The EU 28 region however had a significantly lower proportion of R&D expenditure in the GDP (2.1% in 2012). Since 2000 the share in Germany has increased by 0.53 percentage points. It initially fell during the 1990s and following a low in 1995/1996 did not increase above the 1991 level again until 2002. The target originally aimed for 2010 (3.0% share of R&D expenditure in GDP) was not achieved at this time (2010 share of expenditure: 2.8%). As the target was reached for the first time in 2012 the prerequisites for at least holding this level until 2020 appear favorable.

Internal research within industry accounted for by far the largest share of R&D expenditure at around 68% in 2012, 18% was spent by institutions of higher education and 14% by public and private non-profit research institutions. Staff employed in R&D in 2012 comprised around 590,000 full-time equivalents (FTE), with only the

proportion of their working hours attributable to the area of R&D being taken into consideration. Some 62% of these employees are attributable to business, 22% to institutions of higher education and 16% to public and private non-profit research institutions.

With regard to disciplines, in both the public and private non-profit research institutions the natural and engineering sciences were particularly important (48% and 25% respectively of the R&D expenditure for 2012 in this area). Research in the humanities and social sciences accounted for around 13% of expenditure, human medicine for 9% and agricultural sciences for 5%.

Industry's R&D activities focused on the automotive and aerospace fabrication industries, data processing and electrical engineering, chemical and pharmaceutical products, and mechanical engineering – together around 74% of private industry expenditure. The automotive industry alone in 2012 spent about Euro 17.4 billion on R&D (source: Stifterverband scientific statistics).

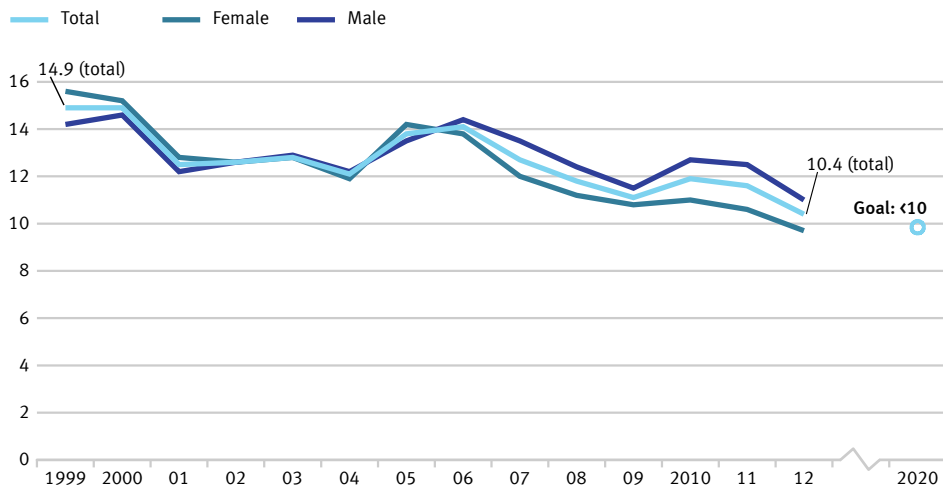
## I. Intergenerational equity

### Education and training

*Continuously improving education and vocational training*



**18- to 24-year-olds without a leaving certificate from post-16 education and not in training**  
Share of all 18- to 24-year-olds in %



#### 9a 18- to 24-year-olds without a school leaving certificate

The state educational system and the dual system of vocational training are the cornerstones of future-orientated qualifications for young people in Germany. A lack of school leaving and vocational qualifications means a risk of poverty and a strain on the social system. The Federal Government's declared aim is to ensure that all young people leave school with qualifications and go on to obtain an apprenticeship or complete a university degree course.

This education indicator describes education deficits based on the proportion of early school leavers. This means the proportion of all 18- to 24-year-olds who currently do not attend any school or institution of higher education and are also not involved in any further education *and* hold no qualifications from post-16 education (university entrance level or completed vocational training). This means that young people who for example have successfully completed the *Hauptschule* or the *Realschule* (Level 2 of the International Standard Classification of Education) but did not subsequently complete vocational training,

did not qualify for university entrance or are no longer involved in the education process are counted as being early school leavers. In adapting to the EU2020 strategy, the Federal Government annulled the national strategy target for 2010 (9%) and modified the target for 2020. In 2020 the proportion of early school leavers should be less than 10% (previous target: 4.5%). In 2012 the indicator value was 10.4% and would easily achieve the new target given a continued average development as in the last five years. The improved evaluation compared to the second-to-last report must be viewed in light of the target modifications.

In 2012 a total of 668,000 young people remained without an apprenticeship or qualifications from post-16 education. Between 1999 and 2012 the proportion of such young people amongst 18- to 24-year-olds decreased from 14.9% to 10.4%, but in 2006 it still stood at around 14.1% and in 2011 at 11.6%. Since 1999 the gender-specific figures of the indicator have deviated from the total values to differing extents. In 2012 the proportion of young women stood at 9.7%, lower than that of young men at 11.0%.

In terms of the proportion of early school leavers, the school statistics show that in 2012 a total of around 47,648 young people (6.0% of the graduating year) left school without a *Hauptschulabschluss* (general school leaving certificate) – not shown in the graph. This proportion has dropped by 34.4% compared to 1999. In the case of young women the proportion continues to be markedly smaller (4.9%) than that of young men (7.0%). In 2012, 19.8% (157,498) of all school leavers with a school leaving certificate obtained a *Hauptschulabschluss*, some 43.3% (344,527) a *Realschulabschluss* (intermediate certificate), 1.6% (13,945) a *Fachhochschulreife* (applied sciences university entrance qualification) and 35.2% (305,172) the *allgemeine Hochschulreife* (general higher education entrance qualification). The proportion of school leavers with a *Hauptschulabschluss* has declined since 1999 by 6.3 percentage points, while the proportions of school leavers with a *Realschulabschluss* rose by 2.5 percentage points, of those with a *Fachhochschulreife* by 0.6 percentage points and of those with the *allgemeine Hochschulreife* by 10.5 percentage points.

Both family and social background and knowledge of the German language play a significant role in school and professional development of young people in Germany. There continues to be a large discrepancy between the educational successes of Germans and those of young foreigners (see Indicator 19). At the end of 2012, 1.4 million young people were employed in a dual system apprenticeship, 2% less than the previous year. Vocational training statistics reveal that the number of new training agreements in 2012 fell to 549,003 (–3.0% compared to the previous year), whereby the drop in the former West German *Länder* (–2.5%) was lower than in the eastern new *Länder* and Berlin (–5.5%). At 3%, the proportion of apprentices with new training agreements and without a *Hauptschulabschluss* was extremely low. Where applicants could not be placed, unfulfillable career wishes and a lack of regional openings in apprenticeships are decisive, in addition to a lack of qualifications. Today, companies find it increasingly difficult to fill their training openings, in particular in the new states, as a consequence of the demographically related reduction in applicants.

# I. Intergenerational equity

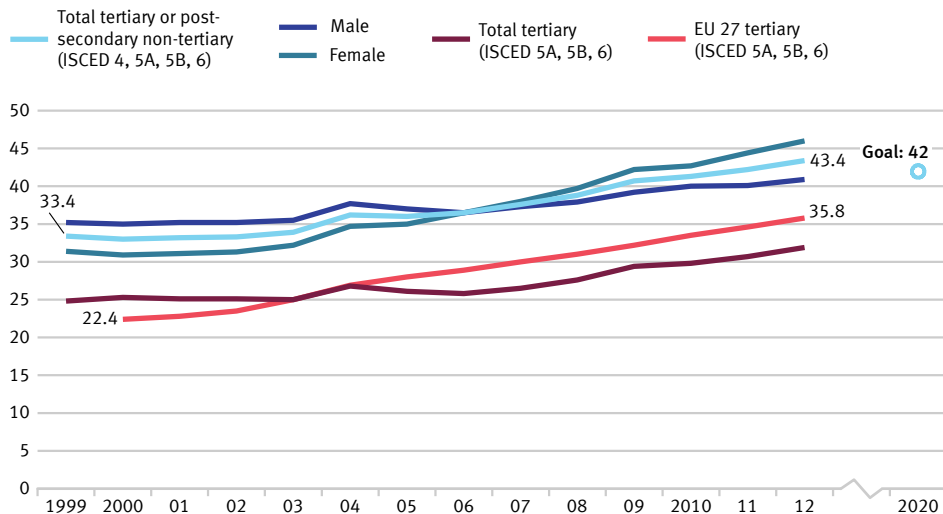
## Education and training

*Continuously improving education and vocational training*



### 30- to 34-year-olds with a tertiary or post-secondary non-tertiary level of education

Share of all 30- to 34-year-olds in %



### 9b 30- to 34-year-olds with a tertiary or post-secondary non-tertiary level of education

Highly developed economies, such as the German one, in which the service sector and the need for knowledge and expertise sectors are becoming increasingly prominent in comparison to production industries, require a highly qualified workforce. Based on a 2010 core target of the Europe 2020 strategy, the national sustainability strategy indicator modified by the Federal Government in 2012 defines the proportion of all young people between the ages of 30 and 34 (previously: 25 years) with a tertiary level of education (International Standard Classification of Education/ISCED levels 5/6) or a similar qualification (ISCED 4).

Included among tertiary certificates are those attained from universities and universities of applied sciences (ISCED 5A/6) as well as from universities of applied administrative sciences, vocational and specialist academies, technical colleges and health care colleges (ISCED 5B). Moreover, the new indicator also includes post-secondary, non-tertiary qualifications (ISCED 4,

see Annex). These are characterised by the fact that two certificates from post-16 education or from the dual system of vocational training can be acquired consecutively or simultaneously, e.g. *Abitur* (A-Level equivalent) from an evening school, college or vocational/technical schools (this presupposes that a vocational certificate has already been attained) or a vocational training certificate following *Abitur* or two consecutive vocational training certificates. If the federal and state governments have their way, the national indicator will increase to 42 % by 2020. The Europe 2020 strategy specified a 40 % target for tertiary or similar qualifications.

Based on 33.4 % in 1999, the national strategy indicator increased by 10 percentage points by 2012 and at 43.4 % in 2012 was already considerably higher than the national target value for 2020 defined by the German cabinet. At 46.0 % women were clearly above the target value, and men below at 40.9 %. These favourable values are related to the incorporation of post-secondary, non-tertiary qualifications, which is not commonly used internationally, because these qualifications do not exist in

many other countries. The stricter, i.e. oriented around ISCED 5/6, indicator for the EU 27 achieved a figure of 35.8 % in 2012, following a continuous rise since 2002. If the EU indicator definition was adopted for Germany (share of 30- to 34-year-olds with tertiary qualification), the value, based on 24.8 % in 1999, would increase by 7 percentage points and in 2012 would be almost 4 percentage points below the EU value, at 31.9 %. In 2012 the women's share was 2 percentage points above that of the men.

The total number of all university graduates in 2012 was 413,338, 86 % more than in 1999. This included 77,775 engineering sciences graduates (84 % more than 1999) and, at 70,343, far more than double the mathematics graduates than in 1999.

The European-wide revision of university programmes (in the so-called 'Bologna' process) had the goal of introducing bachelor's and master's courses in order to encourage international mobility of students and graduates and enhance the attractiveness of European universities for foreign students. In 2012, 72.8 % of all first-year students in

Germany (as in the previous year) chose a course leading to a bachelor's degree and 4.6 % a course leading to a master's degree (previous year 3.7 %). In contrast, the traditional state examinations and others (15.9 %, in the previous year 16.2 %) continued to reduce, German *Diplom* and *Magister* courses practically stagnated (6.8 %, in the previous year 7.3 %). Study durations were also shorter following the introduction of B.Sc courses. The average age of first degree graduates is influenced by the age when starting school, the duration at school, the duration of the transition from the school to the university system and the length of study. The 2012 graduates achieved their Bachelor's degree on average at 25.6 years (previous year: 25.5 years), while they were 28.5 years old on achieving their Master's degree (previous year: 29.1 years) and therefore slightly older than *Diplom* graduates (28.0 years; in the previous year 27.9 years).

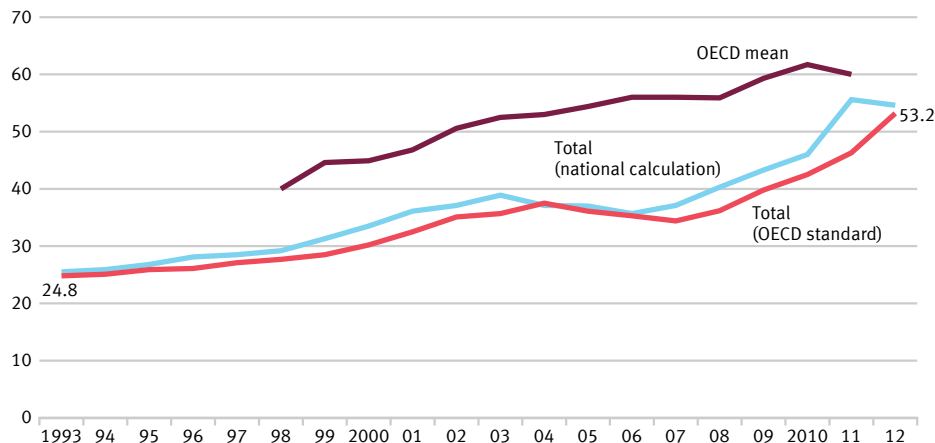
## I. Intergenerational equity

### Education and training

*Continuously improving education and vocational training*



**Share of students starting a degree course**  
Share in %



#### 9c Share of students starting a degree course

An educational policy which enables as many young people as possible to acquire educational qualifications is a prerequisite for our society's ability to meet the challenges of the future. The rate of students starting a degree course measures the number of first-semester students (from Germany and abroad enrolled at institutions of higher education excluding universities of applied administrative sciences) expressed as a percentage of the population of the appropriate university-entrance age. The Federal Government's goal by 2010 was to increase the number of students starting a university course to 40 %, and in subsequent years to develop and stabilise this at a high level. In terms of the necessary measures, the responsibility of the German states for matters of education policy must be taken into consideration.

Between 1993 and 2004 the share of students in Germany starting a university course (calculated according to the OECD standard) improved from 24.8 % to 37.5 %. Following a drop from 2005 to 2007 it increased again strongly and in 2012 reached 53.2 %. At 51.6 % among women, the ratio

was 3 percentage points below that of the men, at 54.7 %. The reason for this may be the suspension of conscription; in the past the women's share was above that of the men.

The average rate among the OECD countries was substantially higher. In 2011, 60 % of young people began a university course. The share of first-year students in the age-specific population was above average in Australia, at 96 %, Iceland and Poland, at 81 % each, New Zealand and Norway, at 76 % each, and Slovenia, at 75 %. Germany, together with Switzerland, Turkey, Mexico and Belgium, was in the lower zone. The differing structure of the educational systems in the OECD countries must be taken into consideration here. The below-average value for Germany is influenced by the fact that the system of vocational training mainly encompasses a dual system, whereas in other countries it takes place primarily at university level.

In the study year 2012 (summer semester 2012 and winter semester 2012/2013) 495,088 new students registered at German institutions of higher education. This number corresponds to a first-year student quota of 54.6 % in the calculation accord-

ing to national classifications (men: 53.6 %, women: 55.6 %).

With a decrease of 23,700 (4.6 %) compared with 2011, the number of new students in 2012 was below the maximum figure achieved in the previous year (518,748 new students). The sharp rise until 2011 is connected to some extent with the peculiarity of doubled *Abitur* years resulting from the reduction in school time in several states (*Länder*). Continued high first-year student numbers are anticipated for the coming years as a result of these doubled years in other states (2012 in Baden-Württemberg, Berlin, Brandenburg and Bremen, 2013 in North Rhine-Westphalia).

In 2012 around 501,000 pupils achieved a university entrance qualification. This was 1.1 % less than in the previous year (including pupils graduating after eight years at *Gymnasium*). 47.7 % of those entitled to study were young men. Young people who were eligible to go to university increasingly chose vocational training instead of going to university. The proportion of those starting an apprenticeship who were eligible to go to university rose from 14.0 % in 2003 to 23.9 % in 2012. Reasons for the increasing preference for the vocational training

among those qualified for university include the desire for more practice-oriented training, which is not covered by university courses, or restrictions on entrance to certain subjects.

First-year students who acquired their university entrance qualifications in Germany were on average 21.3 years old in 2012. 16.5 % of all students matriculating for the first time came to Germany from abroad to study. Since most of these had already studied in their home country, on average they were a good two years older than students who grew up in Germany. This meant that the average age for starting university studies was 21.8 years. On a European comparison, first-year students in 2010 for example in Belgium, Spain and Ireland (around 19 years old for each) were the youngest, and first-year students in Iceland and Luxembourg (22.4 years each), or Denmark (22.1 years each) the oldest. But there were already clear differences in age within Germany: The range extends from 20.6 years in Saarland and 20.8 years in Saxony, to 22.0 years in Hamburg and 22.1 years in Berlin.

## II. Quality of life

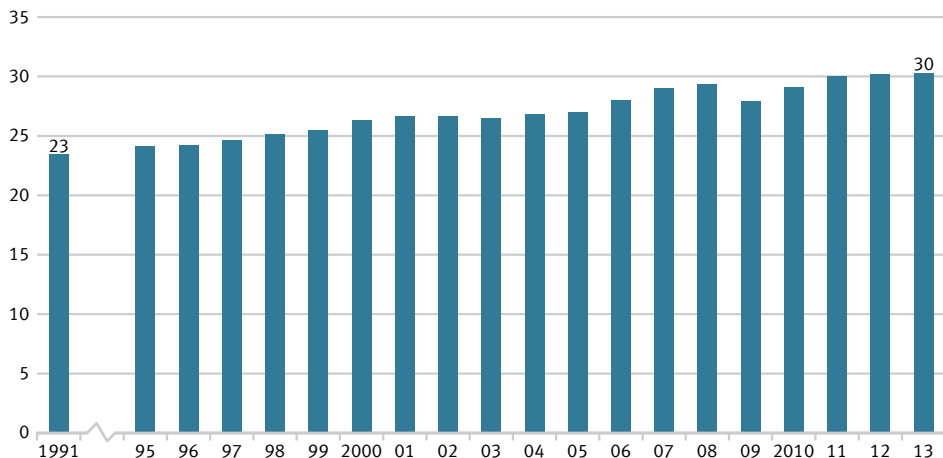
### Economic output



*Combining greater economic output with environmental and social responsibility*

#### GDP per capita

Price-adjusted, at 2005 prices in EUR 1,000



#### 10 Gross domestic product per capita

Gross domestic product (GDP) expresses the total domestically generated economic output. It is considered an important indicator of the economic cycles and growth of a national economy. A variety of aspects link the development of the GDP with other indicators within the sustainability strategy. Thus 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. Increasing economic output is, of course, desirable from a welfare perspective. Sufficient economic growth can enable structural change, safeguard jobs and create new ones, and stabilize social systems against the background of the *ageing society* and the intergenerational equity which is desired. On the other hand, environmental pollution tends to be associated with increasing GDP. Economic growth is one of the aims of the sustainability strategy. Further uncoupling of economic growth and environmental pollution is an important prerequisite for a sustainable economy.



Between 1991 and 2013 (price-adjusted) GDP per capita increased by a total of 29.2%. Following strong growth averaging 2.8% between 2005 and 2008 GDP per capita in 2009 fell by 4.9% compared to the previous year as a result of the global financial and economic crisis. Economic output recovered in 2010 and GDP increased to Euro 30,250 per capita by 2013. During the last five years the increase averaged 2.0% per annum.

Economic growth has varied considerably by sector. The gross value added in the industrial sector (manufacturing industry excluding construction) experienced real growth of 21.8% (price-adjusted) between 1991 and 2012. The service sectors enjoyed a very much sharper rise of 48.6% in this period. In 2009 Manufacturing and Mining and Quarrying suffered a sharp drop in economic output of 20.7% compared with the previous year. The drop in services on the other hand was very much lower at -1.7%. However, due to very strong growth in 2010 and 2011 the industrial sector was able to recover these losses.

While in 1991 the industrial sector still accounted for a 30.2% share of total gross value added (at current prices), by 2013 this figure had declined to 25.5%. The share of services on the other hand increased from 62.5% (1991) to 69.0% (2013). 73.8% of the working population in 2013 worked in the service sector, 24.7% in manufacturing, and 1.5% in agriculture and forestry. These changes to the structure of the economy – marked by the increasing importance of the services sector and the decreasing significance of the production, mining, and construction industries – contributed to a decoupling of economic growth and environmental degradation (see Indicators 1, 2).

Economic output also varied from region to region. Despite the higher level of growth, the new German states (not including Berlin) still continue to lag behind the old German states in 2012 by around 32% in terms of GDP per capita. Over time, the new states have more than doubled their price-adjusted economic output per capita between 1991 and 2012 (+106%) and GDP increased by 80%, while the population fell by 12.7% (around 1.9 million people).

In the old German states, GDP per capita increased by only 20.9% up until 2012, with a 27.9% increase in GDP and simultaneously a 5.8% increase in population.

The number of employed people in Germany increased in total by about 3.1 million persons between 1991 and 2013. Nevertheless, parts of the population are still threatened by poverty. The EU survey SILC (*LEBEN IN EUROPA*) established that in 2012, 16.1% of the population in Germany was threatened by poverty. In 2005 the quota was 12.2%. It has steadily increased since then. Being a relative value, this statistic shows that poverty may even continue given improving GDP per capita. On a European comparison Germany lies below the EU average of 17.0%. Germany displays an above-average value in a European comparison in the number of people living in households with very low employment levels. In 2012, this was 11.1% of all people aged between 0 and 59 years. The EU average was 10%.

## II. Quality of life

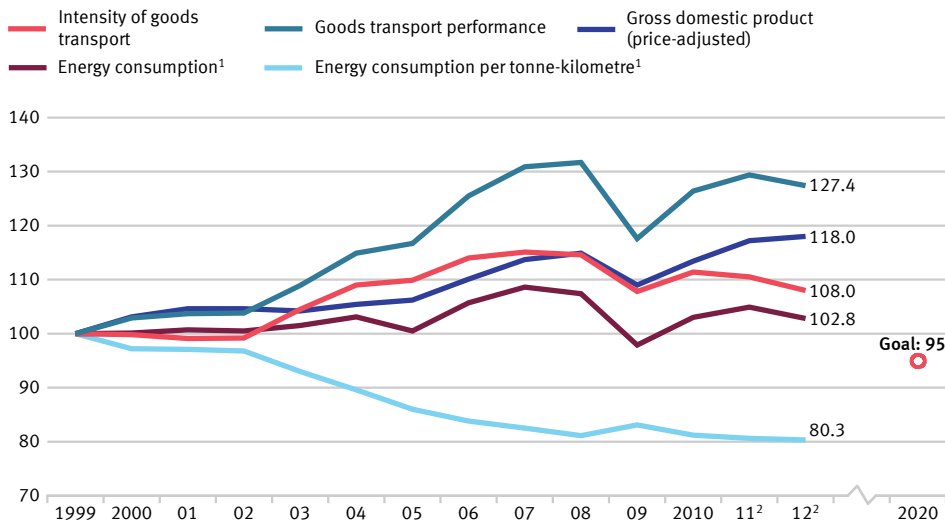
### Mobility

*Guaranteeing mobility – protecting the environment*



#### Intensity of goods transport

1999 = 100



1 Excluding air transport, transport via pipeline and by light commercial vehicles (< 3.5 t gross vehicle weight). 2 Preliminary results.

Source: Federal Statistical Office, Federal Ministry of Transport and digital Infrastructure, Federal Environment Agency

#### 11a Intensity of goods transport

The Federal Government monitors the sustainability of goods transport development by means of the indicator 'Intensity of goods transport'. The intensity is measured as the ratio between domestic goods transport performance on roads, railways, inland waterways, pipelines and air travel in tonne-kilometres and the price-adjusted GDP. The goal of the Federal Government is to reduce the intensity by 2020 by 5 % compared to that of 1999.

Goods transport intensity has increased by 8 % since 1999, but has recently moved in the desired direction. However, in order to reach the target value the average development of the last five years would have to be significantly reinforced. In 2009 the indicator abruptly moved in the direction of the projected target value. However, this was primarily a result of the decrease in economic output (gross domestic product, price-adjusted). In the same year a comparatively large drop in goods transport performance (tonne-kilometres) was observed, partially as a result of lower vehicle capacity utilisation – in particular in road goods

transport – caused by the economic crisis. This also explains the slight increase in average energy consumption per tonne-kilometre, while overall energy consumption decreased. Goods transport performance increased considerably again since 2010 with the economic recovery (including in deviation to indicator 11c/d local transport with German lorries) and in 2012 was 27.4% higher than the 1999 level. This was associated with an increase in energy consumption, which in 2012 was 2.8% higher than that of 1999. Energy consumption per tonne-kilometre simultaneously fell further and in 2012 was 80.3% of the 1999 value.

In addition to the more short-term effects of the economic crisis in 2009, long-term effects in the 1999 to 2012 study period influenced the development of transport intensity. In industry, the vertical range of manufacturing has decreased, which is generally associated with increased transport volume, because companies purchase more upstream products from both domestic and foreign suppliers. In addition, the average distances between the places of production and the places of use of the goods increased, which additionally in-

creased the transport intensity. These effects are in contrast to a change in the demand structure towards less material-intensive goods (for example an increasing proportion of services). The resulting changes in the composition of the goods alleviated the increase in transport intensity.

Also relevant to the interpretation of this indicator is that the goods transport performance of foreign lorries on German territory between 1999 and 2012 increased considerably more than those of German lorries. The increase for foreign vehicles during this period was 80.7%, but 36.3% for commercial transport in German vehicles, in contrast. A decrease in the goods transport performance of 42.9% can even be recorded for own-account transport with German vehicles.

The indicator on goods transport performance refers by definition to transport within Germany. It is for this reason that it only insufficiently reflects the influences of the increasing foreign ties (globalisation) of Germany's industry with the substantial transport flows generated outside of Germany. In 2010 German imports and exports

with a gross weight of 1,032 million tonnes were transported outside of Germany, making for a transport performance of 3,031 billion tonne-kilometres (including sea and pipeline transport). By comparison: Domestic goods transport performance in 2010 came to 628 billion tonne-kilometres with a transport volume of 3,805 million tonnes.

The indicator has direct and indirect cross-references to, among others, the Indicators 1, 2, 4, 10, 11 c/d, 12, 13 and 16.

## II. Quality of life

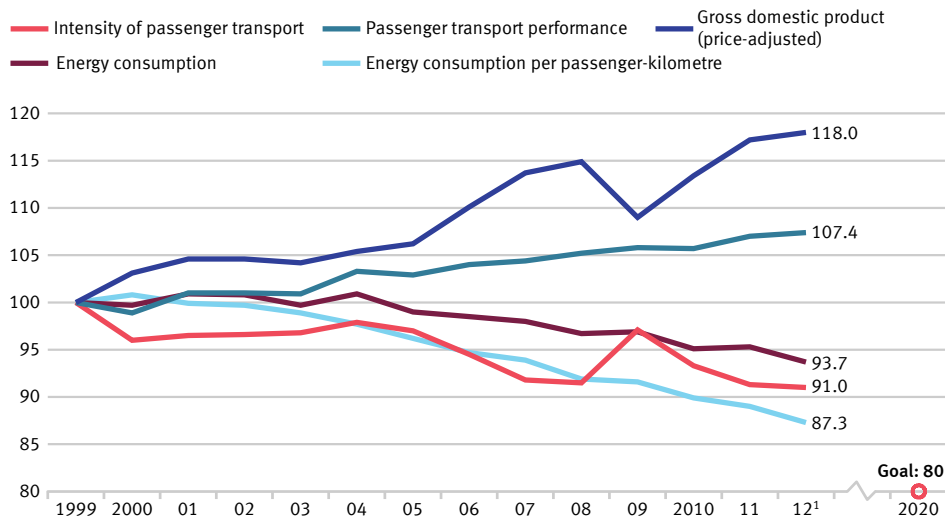
### Mobility

*Guaranteeing mobility – protecting the environment*



#### Intensity of passenger transport

1999 = 100



<sup>1</sup> Preliminary results.

Source: Federal Statistical Office, Federal Ministry of Transport and digital Infrastructure, Federal Environment Agency

#### 11b Intensity of passenger transport

The availability of adequate, flexible and inexpensive passenger transport is important both with regard to social welfare (especially personal mobility) and for the functioning and the international competitiveness of a modern economy based on the principle of division of labour. Passenger transport activities can, however, also lead to substantial environmental burdens, especially through the use of fossil energy sources, atmospheric emissions, land use and noise pollution. For this reason the Federal Government is pursuing the goal of decoupling economic growth from an increase in passenger transport performance and the environmental burden caused by transport.

The sustainability of passenger transport trends is measured by the 'intensity of passenger transport' indicator (passenger transport performance in passenger-kilometres in relation to price-adjusted gross domestic product). The aim of the Federal Government is to reduce the intensity of passenger transport by 2020 by 20 % compared to that of 1999.

After an extended period of favourable development the indicator climbed strongly in 2009 compared to the previous year. This increase was not the result of a corresponding increase in the passenger transport performance, but instead on the decrease in economic output (GDP, price-adjusted) during the 2008/2009 economic crisis. With economic recovery since 2010 the indicator has moved back in the desired direction. Compared to 1999, the indicator fell by 9.0 % by 2012. No statistically significant trend can be observed for the last five years. If the development remains the same as in recent years the 2020 target will not be met. The indicator is characterised by the *cloudy* status.

Despite the 7.4 % increase in passenger transport performance between 1999 and 2012, the absolute energy consumption declined. For all modes of transport consumption of energy per passenger-kilometre decreased in the period under review by 12.7 %, to 1.70 megajoules per passenger-kilometre (MJ/Pkm). This decrease was primarily achieved by efficiency increases in private motorised transport. Private motor

ised transport includes the largest proportion of passenger transport performance and thus energy consumed in passenger transport.

At 5.4 %, the transport performance of private motorised transport increased only slightly between 1999 and 2012. On the other hand, the passenger transport performance of railway and public road transport (which until 2003 comprised only enterprises with at least six buses) increased overall by 9.9 %. The performance of domestic air transport increased by 15.6 %.

In 2012, private motorised transport had a share of 80.5 % in total passenger transport performance. It serves a variety of purposes. In the year 2011 recreational traffic accounted for by far the biggest share in transport performance, with 35.5 %. The share of commuter traffic amounted to 19.6 %, followed by shopping traffic at 17.7 % and business trips at 14.2 %. These proportions have remained practically constant since 2002.

Between 1999 and 2012 fuel consumption per kilometre for passenger and estate

vehicles fell by 13.3 %. This is predominantly the result of technical improvements and the increasing proportion of diesel vehicles.

The indicator has cross-references to, among others, the indicators 1a, b (as concerns energy consumption), 2 (as concerns environmentally harmful emissions from fuels), 3, 4, 10, 12a, 13 (as concerns atmospheric deposition of nitrogen compounds from the combustion of fuels), 14a (as concerns traffic accidents), and in some cases 16 (as concerns transport services industry and the automobile industry).

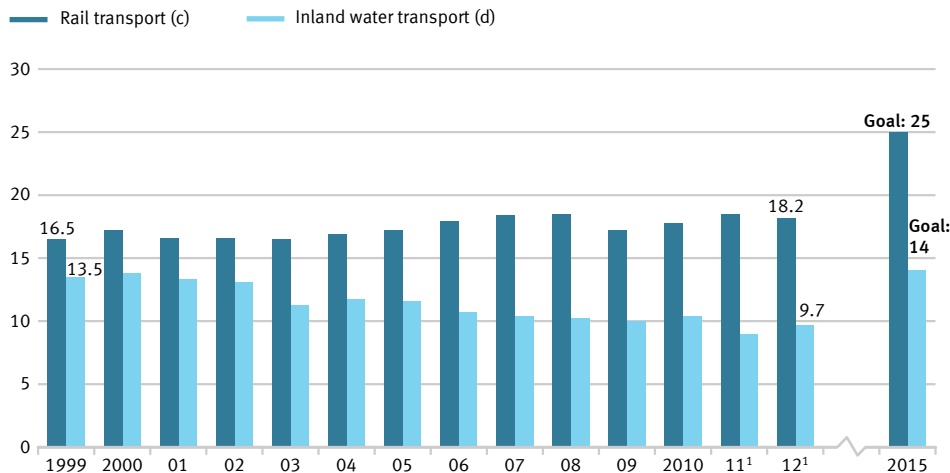
## II. Quality of life

### Mobility

*Guaranteeing mobility – protecting the environment*



**Share of rail and inland freight water transport in goods transport performance in %**



Excluding local haulage by German lorries (up to 50 km).

1 Preliminary results.

Source: Federal Ministry of Transport and digital Infrastructure

### 11c, d Share of rail transport and inland freight water transport

Goods transport by rail or inland waterways has a distinctly lower environmental impact per tonne-kilometre than has transport by road or air. For this reason the Federal Government aims to significantly increase the share of domestic rail (11c) and inland freight water transport (11d) in goods transport performance. The goal is to increase the share of rail transport by 2015 to 25 %, and of inland freight water transport to 14 %.

Total domestic goods transport performance (in deviation to indicator 11a excluding local transport of German lorries) increased between 1999 and 2012 by 29.9 % to 604.4 billion tonne-kilometres. The market share of rail transport improved slightly, from 16.5 % to 18.2 %, but did not increase significantly. The share of inland freight water transport declined from 13.5 % to 9.7 %. Looking at absolute values between 1999 and 2012, goods transport performance for rail increased from 76.8 billion tonne-kilometres to 110.1 billion tonne-kilometres. In contrast, goods transport performance for inland freight

water transport fell from 62.7 billion tonne-kilometres in 1999 to 58.5 billion tonne-kilometres in 2012.

On average over the last five years the proportion of rail traffic in goods transport performance has decreased slightly. If this development continues, the desired goal will not be reached by 2015. However, no statistically significant trend can be seen in this data. The inland freight water transport indicator has continued to move against the target direction during the last five years – with a statistically significant trend. In terms of achieving the target, this development corresponds to the *thunderstorm* status for both indicators.

Around half of the goods transport performance using rail transport in 2012 were allocated to the goods groups metals and metal products, chemical and mineral oil products, ores, non-metallic mineral products, coke and coal, crude oil and natural gas. Around 67.4 % of inland freight water transport performance dealt with these goods groups. A detailed comparison with 1999 is only possible to a limited degree because of changes in survey methodology.

However, a rough estimate shows that the proportions of these goods in the transport performance of both modes of transport have since fallen.

Also relevant to the interpretation of the figures is that the proportion of foreign lorries in goods transport performance in the period 1999 to 2012 increased considerably from 18.6 % to 26.4 %.

The indicator has cross-references to, among others, the indicators 1 (as concerns energy and resource consumption), 2 (as concerns environmentally harmful emissions from fuels), 11a (intensity of goods transport) and 13 (air pollution by emissions).

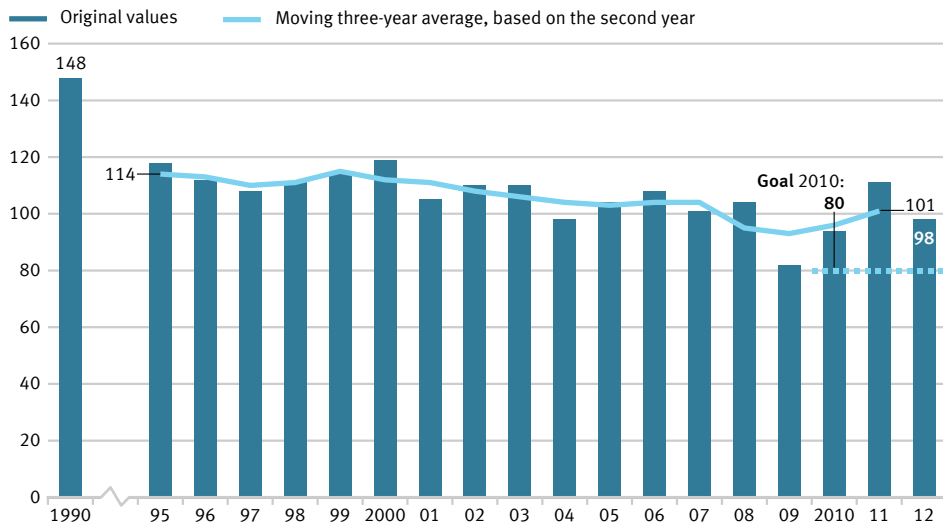
## II. Quality of life

### Farming

*Environmentally sound production in our cultivated landscapes*



**Nitrogen surpluses in Germany's overall balance**  
kg per ha of agricultural land



Source: Federal Research Centre for Cultivated Plants - Julius Kühn Institut and Institute of Landscape Ecology and Resources Management, University of Gießen

#### 12a Nitrogen surplus

Nitrogen is one of the most important plant nutrients. In farming, nitrogen is used on the land as fertiliser in order both to replace the nutrients in the soil used up in production, to ensure yield levels and the quality of harvests and to maintain soil fertility. For ecological and economic reasons particular importance is attached to using the nutrient efficiently. Additional sources also contribute to nitrogen input on land surfaces via the atmospheric path (e.g. livestock farming, traffic, private households, biological nitrogen fixation). Excess nitrogen input into the environment causes far-reaching problems: pollution of ground water, excess nutrients in inland water bodies, oceans and onshore ecosystems (eutrophication), generation of greenhouse gases and acidifying atmospheric pollutants with all their consequences for the climate, biodiversity and landscape quality (see Indicators 2, 5 and 13).

The nitrogen indicator for agriculture in Germany depicts the overall nitrogen surplus in Germany in kilograms (kg) per hectare (ha) of agriculturally utilised land



per year. The nitrogen indicator can be calculated by means of the comparison of nitrogen input to nitrogen output. It takes account of the input of nitrogen from fertilisers, non-agricultural emissions, biological nitrogen fixation, seed and plant material along with feedstuff from domestic production and from imports. Nitrogen output takes place via plant and animal products. The total balance is calculated based on the farm-gate model, meaning that nitrogen flows within the farming operation – with the exception of domestic feed production – are not shown. The surpluses that have been discovered must not be equated across the board with environmental loss, as a certain amount of nitrogen is necessary to maintain soil fertility. Under consideration of this factor, the overall surplus can be used as a measure of the environmental pollution caused by nitrogen.

The relevant time series for the indicator is that of the moving three-year average, with reference to the second calendar year in each instance. This balances out the yearly fluctuations that cannot be influenced, caused by the weather and the market. The

Federal Government's goal was to reduce the agricultural nitrogen surpluses to 80 kg of nitrogen per hectare and year by 2010. With a surplus of 96 kg of nitrogen per hectare the projected reduction in the target year was not achieved. No new target has been defined. The surplus increased again to 101 kg N/ha by 2011. This means the balance (three-year average) has fallen from 130 kg N/ha to 101 kg N/ha (–22 %) since 1991. There is no statistically significant trend for the past years.

The significant reduction at the beginning of this time series results from reduced use of fertilisers and the decreasing number of livestock in the new German states. The remaining slight decrease seen in the time series since 1993 is caused by a slight decrease in the use of mineral fertilisers and an increase in harvest yield as a result of modified crop rotation (more efficient nitrogen fertilisation) and improved feed conversion by livestock. In 2012 – relative to the individual year – fertiliser input, at 54 % or 102 kg N/ha, was the most important nitrogen input component in the overall balance. Domestic forage contributed

21 % (39 kg N/ha), forage imports just under 14 % (26 kg N/ha), biological nitrogen fixation 7 % (13 kg N/ha), non-agricultural emissions 4 % (7 kg N/ha), and seeds and plants 1 % (1 kg N/ha). While nitrogen input between 1990 and 2012 was only decreased by 11 % (that is, by 24 kg N/ha to 189 kg N/ha), the percentage nitrogen output between 1990 and 2012 increased considerably more at 39 % (that is by 26 kg N/ha to 91 kg N/ha). In 2012 almost three-quarters (73 %) of the nitrogen discharge left the sector with plant market products and a good quarter (27 %) with animal market products.

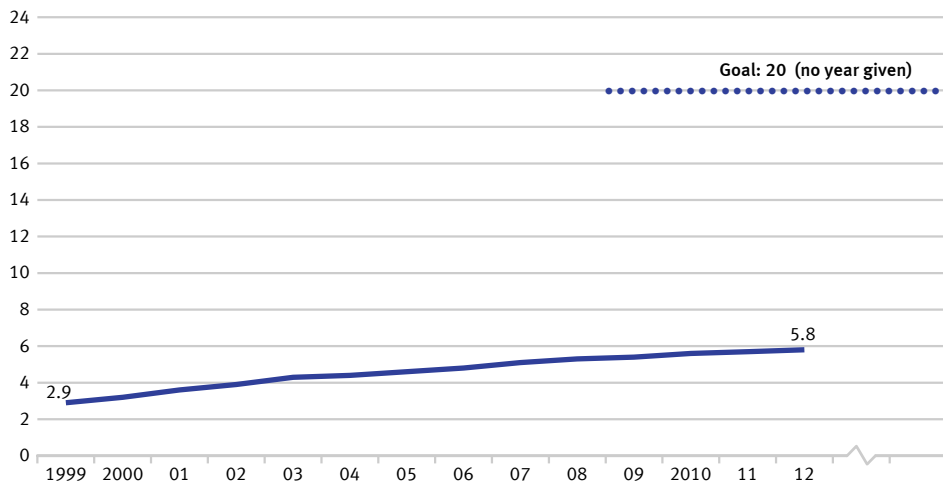
## II. Quality of life

### Farming

*Environmentally sound production in our cultivated landscapes*



**Land used for organic farming**  
Share of total farming land in %



#### 12b Organic farming

Organic farming is specifically geared towards sustainability. This kind of farming preserves and protects natural resources to a particularly high degree. It has a range of positive effects upon nature and the environment, and provides for the production of high quality foodstuffs. The rules for organic farming particularly include keeping processing cycles as closed as possible and foregoing the use of highly soluble mineral fertilisers, synthetic chemical pesticides and genetically modified organisms. From an economical perspective the lower production volumes per unit area are compensated in part by higher prices for organic products and in part by the payment of premiums for converting to or maintaining organic farming.

The indicator shows the land used fully for organic farming, as well as the land currently being converted as a share of the total area under agricultural cultivation in Germany. The Federal Government considers farm conversions as being desirable for protecting the environment and meeting demand and aims to provide a framework

for converting to or maintaining organic farming such that organic farming can achieve a 20 % share by land area in the future.

According to official statistics, from 1999 to 2012 the share of organic farming in the agricultural utilised land increased from 2.9 % to 5.8 % (960,200 hectares). Alternative data provided annually by the Federal Office for Agriculture and Food (BLE) display – for methodological reasons – a higher proportion of organic farming land in the agricultural utilized land. For 2012 the proportion given was 6.2 % (1,034,355 ha).

The annual increase in organic farming land has slowed down in recent years. If this slow development were to continue the indicator would require several more decades to reach the target value.

At 53.2 %, the largest proportion of organic farming land in Germany was used as permanent pasture in 2012. 43.0 % of organic farming land was arable land and 3.8 % were other crop type (among others, fruit). In contrast to this, the emphasis for farming as a whole was on arable land, at 71 %, the

proportion of permanent pasture was 26.6 % and the remaining crops covered 2.4 % of land used.

Among the states, in 2010 Bavaria had the largest proportion of organic farming land in Germany, at 20 %, followed by Brandenburg at 15 % and Mecklenburg-Western Pomerania at 12 %. The conversion to organic farming is funded to different levels by the individual states.

According to details provided by Eurostat a total area of 9.6 million hectares was managed organically in EU 27 in 2011. For 2012 Eurostat estimates the proportion at 5.8 % of agricultural land. Relative to the agricultural land area of the individual EU countries, the largest proportion of organic farming land in 2012 was recorded for Austria at 18.6 %, followed by Sweden at 15.8 %, Estonia at 14.9 % and the Czech Republic at 13.1 %.

The causes of the relatively slow increase in organic farming land in Germany may, among other things, be found in the competition for leased land and prices, including in conjunction with the cultivation of

biomass for biogas plants (see Indicator 3). In contrast, the demand for organic products as foodstuffs grows continuously and strongly. Turnover of organic products increased as a result of sales and price increases between 2000 and 2013 from Euro 2.1 billion to Euro 7.55 billion (*Agrarmarkt Informationsgesellschaft AMI*). Organic foodstuffs and drinks now achieve a share of 3.8 % (preliminary figure) of the respective total turnover. Demand is covered to a large extent by imports from other EU countries or non-EU countries.

The indicator has cross-references to Indicators 1, 2, 3, 4, 5, 12a and 13.

## II. Quality of life

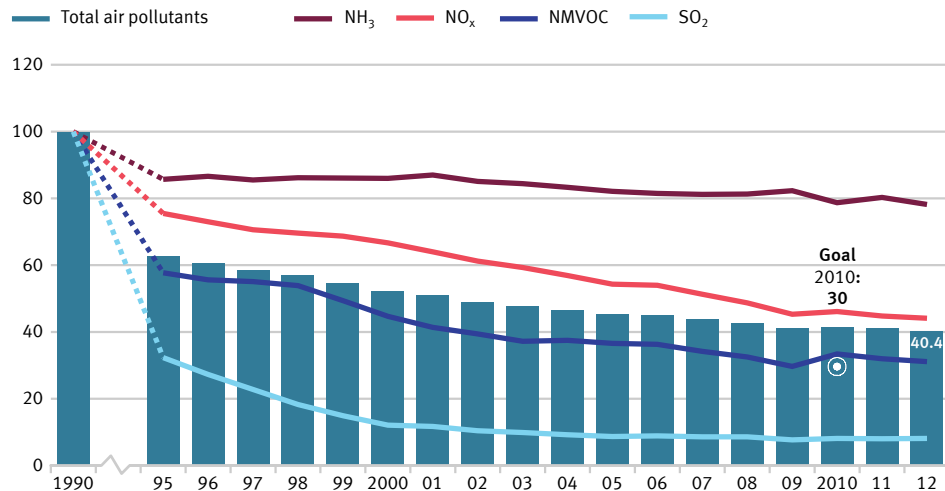
### Air pollution

*Keeping the environment healthy*



#### Air pollution

Index 1990 = 100



Sulphur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), ammonia (NH<sub>3</sub>) and non-methane volatile organic compounds (NMVOC), averaged index of measurement data.

Source: Federal Environment Agency

### 13 Air pollution

The protection of human health was the starting point of the environmental protection movement. Respiratory ailments were linked to atmospheric pollutants at a very early stage. As a result, protective measures initially concentrated on reducing pollutant concentrations. But atmospheric pollutants also damage ecosystems and species diversity, especially through acidification and eutrophication of the ecosystems. In order to model the development of both health and ecosystem burdens, the emissions released in Germany were selected as an indicator. These emissions have been substantially reduced since the 1980s, for example by installing desulphurisation and denitrification facilities in power plants and industrial installations, as well as the widespread use of catalyst technologies. However, more effort is needed. The Federal Government's national sustainability strategy's 'Air pollution' indicator combines four essential pollutants: sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), ammonia (NH<sub>3</sub>) and the non-methane volatile organic compounds (NMVOC).

It was the aim of the Federal Government to reduce the emission of these air pollutants as a whole by 70 % compared with the base year of 1990 by 2010. Atmospheric pollution decreased by 59.6 % by 2012. The indicator thus developed in the right direction overall, but did not reach the target hoped for, even two years later than the target year of 2010. There were significant reductions in the first half of the 1990s. By 2000 the emission of air pollutants had virtually halved (–48 %). In the five years up until 2012 the index only reduced slightly. A new target year has not yet been defined. The results of EU negotiations on emission reduction obligations until 2030 for the components included in the indicator and for particulates and methane are being waited for.

The individual pollutant emissions were reduced to very different degrees between 1990 and 2012. The greatest reductions were in the emissions of sulphur dioxide which were reduced by 91.9 %. A reduction of 70 % had already been achieved by the middle of the 1990s and since then it had been significantly exceeded. But since

2000 the additional reduction has been marginal. Part of this reduction at the start was accomplished by the desulphurisation of the exhaust gases of power plants, by the partial replacement of high-sulphur domestic lignite with low-sulphur fuels, as well as legal limits for sulphur contents in liquid fuels.

The emissions of NMVOC, predominantly generated during the industrial use of solvents, were also reduced substantially by 68.9 % by 2012. This means that a reduction of nearly 70 % has been achieved. The results of Environmental-Economic Accounting reveal that 67.3 % of NMVOC emissions in 2011 originated in industry (and here primarily in the manufacturing industry), 32.7 % were caused by private households.

Nitrogen oxide emissions fell continually until 2012 and, at –55.9 %, by more than half of the 1990 value. In 2011, 13.4 % of emissions were caused by the manufacturing industry and 20.3 % by the energy industry. The transport services' share of NO<sub>x</sub> emissions was 23.5 % and private

household consumption accounted for 17.2 %. Agriculture accounted for 10.5 % of nitrogen oxides.

The emissions of ammonia, of which 93 % came from farming, persist at a high level. In 2012 they were only 21.8 % lower than in 1990. The initial decrease was mostly due to the reduction of livestock in Eastern Germany after 1990. The amounts of ammonia emissions are primarily associated with the scope of milk and meat production.

The indicator has direct and indirect cross-references to the Indicators 1, 3, 4, 5, 11, 12a, 14a, b and 14e.

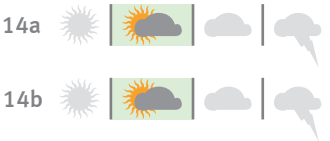
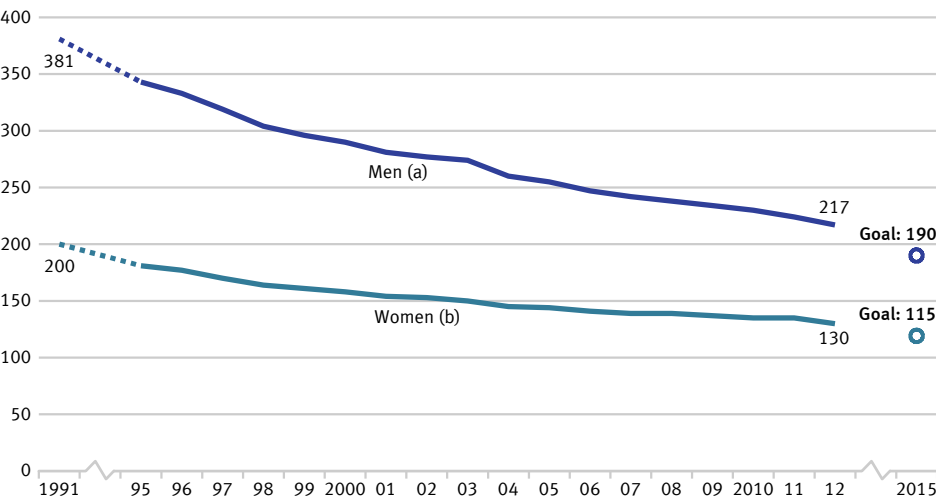
# II. Quality of life

## Health and nutrition

Living healthy longer

### Premature mortality

Deaths per 100,000 population below the age of 65



### 14a, b Premature mortality

Health and life expectancy are determined by a number of factors. These include social status, educational level, personal lifestyle and habits (consumption of tobacco, alcohol, physical exercise, nutrition), working conditions, environmental factors and medical care and disease prevention measures. When a high number of fatalities in a population occur at an age distinctly below the average life expectancy, this is an indication of increased health risks that could well be avoided. The Federal Government's Sustainability Strategy has set the goal of limiting premature mortality for men (14a) to 190 cases and for women (14b) to 115 cases per 100,000 inhabitants by the year 2015.

The indicator presented here shows the deaths of under 65-year-olds in Germany. The values refer to 100,000 inhabitants of the standardised population in 1987 under 65 years of age. The method of computing the figures provides for a time series that is comparable over time. It takes the fact into account that due to the demographic

development in Germany there is an ever-increasing number of people above the age of 65.

Between 1991 and 2012 premature mortality steadily decreased, more significantly for men (–43 %) than for women (–35 %). This means that gender-specific differences in premature mortality have continued to decrease. In 2012, 217 men and 130 women per 100,000 inhabitants died, before they reached the age of 65. If this trend continues, 93 % of the necessary ground to the target value would have been covered for men, and 88 % of the ground for women, meaning that the target values would only be missed by a small amount.

Life expectancy has also continued its positive development in Germany. Between 2009 and 2011 the average life expectancy for newborn girls was 82.7 years of age and for boys 77.7. Between 2008 and 2010 the average was 82.6 and 77.5 years of age respectively.

Today 60-year-old women can, statistically, expect an additional 25 years of life, and men an additional 21.3. In the old German

states (excluding West Berlin) life expectancy is still somewhat higher than in the new German states (excluding East Berlin): for newly born males the difference continues to be 1.3 years, for females only 0.2 years.

At 37.2 %, malignant neoplasms formed the largest share of all causes of death in premature mortality in 2012 (women 47.3 %, men 31.5 %), followed by cardiovascular diseases at 19.8 % (women 15.1 %, men 22.2 %). However, deaths from external causes (such as accidents, poisoning, suicide) made up a significant percentage at 11.1 % (women 7.5 %, men 13.3 %). Digestive system ailments contributed 7.3 % (women 6.3 %, men 7.9 %) and ailments of the respiratory system 3.9 % (women 4.2 %, men 3.7 %). Since 1991 an increase in the causes of death in cases of premature mortality due to malignant neoplasms (5.4 percentage points) and due to ailments of the respiratory system (0.5 percentage points) has been recorded. In contrast, the cardiovascular causes have fallen (–6.9 percentage points), as have external causes (–2.5 percentage points) and digestive system ailments (–0.9 percentage points).

Besides factors such as health behaviour (see Indicators 14c, d for the smoker ratio or 14e for obesity), medical care also plays an important role in the mortality rate. Health expenditure increased in 2012 to Euro 300.4 billion. That was a rise of Euro 6.9 billion or 2.3 % compared with 2011. Expenditure corresponded to 11.3 % of gross domestic product (11.2 % in the previous year), representing Euro 3,740 per capita (2011: Euro 3,660).

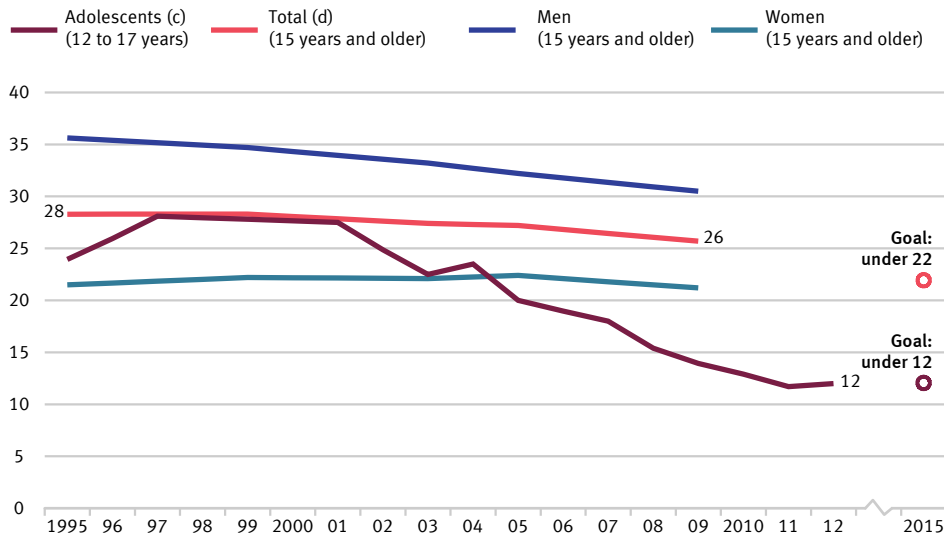
## II. Quality of life

### Health and nutrition

*Living healthy longer*

#### Smoking rate

Share in % of those polled



Source: Federal Statistical Office, Federal Centre for Health Education



#### 14c, d Smoking rates amongst young people and adults

Smoking tobacco products can lead to considerable damage to health and premature death. Not only the smokers themselves are affected. Non-smokers exposed to tobacco smoke are not only annoyed by the smoke, they may also become ill. It can be observed that adolescents are guided by social role models in their smoking behaviour, in order to appear more grown up. The two partial indicators on smoking behaviour show the percentage of polled adolescents between 12 and 17 years of age (14c) and those 15 years old and older (14d), who occasionally or regularly smoke. The Federal Government is pursuing the goal of reducing the percentage of juvenile and adolescent smokers to under 12% by 2015, and that of smokers of 15 years of age and older to under 22%.

In the group of adolescents between 12 and 17 years of age, the proportion of smokers increased from 24 % (1995) to 28 % (1997 and 2001), but since then dropped tobacco to 12% by 2012 (data from the Federal Centre for Health Education). Here, how-



ever, there are no considerable differences between the data for boys and girls. In the general population over the age of 15 a total of 26 % said that they smoked occasionally or regularly (microcensus) in 2009. 28 % smoked in 1995 and 1999. This meant that the figures for adult smokers had only dropped slightly. In order to reach the goal for adults (15 years of age and older), a more concerted effort on the part of all stakeholders must be made. In the group of adolescents between 12 and 17 years of age, in contrast, the target value has already been almost achieved before the target year.

In 2009 22 % of all those polled that were 15 years or older considered themselves regular smokers, while 4 % smoked occasionally. Clearly more men (31 %) smoked than women (21 %). While the proportion of men who smoke had decreased by 5 percentage points since 1995, the proportion of women smokers remained virtually unchanged. The amount of tobacco smoked is important relative to the individual threat to health. 96 % of the smokers questioned in 2009 preferred cigarettes. 14 % of regular

cigarette smokers (1995: 17 %) were in the category of heavy smokers with more than 20 cigarettes a day, whereas 80 % smoked 5 to 20 cigarettes a day. There were also gender-specific differences in the quantity of cigarettes smoked daily.

One in six regular male cigarette smokers (17 %) smoked heavily, but only one in ten (10 %) females. Besides the amount smoked, the age at which smoking is started also has an influence on the health risk. In the last fifty years the starting age has dropped significantly. In 2009 those men aged 65–69 at the time of polling stated that they had begun smoking at the age of 18.5, whereas women of the same age had begun at 21.9 years of age. Male adolescents aged 15–19 stated that they started at the age of 15.6 years, and their female counterparts at the age of 15.2. There is an inverse relationship between net household income and the proportion of smokers. In 2009, in households with a low monthly income, of up to Euro 1,300, 33 % of those polled reported being smokers. In households with Euro 2,600–4,500 per month 24 % said they were smokers,

and in households with over Euro 4,500 per month, 19 % of those polled said they smoked.

Smoking poses a high and at the same time avoidable risk to health. A reduction in the number of smokers would help to reduce premature mortality (see also Indicators 14 a, b). In 2012, 5.3 % of all fatalities (7.4 % for men and 3.3 % for women) could be traced to diseases typical of smokers (lung, laryngeal and tracheal cancer). In 1995, this was 4.4 %. The increase is predominantly the result of an increase in women's mortality.

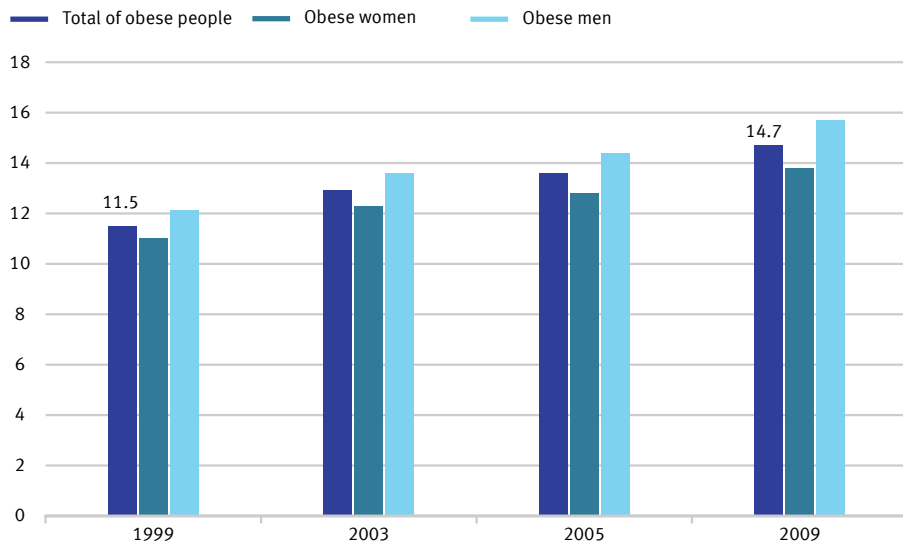
The average age of those who died from lung, laryngeal and tracheal cancers in 2012 was 70.7 years of age – seven years below the average death rate (77.8 years). Compared to 1995 the average age of people dying from lung, laryngeal and tracheal cancer increased by 2.5 years, and by 3.2 years in overall deaths. Apart from individual suffering and personal tragedy, from an economic perspective, diseases and premature deaths caused by the consumption of tobacco led to a high burden on the social security and health care systems.

## II. Quality of life

### Health and nutrition

*Living healthy longer*

**Proportion of obese people**  
in % of adults (18 years and older)



#### 14e Proportion of adults suffering from obesity

Surplus body weight plays a major role in the development of diseases of civilisation such as cardiovascular diseases, diabetes and joint injuries. Being overweight is directly caused by an unbalanced diet and lack of exercise, and is indirectly related to social causes, such as educational background or social integration. Besides the consequences to health, being overweight is also a burden on the national economy and has a negative impact on social life. Categorisation as 'overweight' is made on the basis of the body mass index (BMI), that is, an individual's body weight in kilograms divided by the square of his or her height in metres. People with a BMI of 25+ are classified according to the WHO as 'overweight' (with age and sex-specific differences not taken into consideration). When being overweight goes beyond a definite point (a BMI of 30+), it is classified as 'obesity' and is as a rule connected to certain impairments to health.

It is the goal of the Federal Government for the number of obese people in Germany to

be reduced by 2020. In 2009 14.7 % of the German population over the age of 18 were classified as obese. In 1999 this proportion still amounted to 11.5 %. Obesity in the population has moved steadily counter to the objectives of the sustainability strategy since 1999.

At 15.7 % the percentage of obese men was higher than that of obese women (13.8 %). In 2009, 51.4 % of the population over the age of 18 were regarded as overweight. The share made up by men (60.1 %) was larger than that made up by women (42.9 %).

The proportion of obese people increases directly with age, although this trend reverses suddenly and emphatically among older retired people. In 2009, 2.6 % of 18-20-year-old women were obese. About 8 % of women between 30 and 35 years of age were already obese, and 15.2 % of those between 50 and 55. The highest proportion of obese women was found in the age group between 70 and 75 years of age at 21.6 %; after this age the figures fell sharply.

In men, some 11.5 % between 30 and 35 were obese, and the highest proportion of

obese men was found in 60–65-year-olds (22.3 %). In comparison to 1999, the shift in proportion of the obese in advanced age is conspicuous: in 1999 about 16 % of the women between 70 and 75 were obese, but in 2009 the figure was 21.6 %.

The German Health Interview and Examination Survey for Children and Adolescents 2007 (KiGGS baseline study, Robert Koch Institute) provided age-specific results for 3-17-year-olds. According to these figures, between 2003 and 2006, 2.9 % of the 3-6-year-olds, 6.4 % of the 7–10-year-olds and, moreover, 8.5 % of the 14–17-year-olds were obese. There were no obvious differences between boys and girls. An increased risk of being overweight or obese was found among children from families of a lower social status and among children whose mothers were also overweight. The causes of the increasing prevalence of obesity can be found, among other things, in a diet too high in calories and a restricted programme of physical activity. As yet, no continuous time series is available for obesity in children and adolescents, meaning that no trends can be depicted. New results for the reporting years 2009 to 2012 (KiGGS Wave 1) are anticipated for mid-2014.

Being underweight, that is with a BMI lower than 18.5, is a contrasting phenomenon to obesity. It also represents a considerable threat to health. In 2009 women were considerably more often (3 %) affected by being underweight than men (1 %). It needs to be mentioned that 12.5 % of young women between 18 and 19 years of age were underweight, and in those between 20 and 24 there were still 9.4 % underweight.

The indicator has relevance to, among others, Indicators 9, 14a, 14b, 16 and 17.

## II. Quality of life

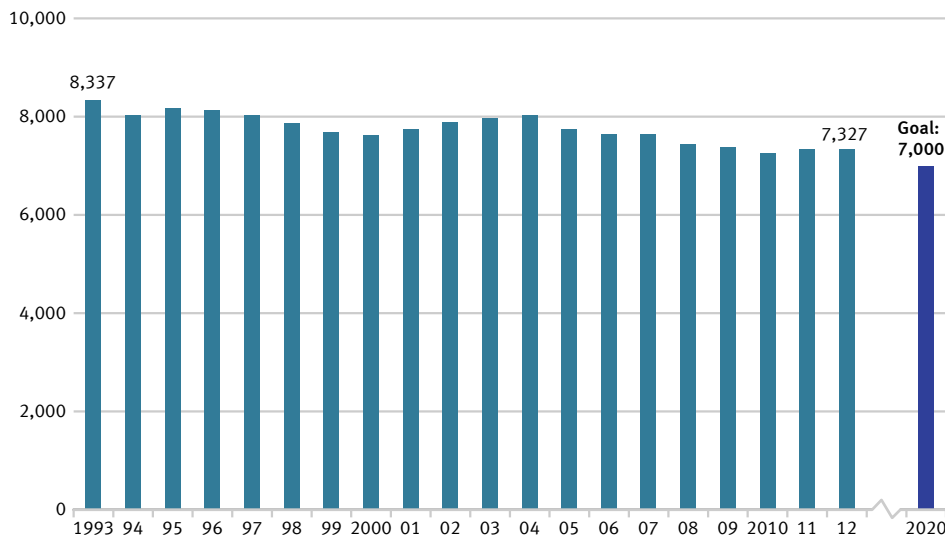
### Crime

*Further increasing personal security*



#### Criminal offences

Reported cases per 100,000 population



Source: Federal Criminal Police Office

#### 15 Criminal offences

A safe environment that permits the citizens of a country to live without fear of crime or threats is an essential prerequisite for a properly functioning social system and social sustainability. Indicator 15, *Burglaries in homes*, used until 2010, placed a specific crime at the focal point. It was replaced by the *Criminal offences* indicator, with a view to overall crime trends. This indicator is more comprehensive as a measure of personal security and allows individual crimes to also be considered and thus to extend the perspective.

The indicator records all criminal offences reported to the police and included in the Police Crime Statistics. As a goal, it was established that by 2020 the number of recorded cases per 100,000 inhabitants (frequency rate) is to be reduced to under 7,000.

The number of criminal offences per 100,000 inhabitants fell between 1993 and 2012 by 12.1 %. However, this was not a continual development. It was interrupted by occasional increases in case

numbers. On average over the last five years the indicator has moved in the correct direction, such that if this trend continues the target defined for 2020 can be achieved.

In 2012 the total number of criminal offences was just below 6 million. If various subsections are considered, 2.4 % of the offences registered by the police were burglaries in homes, 16.0 % were cases of fraud and 2.3 % were grievous and serious bodily harm.

While the number of burglaries in homes between 1993 and 2012 fell by 36.5 %, cases of fraud increased by 81.4 %, and cases of grievous and serious bodily harm by 55.0 %. If only the developments of the last five years are considered, it deviates from the trends described above in the cases of burglaries in homes, and grievous bodily harm. A slight decrease in burglaries in homes since 2007 was initially noted. However, between 2008 and 2012 a further total increase of 33.1 % was recorded. Cases of grievous and serious bodily harm fell between 2007 and 2012 by a total of 12.1 %.

However, actual changes in case numbers can not always be concluded from changes in Police Crime Statistics: the statistics only record what is referred to as the “bright field” – that is, criminal activity actually known to the police. Because of the lack of statistical data the “dark field” – criminal activity not actually known to the police – cannot be represented in the Police Crime Statistics. For example, if the population's reporting behaviour or the police's prosecution intensity changes, the boundary between the dark and the bright field may shift, without necessarily being associated with a change in the extent of actual crimes.

The clear-up rate for all offences registered by the police in 2012 was 54.4 %. However, there were clear differences here in terms of type of criminal offence. Such as that the clear-up rate for burglary in homes was only 15.7 %. In cases of fraud, on the other hand, 77.4 % were cleared up and 81.4 % of all grievous and serious bodily harm crimes. The comparatively low clear-up rate for burglary in homes is related to the high willingness to report such crimes: Reporting such crimes to the police is generally a pre-

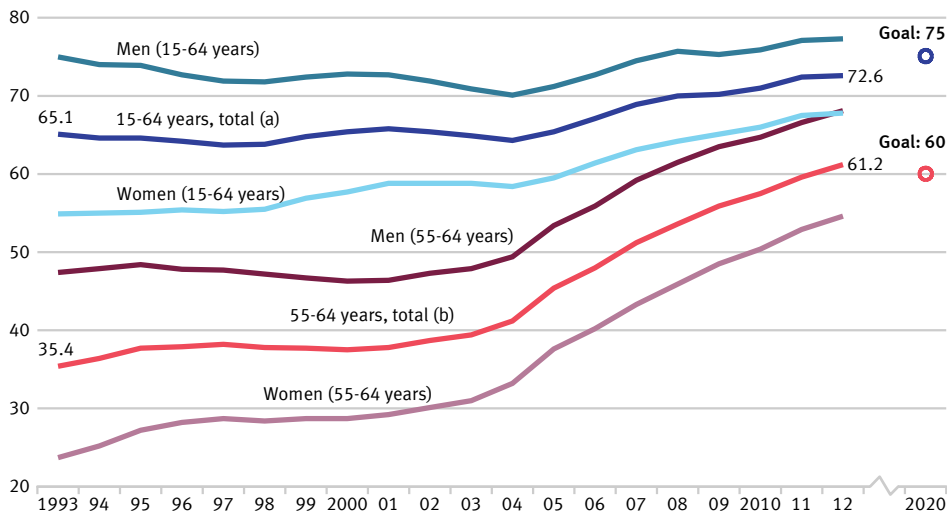
requisite for submitting insurance claims. On the other hand, only very rarely are there concrete pointers to the perpetrators. This is clearly in contrast to the situation for fraud and bodily harm crimes. These crimes display a high clear-up rate, because in most cases the identity of the perpetrators becomes known to the police at the time the crime is reported.

### III. Social cohesion

#### Employment

*Boosting employment levels*

**Employment rate**  
Share in %



#### 16a, b Employment rate

Because of demographic changes in Germany (an ageing society), there may be a skilled labour shortage in the long run. Moreover, the social security system is threatened by an increasing lack of funds due to the shifting ratio of people drawing pensions to people in work. Therefore, it is necessary to exploit our labour potential more effectively in the future.

As a consequence, the Federal Government aims to increase the employment rate, i.e. the share of employed people in the employable age group (15 to 64 years of age) to 75 % by 2020. In addition, the employment rate among older people (55 to 64 years of age) is to be increased to 60 % by 2020.

The total employment rate rose from 65.1 % in 1993 by 7.5 percentage points to 72.6 % in 2012. If the annual average continues to develop as it has for the last five years, the 75 % target for 2020 can be achieved. The 73 % target aimed for in 2010 was not achieved in the target year.

The employment rate for the older population increased by 25.8 percentage points

from 35.4 % in 1993 to 61.2 %, meaning that the 60 % target value for the target year 2020 was already exceeded in 2012.

The significant rise in the employment rate observable in 2005 is partly based on methodological changes to the survey. With this change from 2005 the microcensus has supplied average annual results for the first time, but these are only comparable to a limited extent to the results up to 2004, which were obtained in reporting periods of a single week. At the same time there was an improvement in recording employment data in the survey and a new extrapolation procedure was introduced.

The employment rates of men and women have developed very differently since 1993. The rate for men in the period under review only rose by 2.4 percentage points to 77.3 %, whereas in the case of women it rose by 12.9 percentage points to 67.8 %. In evaluating the increase in the employment rate of women it must be taken into consideration that this was accompanied by a clear increase in part-time employment (+3.6 million), while the number of women employed full-time went down by 0.15 million.

If we break down the employment rate into age groups we find various development trends. Among 15- to 24-year-olds the share went down by 6.5 percentage points to 46.5 % between 1993 and 2012. This is also connected to the fact that with increasing qualification requirements the average educational periods at school and university are getting longer with the result that the transition into professional life has shifted. Among the 25- to 54-year-olds, in contrast, a relatively constant increase was observed between 2004 (77.0 %) and 2012 (83.0 %).

Among older people (55- to 64-years-olds) a particularly sharp rise in the employment rate can be seen at 21.9 percentage points since 2003. Starting from a lower level, female employment rates in this age group have risen much more than for men since 1993 (31.0 percentage points compared to 20.7 percentage points).

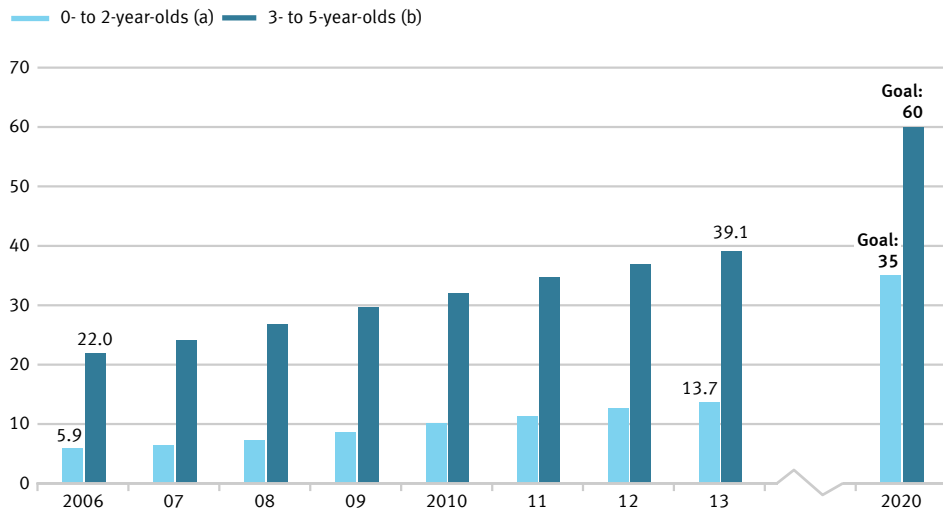
There are cross-references to Indicators 6, 9, 10, 17, and 18.

### III. Social cohesion

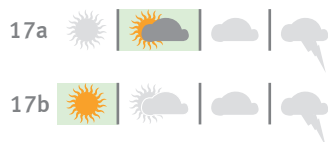
#### Prospects for families

*Improving the compatibility of work and family life*

**Share of children in all-day care in each age group**  
in %



More than 7 hours of care in day-care facilities, excluding publicly funded care in private homes.



#### 17a, b All-day care provision for children

The provision of childcare in line with demand improves the balance between family life and work. Women in particular continue to be prevented from taking up employment due to a lack of childcare, or couples decide against starting a family because they cannot be sure of obtaining childcare. A better balance between family and job might also contribute to increasing the birth rate in Germany. But support for children in the context of childcare in line with demand, in particular all-day care provision as well, is also an important contribution to equal opportunities and to the integration of foreign children and adolescents.

The aim of the sustainability strategy is to provide all-day care for at least 35 % of 0- to 2-year-olds (17a) by 2020. This percentage should be at least 60– for 3- to 5-year-olds (17b) by 2020. In 2013, parents of 39.1 % of the 3- to 5-year-olds (kindergarten age) took advantage of institutional all-day care in addition to their own institutional activities, while for children under 3 years of age (crèche age) this figure was



13.7%. By comparison with 2006, for which comparable figures are available for the first time, there has been significant progress in the area of all-day care in nurseries. Among 3- to 5-year-olds, the proportion of children in all-day care increased by 17.1 percentage points. All-day nursery care went up by 7.8 percentage points from 2006 to 2013. Among 3- to 5-year-olds, the target for 2020 may be reached if the development shown in the last 5 years continues. Among the 0- to 2-year-olds around 93 % of the ground to the target value would have been covered, meaning that the target value would only be missed by a small amount. The 2010 aim of the sustainability strategy to provide all-day care for at least 30 % of children was exceeded for all-day kindergartens, but not achieved for the crèches.

The number of children in all-day care in crèches and kindergartens in 2013 was just below 1.1 million. A further number of approximately 46,600 children under six years old are cared for in publicly subsidised day-care facilities. The number of children in this age group in part-time care was around 1.4 million. A quarter of the

children cared for full-time or part-time in crèches and kindergartens in 2013 had a background in migration, i.e. at least one of the parents was of foreign origin. The care rate for these children in 2012 was 52 %, for children with no background in migration it was 65 %.

In terms of childcare, after-school clubs and all-day schools also play a significant role. In 2013 just under 167,800 children between 6 and 13 years of age were cared for in after-school clubs full-time and around 614,000 children part-time. The proportion of full-time pupils (out of all pupils in general education schools) in school year 2011/2012 was 30.6 %. However, this figure includes all forms of school, in other words it also includes pupils older than 13. In *Grundschulen* (primary schools) in the same school year 26.6 % of the children received all-day care. In comparison to 2002, the number of full-time pupils went up markedly, from 874,000 to almost 2.3 million (general schools altogether) and from 134,000 to around 730,000 in *Grundschulen*. (Source: Standing Conference of the Ministers of Education and Cultural Affairs, 2013). In

terms of the availability of all-day care facilities there is a clear gradient between the states in the east and west of Germany. The highest all-day care rates for 0- to 2-year-olds (share of children in all-day care in all children of this age group) can be seen in the eastern states and in Berlin. They range from 43.1 % in Thuringia and 7.1 % in Lower Saxony. The highest percentage of all-day care for 3- to 5-year-olds was found again in Thuringia at 88.1 %; the lowest in Baden-Württemberg at 17.6 % (both 2013). Compared to the previous years, all states have expanded their all-day care provision.

At the nursery summit between the Federal Government, the German states and the municipalities in 2007 it had been agreed to create a daycare package throughout the country for 35 % of the children under three years of age (irrespective of the scope of care) by 2013. In terms of this objective there were places in children's day-care available in 2013 for about 29 % of children under three years of age, and while the ratio in German states in the west of Germany was about 24 %, in the German states in the east of Germany it was around 50 %.

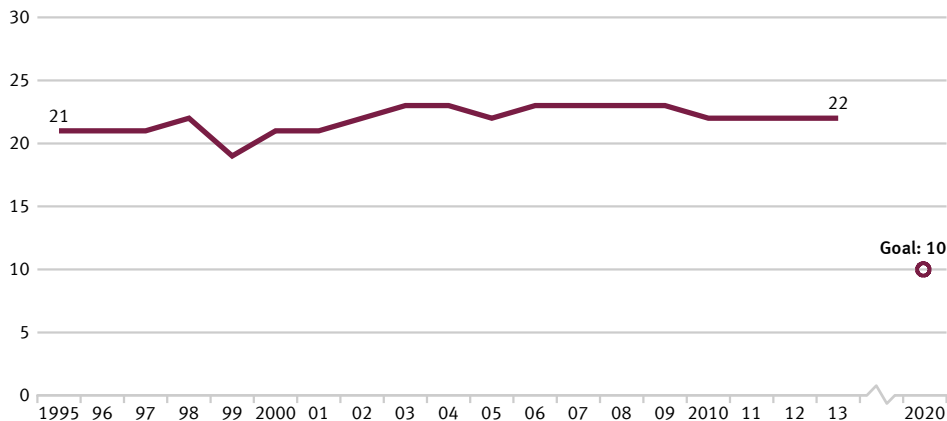
### III. Social cohesion

#### Equal opportunities

*Promoting equal opportunities in society*



**Difference between average gross hourly earnings of women and men  
in % of men's earnings**



Because of changes to the applied method made in 2002 and 2006, the gender pay gap probably rose by one percentage point in each of these years.

#### 18 Gender pay gap

‘Men and women are equal before the law. The state encourages the actual enforcement of the equality of men and women and works towards the elimination of existing disadvantages’. This statement of principle in the constitution is also the goal of a sustainable society. Disadvantages based upon gender in politics, business and society must be avoided in order to create equal opportunities.

Differences in pay between men and women in a modern business-oriented society are a sign of social inequality. A decrease in pay disparities is an indication of progress on the road to equality. The goal of the Sustainability Strategy of 2002 is a reduction in the pay gap to 15 % by 2010 and to 10 % by 2020.

In 2013 the gender pay gap was on average 22 %, which means that the average gross hourly wage for women was more than a fifth lower than that of the men. The target defined for 2010 has already been clearly missed. Since 1995 the gender pay gap has scarcely changed. If the trend remains

the same the target for 2020 may not be reached. No statistically significant trend can be recognised for the last five years.

Differences in pay between men and women are due to a number of factors. Women for example are under-represented in certain professions, sectors and on the higher rungs of the career ladder. They interrupt and reduce their employment more frequently and longer for family reasons than men, which hinders their subsequent professional development. This means that women are often paid less even given the same formal qualifications. Another role is the fact that the earning opportunities in typical female professions are in general still worse than in the classical male professions. Sectors with a high percentage of female employees include the clothing industry, retail sales, and the health and social services sectors (each with a proportion of women employees of between 70 % and 80 %). On the other hand, men more frequently work in areas with comparably higher earnings, such as mechanical engineering and automobile manufacturing. Women represent less than 20 % of the employees in these industries. In 2013,

for example, the gross monthly earnings of women with full-time employment in retail sales was Euro 2,323 on average, while in automobile manufacturing it was Euro 3,734. Men in these sectors earned on average Euro 2,956 or Euro 4,414 per month, respectively.

Since 2006 it has also been possible to compare the gender-specific pay gap in private industry and in the public sector. It can be seen for the years 2006 to 2013 that the difference in earnings in private industry is around four times higher than in the public sector (2013: 24 % and 6 %).

Although the availability of childcare facilities (all-day crèches, kindergartens and schools) has much improved over the last few years (see Indicator 17), in West Germany at least it is still by no means sufficient to enable women to easily combine paid work with raising children and thus at least avoid women having to take career breaks. However, the introduction of *Eltern-geld* (paid parental leave) at the start of 2007 and the legal right to a childcare place should also make a major contribution to women having to take fewer breaks in their careers.

At 22 %, the gender pay gap in Germany in 2012 was substantially higher than the European Union average of 16 %. Of the 28 countries in the EU, in 2012 only Estonia and Austria had a higher gender-specific pay gap compared to Germany, at 30 % and 23 % respectively. The country with the lowest European gross hourly earnings difference between men and women was Slovenia, at 3 %, followed by Poland and Malta at 6 % each, and Italy at 7 %.

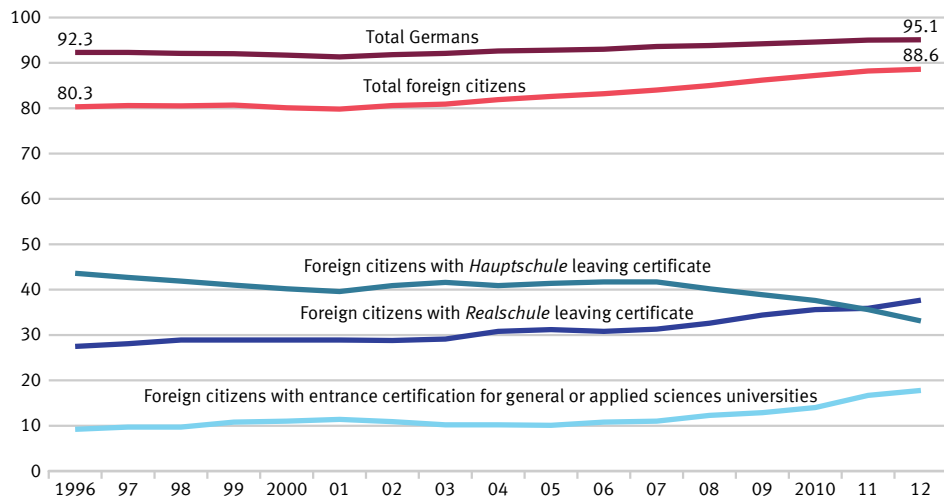
### III. Social cohesion

#### Integration

*Integration instead of exclusion*



**General school leavers with a school leaving certificate**  
in % of all school leavers by year



#### 19 Foreign school leavers with a school leaving certificate

The integration of foreign citizens in Germany is an important prerequisite for cohesion within our society. A necessary condition for successful integration is an adequate system of school qualifications which opens up further educational and professional opportunities. For this reason the national sustainability strategy pursues the goal of increasing the proportion of young foreign school leavers who obtain at least a school leaving certificate from a *Hauptschule*, and of bringing this into line with the corresponding percentage of German pupils by 2020.

The indicator shows the percentage of foreign school leavers who leave general schools with at least a *Hauptschule* certificate as a percentage of all foreign school leavers within one year. In the period 1996 to 2012 this share rose from 80.3 % to 88.6 %, which means progress was made for foreign youths. Nevertheless, in 2012 the percentage of school leavers in possession of a certificate in this group was still lower than that of German young people, for whom the proportion was 95.1 %. In

view of the desired goal, further efforts are still necessary, especially as efforts are being made at the same time to increase the proportion of all school leavers who achieve certificates (see Indicator 9a).

If we look at the certificates achieved, it is apparent that just under 33.1 % of the foreign school leavers from general schools acquired a *Hauptschule* certificate in 2012, 37.7 % achieved a certificate from the *Realschule*, and 17.8 % earned an applied sciences university entrance qualification or university entrance qualification. For Germans the corresponding figures were 16.6 %, 39.8 % and 38.6 %. Foreign young people are thus substantially under-represented in comparison to Germans, especially in terms of the higher level school leaving certificates. 11.4 % of foreign school-leavers failed to obtain a school leaving certificate from general schools, by comparison with 4.9 % of German school leavers. At the same time, when comparing the gender factor, a better level of school education overall is achieved by both young foreign and German women by comparison with young men. Only 9.4 % of foreign young women leaving general schools had

no school leaving qualification in 2012, whereas for foreign young men the figure was 13.3 %.

Besides school education, vocational qualification plays an important role in the integration of foreign fellow citizens into our society. In 2012 41.6 % of the 30- to 34-year-olds of foreign origin had no vocational certificates or university degrees. Whereas the figure for their German of the same age, this was 12.7 %. Despite a better school education, 43 % of foreign young women aged 30 to 34 in 2012 had no vocational or university qualifications, compared to 40 % of young men of foreign origin. Of the people of this age group with a migration background living in Germany (everybody who has immigrated to Germany either themselves or whose parents immigrated to Germany after 1949, or are not German nationals or have not been naturalised) just under 35 % had no vocational qualifications in 2012.

A sound knowledge of German is also of decisive importance for social integration. It is a prerequisite for obtaining a higher-level school leaving certificate, as well as for participation in society generally.

Integration courses for immigrants were therefore introduced in 2005. Almost 1 million immigrants have since attended one of these courses and 546,600 people completed the course by the end of 2012. Around 56 % of all test participants achieved the B1 level of the Common European Framework of Reference for Languages (CEFR) in the final examination. If the language level below this is included (A2 CEFR), more than 91 % of all participants received a language certificate. (Sources: Federal Ministry of the Interior (BMI), Federal Office for Migration and Refugees).

At the end of 2012 around 6.6 million citizens with foreign passports (8.2 %) (population projection based on the 2011 census) lived in Germany, 16.3 million people (20.2 %) had a migration background. In the school year 2012/2013, approx. 628,000 foreigners attended general education schools (7.3 % of the pupils). 206,800 foreign pupils attended vocational schools (8.1 %).

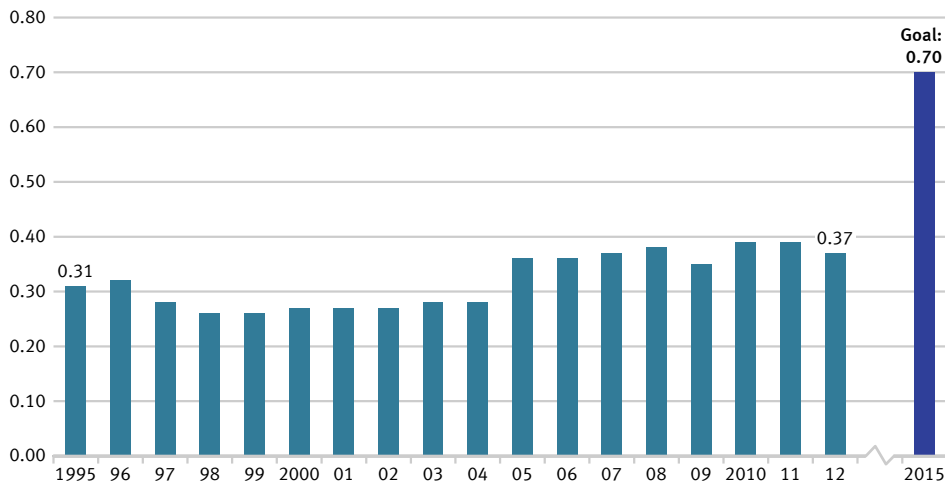
## IV. International responsibility

### Development cooperation

*Supporting sustainable development*



Share of expenditure for Official Development Assistance (ODA) in gross national income  
in %



Sources: Federal Statistical Office, Federal Ministry for Economic Cooperation and Development

#### 20 Share of expenditure for official development assistance in gross national income

Through their development policies, industrialised nations are contributing to reducing poverty worldwide, securing peace, achieving democracy, creating globalisation equitably and protecting the environment. In the context of these responsibilities German development policy is oriented towards the guiding principle of global sustainable development which is expressed equally through economic performance, social justice, ecological sustainability and political stability.

The indicator comprises public expenditure for development cooperation (Official Development Assistance, ODA) in relation to gross national income (GNI). ODA mainly includes expenditure for financial and technical cooperation with developing countries as well as contributions to multilateral institutions for development cooperation (such as the United Nations, European Union, World Bank and regional development banks). Furthermore, expenditure for

certain peace missions, waivers of debt as well as costs for specific development assistance provided in the donor country, such as cost of studies for students from developing countries or expenditure for development-specific research are attributable to ODA. The EU has jointly undertaken to gradually increase ODA expenditure. For German development policy this means that the ODA share will increase to 0.7 % by 2015. In a recorded statement on the decision of the European Council the Federal Government has stated that, because of the extremely difficult German financial situation, innovative financial instruments must make a major contribution towards this goal. Thus in 2008 for the first time revenues derived from the public sale of emissions certificates have been used for international climate projects in the context of measures provided for by development policies.

The ODA share in German GNI in 2012 was 0.37 % and thus slightly lower than the 0.39 % of the previous year. ODA payments in 2012 were around Euro 10.1 billion. In the previous year they were also around

Euro 10.1 billion and in 2010 they amounted to Euro 9.8 billion. If this trend remains at the level of the last five years (2008 to 2012), and without additional efforts, the goal of the sustainability strategy of contributing 0.70 % of gross national income to development cooperation by 2015 will not be reached. No statistically significant trend can be recognised for the last 5 years.

The largest portion of ODA funds (around 66 % in 2012) is being used for technical or financial cooperation with selected partner countries, for food aid, development-oriented emergency and refugee aid and for waivers of debt. Funds are also being used to support non-governmental development cooperation (e.g. non-governmental organisations, political foundations, church relief organisations and the private sector). Additional funds go to multilateral institutions.

In an international comparison, in 2012 Germany was the third largest donor of ODA funds in absolute terms after the USA and the UK, and in front of France and Japan. In terms of gross national income, Germany

lies above the OECD donor nations average at 0.29 %. In comparison, in 2012 Luxembourg, Sweden, Norway, Denmark, and the Netherlands exceeded the targeted 0.7 % mark, as they have for many years.

In addition to official development cooperation, the private sector (for example, churches, foundations and associations) also contributes from donations and its own resources. Private development cooperation remained roughly constant between 1999 and 2004 at around Euro 900 million a year. In 2005 it increased to around Euro 1.23 billion and amounted to Euro 1.09 billion in 2012, equivalent to a 0.04 % share of GNI. According to provisional data, private direct investment in developing countries amounted to Euro 12.4 billion in 2012.

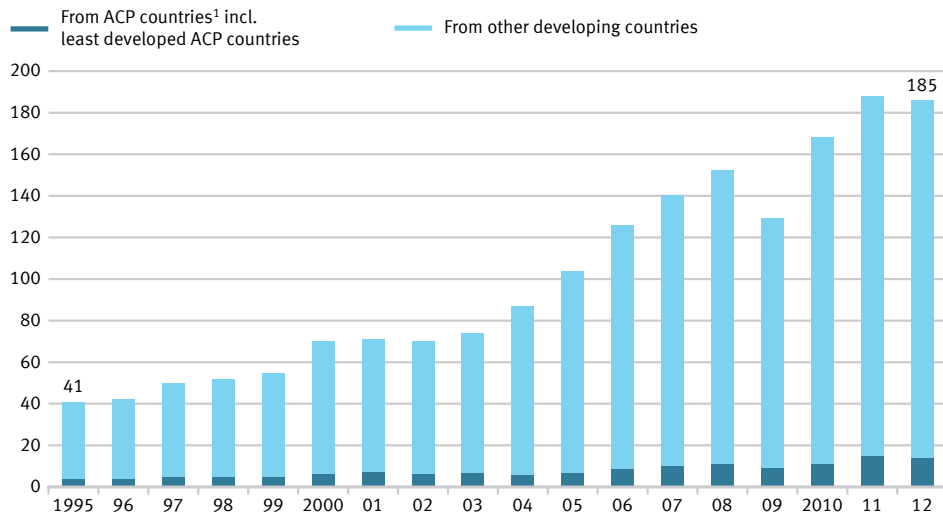
## IV. International responsibility

### Opening markets

*Improving trade opportunities for developing countries*



**German imports from developing countries**  
in billion EUR



Excl. advanced developing countries.

1 ACP = Africa, the Caribbean and the Pacific.

### 21 German imports from developing countries

For their economic and social development the developing countries are dependent upon an open and fair system of trade, which enables them to sell both raw materials and finished products in the markets of the industrial and emerging countries. The figures for German imports from the developing countries serve as an indicator of how far this goal has been achieved. The so-called advanced developing countries, such as South Korea, Israel and Singapore are not included.

Between 1995 and 2008 imports increased considerably, from Euro 41 billion to Euro 152 billion. Following a considerable drop in 2009 (–16 %) the increase continued in 2010 and 2011. A slight decrease was noted again in 2012 (–1 %). The total value of imports from developing countries in 2012 was around Euro 185 billion. This means these imports increased around four and a half times between 1995 and 2012, which was considerably more than the increase in total imports into Germany (+167 %). The proportion of imports from



developing countries to total imports in this period increased from 12.0 % to 20.5 %.

Approximately two-thirds of the imports from developing countries in 2012 came from Asian countries (including China), 13.4 % from Central and South America and 13.0 % from Africa. The remainder came from European developing countries, the countries of the Middle East and Oceania. In terms of imports to Germany, the most important developing country was China: the value of imports from there was around Euro 78.5 billion in 2012. That is around 42 % of the total imports from developing countries. Thus imports from China greatly shape the development of the indicator. If these are excluded from imports from developing countries for the period from 1995 to 2012, it becomes apparent that the proportion of German imports accounted for by these countries has only increased by 2.2 percentage points (to 11.8 % in 2012). To this extent a greater participation of these countries in trade with Germany is hardly recognisable.

This also applies to imports from the African countries, the Caribbean and the

Pacific Area (the ACP states), with which the EU cultivates a special relationship. The value of the imports from these countries went up from Euro 4.2 billion to Euro 13.7 billion between 1995 and 2012. Their share of the total German import market has however remained virtually the same and was 1.5 % in 2012. The group of the fifty least developed countries (LDCs), which for the most part also belong to the ACP states, increased their share of imports from 0.37 % in 1995 to 0.62 % in 2012.

As an EU member state Germany offers the ACP states and also the group of LDCs market access virtually free from customs duties and quotas in the context of various preference systems. Nevertheless, most of these countries have not been able to increase their exports to Germany within the EU to the same degree as has been possible for a country such as China. This suggests that in addition to the openness of markets there are other factors which influence the export opportunities of developing countries. These include for example the capacity to produce goods in sufficient quantity and quality, a functioning infrastructure and also political stability.

It is interesting to take a look at the groups of goods in which imports from developing countries took up an especially high percentage of total imports in 2012 (more than 25 %). These include clothing products (75 %), ores (71 %), leather and leather goods (61 %), data processing equipment, electronics and optical products (43 %), textiles (40 %), plus agricultural products (37 %), and furniture and electrical equipment (25 % each).

This indicator has direct and indirect cross-references to many indicators of the strategy, including 1, 2, 3, 10, 11 and 20.

### Indicator status summary

The following summary shows the mathematically calculated status of the indicators in the target year in simplified form. The basis for the calculation is the average annual change over the last five years (ten years for Indicator 5) up to the last year of the relevant time series. Based upon this, the value which would have been achieved in the next target year (or was actually achieved in the target year) if this trend had continued unchanged has been calculated statistically. On this basis the indicators have been subdivided into four groups:



The target value of the indicator has been achieved or the remaining “distance” to the target value would be covered by the target year (deviation less than 5 %), or a limiting value was met.



The indicator is developing in the right direction, but if the average annual trend continues unaltered there remains or will remain a gap of between 5 and 20 % to the target value by the target year.











The indicator is developing in the right direction, but if the average annual trend continues unaltered there remains or will remain a gap of more than 20 % to the target value by the target year.











The indicator has developed in the wrong direction and if the average annual trend continues unaltered, the distance to be covered to reach the target would become even greater, or a limiting value was not met.

These calculations are not forecasts. The effect of measures decided upon at the end of the observation period and of additional efforts by the players in subsequent years have not been taken into account. The actual development of the indicators in the target year can thus differ from the projected value, depending upon changes in the political, economic and other basic conditions.









Note: in the development of 8 indicators over the last five years (10 years for Indicator 5) up until the last year of the time series there is no statistical trend recognizable (see identifier *nt* in the following summary). The classification in these cases suffers from larger uncertainties. No trends were calculated for an additional 6 indicators for methodological reasons (identifier *nc*, for example where there are gaps in time series).

No.	Indicator areas Sustainability axiom	Indicators	Goals	Status	5 year trend <sup>1</sup>
<b>I. Intergenerational equity</b>					
1a	<b>Resource conservation</b> <i>Using resources economically and efficiently</i>	Energy productivity	To be doubled between 1990 and 2020		t
1b		Primary energy consumption	To be reduced by 20 % by 2020 and 50 % by 2050 compared to 2008		nt
1c		Raw material productivity	To be doubled between 1994 and 2020		t
2	<b>Climate protection</b> <i>Reducing greenhouse gases</i>	Greenhouse gas emissions	Reduction by 21 % by 2008-2012 (average for those years), 40 % by 2020 and 80 to 95 % by 2050, compared to 1990 respectively		nt
3a	<b>Renewable energy sources</b> <i>Strengthening a sustainable energy supply</i>	Share of renewable energy sources in final energy consumption	To be increased to 18 % by 2020 and 60 % by 2050		t
3b amended		Share of renewable energy sources in electricity consumption	To be increased to 40 % to 45 % by 2025, to at least 55 % to 60 % by 2035 and to at least 80 % by 2050		t
4	<b>Land use</b> <i>Sustainable land use</i>	Built-up area and transport infrastructure expansion	Increase to be reduced to 30 hectares a day by 2020		t
5	<b>Species diversity</b> <i>Conserving species – protecting habitats</i>	Species diversity and landscape quality	Increase to the index value of 100 by 2015		t <sup>2</sup>









1 t = trend, nt = no trend, nc = not calculated. – 2 10 year trend.

No.	Indicator areas Sustainability axiom	Indicators	Goals	Status	5 year trend <sup>1</sup>
6a	<b>Government debt</b> <i>Consolidating the budgets – creating intergenerational equity</i>	General government deficit	Ratio of government deficit to GDP less than 3 %		nc
6b		Structural deficit	Structurally balanced public spending, total national structural deficit of no more than 0.5 % of GDP		nc
6c		Government debt	Ratio of government debt to GDP no more than 60 %		nc
7 target added	<b>Provision for future economic stability</b> <i>Creating favourable investment conditions – securing long-term prosperity</i>	Gross fixed capital formation in relation to GDP	Increase in share; total investment ratio higher than the OECD average		nt
8	<b>Innovation</b> <i>Shaping the future with new solutions</i>	Private and public spending on research and development	To be increased to 3 % of GDP by 2020		t
9a	<b>Education an training</b> <i>Continuously improving education and vocational training</i>	18- to 24-year-olds without a school leaving certificate	To be reduced to less than 10 % by 2020		t
9b		30- to 34-year-olds with tertiary or post-secondary non-tertiary level of education	To be increased to 42 % by 2020		t
9c		Share of students starting a degree course	To be increased to 40 % by 2010, followed by further increase and stabilisation at a high level		t







1 t = trend, nt = no trend, nc = not calculated.

No.	Indicator areas Sustainability axiom	Indicators	Goals	Status	5 year trend <sup>1</sup>
<b>II. Quality of life</b>					
10	<b>Economic output</b> <i>Combining greater economic output with environmental and social responsibility</i>	Gross domestic product per capita	Economic growth		t
11a	<b>Mobility</b> <i>Guaranteeing mobility – protecting the environment</i>	Intensity of goods transport	To be reduced to 95 % by 2020, compared to 1999 levels		t
11b		Intensity of passenger transport	To be reduced to 80 % by 2020, compared to 1999 levels		nt
11c		Share of rail transport in goods transport performance	To be increased to 25 % by 2015		nt
11d		Share of inland freight water transport in goods transport performance	To be increased to 14 % by 2015		t
12a	<b>Farming</b> <i>Environmentally sound production in our cultivated landscape</i>	Nitrogen surplus	To be reduced to 80 kg/hectare of agricultural area by 2010, further reduction by 2020		nt
12b		Organic farming	Share of organic farming on land used for agricultural to be increased to 20 % in coming years		nc
13	<b>Air pollution</b> <i>Keeping the environment healthy</i>	Air pollution	To be reduced to 30 % by 2010, compared to 1990 levels		t

1 t = trend, nt = no trend, nc = not calculatet.

No.	Indicator areas Sustainability axiom	Indicators	Goals	Status	5 year trend <sup>1</sup>
14a	<b>Health and nutrition</b> <i>Living healthy longer</i>	Premature mortality (cases of death per 100,000 residents under 65): Men	To be reduced to 190 cases per 100,000 by 2015		t
14b		Premature mortality (cases of death per 100,000 residents under 65): Women	To be reduced to 115 cases per 100,000 by 2015		t
14c		Smoking rate amongst young people (12- to 17-year-olds)	To be decreased to under 12 % by 2015		t
14d		Smoking rate amongst adults (15 years and older)	To be decreased to under 22 % by 2015		nc
14e		Proportion of adults suffering from obesity (18 years and older)	To be reduced by 2020		nc
15	<b>Crime</b> <i>Further increasing personal security</i>	Criminal offences	To be reduced in number of recorded cases per 100,000 inhabitants to under 7,000 by the year 2020		t
<b>III. Social cohesion</b>					
16a	<b>Employment</b> <i>Boosting employment levels</i>	Employment rate (total) (15- to 64-year-olds)	To be increased to 75 % by 2020		t
16b		Employment rate (older people) (55- to 64-year-olds)	To be increased to 60 % by 2020		t

1 t = trend, nt = no trend, nc = not calculatet.

No.	Indicator areas Sustainability axiom	Indicators	Goals	Status	5 year trend <sup>1</sup>
17a	<b>Prospects for families</b> <i>Improving the compatibility of work and family life</i>	All-day care provision for children (0- to 2-year-olds)	To be increased to 35 % by 2020		t
17b		All-day care provision for children (3- to 5-year-olds)	To be increased to 60 % by 2020		t
18	<b>Equal opportunities</b> <i>Promoting equal opportunities in society</i>	Gender pay gap	To be reduced to 10 % by 2020		nt
19	<b>Integration</b> <i>Integration instead of exclusion</i>	Foreign school leavers with a school leaving certificate	Proportion of foreign school leavers with at least a <i>Hauptschule</i> certificate (lower secondary education) is to be increased, with their diploma rate to be raised to that of German school leavers by 2020		t
<b>IV. International responsibility</b>					
20	<b>Development cooperation</b> <i>Supporting sustainable develop- ment</i>	Share of expenditure for official development assistance in gross national income	To be increased to 0.7 % by 2015		nt
21	<b>Opening markets</b> <i>Improving trade opportunities for developing countries</i>	German imports from develo- ping countries	Further increase		t

1 t = trend, nt = no trend, nc = not calculated.

## Definitions of the indicators

No.	Indicator (Unit)	Definition
1a	<b>Energy productivity</b> Index, 1990 = 100	Energy productivity = gross domestic product / domestic primary energy consumption. Energy productivity expresses how much gross domestic product (in euros adjusted for price changes) is generated per unit of primary energy used (in petajoules).
1b	<b>Primary energy consumption</b> Index, 2008 = 100	Domestic primary energy consumption is calculated from the sum of all primary energy sources generated domestically and all imported energy sources less energy exports (and excluding offshore bunkering). In terms of use, this is equivalent to total energy used for energy purposes (final energy consumption and own consumption by energy sectors) and for non-energy purposes (e.g. in the chemical industry), losses incurred through domestic energy conversion, losses from flaring and distribution, as well as statistical differences reported in energy balance sheets.
1c	<b>Raw material productivity</b> Index, 1994 = 100	Raw material productivity = gross domestic product / domestic abiotic primary materials. Raw material productivity expresses how much gross domestic product (in euros, adjusted for price changes) is obtained per tonne of abiotic primary material used. The (non-renewable) raw materials withdrawn from the domestic environment – not counting agricultural and forestry products – as well as all imported abiotic materials (raw materials, semi-finished and finished products) are considered to be abiotic primary material.



No.	Indicator (Unit)	Definition
2	<b>Greenhouse gas emissions</b> Index, base year = 100	Emissions of the following greenhouse gases (substances or substance groups) compliant with the Kyoto Protocol (excluding emissions from land use changes and forestry (LULUCF) and excluding emissions from the energy utilisation of biomass): carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), partly halogenated hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulphur hexafluoride (SF <sub>6</sub> ). The base year is 1990 for CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O and 1995 for HFC, PFC, and SF <sub>6</sub> . Calculations are based on the database Zentrales System Emissionen (Central System of Emissions – ZSE) of the Federal Environment Agency taking additional statistical energy information into account. Indicators are calculated in accordance with the territorial principle (emissions on German territory, in other words including foreign companies located in Germany and excluding emissions from German companies located abroad).
3a	<b>Share of renewable energy sources in final energy consumption</b> %	Share of renewable energy sources in total final energy consumption. Renewables include, among others, hydropower, wind power on land and at sea, solar energy and geothermal energy, but also biomass such as biogenic solid fuels, biogas and biogenic wastes. Final energy is generated subject to energy loss through conversion from primary energy (see Indicator 1b) and is directly available to the consumer.
3b	<b>Share of electricity from renewable energy sources in electricity consumption</b> %	Share of electricity from renewable energy sources (see Indicator 3a) in (gross) electricity consumption (comprising net electricity supply of the country, exchange balance with other countries, own electricity consumption of power plants and grid losses).

No.	Indicator (Unit)	Definition
4	<b>Built-up area and transport infrastructure expansion</b> ha/day	Average daily built-up area and transport infrastructure expansion. Determination by the division of the built-up area and transport infrastructure expansion (in hectares) in a defined period of time (one year or four years) by the number of days (365/366 or 1,461). The moving four-year average is determined in each case by the development of this area in the relevant year and the preceding three years. The data for one year is currently influenced by external effects (the public land survey registers are being reorganised), so that the moving four-year average gives a better picture.
5	<b>Species diversity and landscape quality</b> Index, 2015 = 100	With reference to the projected target value of 100 that is to be reached by 2015, the indicator shows the state of development for 51 selected bird species in the form of an index (measured in % of target value, degree of target achievement). The bird species represent the most important landscape and ecosystem types in Germany (10 species each for the sub-indicators agricultural land, settlements, inland waters, coasts and seas, 11 species for forests; temporarily excluding the Alps due to the unreliable data basis). The stock per species is calculated annually from the results of bird monitoring programmes and related to the size of the defined target value. The results of the spatially representative and statistically reliable monitoring of common breeding species started in 2004 is incorporated in the calculations. More than 1,400 sample areas were recorded in 2011. The historical values for 1970 and 1975 in comparison, have been reconstructed. The indicator is also adopted for the National Strategy on Biological Diversity
6a	<b>National deficit</b> %	Annual national deficit (or national financing balance), calculated from national revenue less national expenditure (by the Federal Government, the <i>Länder</i> , municipalities and social security funds), itemised under national accounts as a percentage of the nominal gross domestic product. Proceeds from UMTS auctions in the year 2000 are not included.

No.	Indicator (Unit)	Definition
6b	<b>Structural deficit</b> %	Annual structural deficit as a percentage of GDP. This is the part of annual national deficit which cannot be attributed to economic fluctuations and temporary effects. The principle of the structurally balanced budget (debt brake) is laid down in German Basic Law (Grundgesetz) (Articles 109 and 115) and relates to the European Stability and Growth Pact.
6c	<b>Government debt</b> %	The national debt level as defined in the Maastricht Treaty as a measure of government debt in relation to the nominal GDP.
7	<b>Gross fixed capital formation in relation to GDP</b> %	Gross fixed capital formation (at current prices) in relation to the nominal gross domestic product (GDP) also referred to as investment ratio. This includes investments in buildings (residential buildings, non-residential buildings), equipment (machinery, vehicles, tools) and other assets (intangible assets, such as software and copyrights, property transfer costs, production livestock).
8	<b>Private and public spending on research and development</b> %	Spending on research and development by industry, government and institutions of higher education expressed as a percentage of gross domestic product.
9a	<b>18- to 24-year-olds without a school leaving certificate</b> %	Share of 18- to 24-year olds (of all 18- to 24-year olds) who currently do not attend any school or institution of higher education and are not in training and hold no qualifications from post-16 education or from the dual system of vocational training. Graduates of <i>Sekundarstufe I</i> (level 2 of the International Standard Classification of Education) who subsequently did not complete vocational training or did not qualify for university entrance or are no longer involved in the process of education are included. This incorporates those with and without a leaving certificate from a <i>Hauptschule</i> (the lowest of the three-tiered German secondary school system). Population data are based on the microcensus.

No.	Indicator (Unit)	Definition
9b	<b>30- to 34-year olds with tertiary or post-secondary non-tertiary certificate</b> %	Share of 30- to 34-year olds (of all 30- to 34- year olds) who have a university or college education (tertiary education according to International Standard Classification of Education (ISCED) Levels 5 and 6) or a comparable certificate (ISCED 4). Included among tertiary certificates are those attained from universities and universities of applied sciences (ISCED 5A/6) as well as from universities of applied administrative sciences, vocational and specialist academies, technical colleges and health care colleges (ISCED 5B). The indicator includes post-secondary non-tertiary certificates (ISCED 4). These are characterised by the fact that two certificates from post-16 education or from the dual system of vocational training can be acquired consecutively or simultaneously, e.g. <i>Abitur</i> (A-Level equivalent) from a night school, college or vocational/technical schools (this presupposes that a vocational certificate has already been attained) or a teacher training certificate following <i>Abitur</i> or two consecutive vocational training certificates. Population data are based on the microcensus.
9c	<b>Share of students starting a degree course</b> %	Number of first-semester students (from Germany and abroad, enrolled at institutions of higher education, excluding universities of applied administrative sciences) expressed as a percentage of the population of the appropriate university-entrance age. The indicator shows how high the proportion of a demographic age group is that takes up studies at an institution of higher education. The quota is calculated according to the OECD standard in order to allow an international comparison. Population data are based on the microcensus.
10	<b>Gross domestic product per capita</b> Euro	GDP (price-adjusted, reference year 2005) per capita. The population data refer to the annual average as delineated in the national accounts (currently exclusively based on the 1987 census for the years starting in 1990).

No.	Indicator (Unit)	Definition
11a	<b>Intensity of goods transport</b> Index, 1999 = 100	Intensity of goods transport = domestic goods transport performance (in tonne-kilometres) / gross domestic product (price-adjusted). The term transport covers any conveyance of items and all supplementary domestic services (including air transport and local transport by German lorries up to 50 km). In addition to the freight transport performance, energy efficiency is considered (absolute energy consumption and energy consumption per tonne-kilometre).
11b	<b>Intensity of passenger transport</b> Index, 1999 = 100	Intensity of passenger transport = passenger transport performance (in passenger kilometres) / gross domestic product (price-adjusted). The term transport covers any conveyance of persons and all supplementary domestic services (including air transport). In addition to the passenger transport performance, energy efficiency is considered (absolute energy consumption and energy consumption per passenger kilometre).
11c, d	<b>Share of rail transport and inland freight water transport</b> %	Share of rail transport (11c) as well as share of inland freight water transport (11d) in the total domestic goods transport performance excluding local haulage by German lorries up to 50 km.
12a	<b>Nitrogen surplus</b> kg/ha	Nitrogen surplus in kilogram per hectare of land used for agriculture, calculated from nitrogen input (from fertilisers, atmospheric deposition, biological nitrogen fixation, seed and plant material, feed-stuff from domestic production and from imports) minus nitrogen output (through crop and animal market products leaving the agricultural sector). The overall balance is calculated on the basis of the “farm-gate model”. Nitrogen flows in the domestic cycle – with the exception of domestic feed production – are not shown. The moving three-year average is calculated from the total balance of the given year, the previous year and the following year.

No.	Indicator (Unit)	Definition
12b	<b>Organic farming</b> %	Farmland used for organic farming subject to the control procedure of the EU regulations on organic farming (EC Regulation No. 834/2007 and provisions concerning its implementation in EC Regulation No. 889/2008), as a proportion of all the farmland in Germany. It includes both the areas completely devoted to organic farming as well as those still under conversion. The results of official statistics are used. For methodological reasons (among other things data collection thresholds, time of survey) they differ slightly from the data provided annually by the Federal Office for Agriculture and Food.
13	<b>Air pollution</b> Index, 1990 = 100	The following substances or substance classes are considered to be air pollutants for the purpose of this indicator: sulphur dioxide (SO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), ammonia (NH <sub>3</sub> ), non-methane volatile organic compounds (NMVOC). Unweighted average of the indices of the four air pollutants referred to.
14a, b	<b>Premature mortality</b> Number of cases per 100,000 inhabitants	Cases of death in the male (14a) and female (14b) under-65 year old population in relation to 100,000 inhabitants of the standardised population (of 1987) under 65 years, including those younger than one year. The calculation takes into account the fact that through demographic change in Germany there is an ever increasing number of people older than 65 and provides a comparable time series over the years.
14c, d	<b>Smoking rates amongst young people and adults</b> %	Proportion of polled 12- to 17-year olds (proportion of adolescents who smoke, 14c) and the proportion of polled 15-year olds and older (proportion of adults who smoke, 14d), who answered the questions in the microcensus on smoking behaviour and occasionally or regularly smoke.
14e	<b>Proportion of adults suffering from obesity</b> %	Proportion of obese adults (18 years and older), who have answered the questions on body weight and height and have a BMI (body mass index) of 30 and above, in the population of the same age. The BMI is calculated from the ratio of body weight in kilograms to height in metres squared. People with a BMI of 30+ are classified as obese according to the classification of the World Health Organisation (WHO). Age and gender are not taken into consideration.

No.	Indicator (Unit)	Definition
15	<b>Criminal offences</b> Number of cases per 100,000 inhabitants	Number of criminal offences reported each year to the police and recorded in the Police Crime Statistics (Polizeiliche Kriminalstatistik) per 100,000 inhabitants (frequency). The population figure is given by projecting the 2012 population and does not yet incorporate the results of the 2011 census.
16a, b	<b>Employment rate</b> %	Share of the persons employed between 15 and 64 years (16a), and 55 and 64 years (16b) in the total population of the respective age group. The population data are taken from the microcensus, the results of the 2011 census are not yet incorporated. The working population consists of people who, during the week under survey, engaged in some kind of activity for at least one hour for which they received compensation, or did not work because they were absent from their workplace temporarily.
17a, b	<b>All-day care provision for children</b> %	Share of children in all-day care (more than seven hours without publicly funded care in private homes) as percentage of all children from the respective age groups: 0- to 2-year-olds (17a) as well as 3- to 5-year-olds (17b). Date of survey: 1 March. Data on population (by age groups) are based on updating of former census results. The results of the 2011 census are not yet incorporated.
18	<b>Gender pay gap</b> %	Difference between average gross hourly wages of women and men expressed as percentage of men's earnings.
19	<b>Foreign school leavers with a school leaving certificate</b> %	Share of foreign school leavers from general schools with school leaving certificates (at least the <i>Hauptschule</i> certificate) in all foreign school leavers in the year under review.

No.	Indicator (Unit)	Definition
20	<b>Share of expenditure for official development assistance in gross national income</b> %	Share of the expenditure for official development assistance (ODA) in gross national income. ODA mainly includes expenditure for financial and technical cooperation with developing countries as well as contributions to multilateral institutions for development cooperation (such as the United Nations, European Union, World Bank, regional development banks). Furthermore, waivers of debt as well as costs for specific development assistance provided in the donor country, such as cost of studies for students from developing countries or expenditure for development-specific research are attributable to ODA. The data are taken from the yearly report to the Development Assistance Committee of the OECD.
21	<b>German imports from developing countries</b> Euro	Value of the imports from developing countries into Germany excluding imports from the so-called advanced developing countries, but including the European developing countries, such as Albania, Belarus or Turkey. The classification of developing countries is based on the DAC List of Aid Recipients prepared by the Development Assistance Committee of the OECD.





Data on the Indicator Report and regularly updated indicators  
on the environment and the economy at [www.destatis.de](http://www.destatis.de)

Information service

Phone: +49 (0) 611 / 75 24 05

Fax: +49 (0) 611 / 75 33 30

Written enquiries: [www.destatis.de/contact](http://www.destatis.de/contact)

Other publications for download or order at: [www.destatis.de/publications](http://www.destatis.de/publications)