Germany's Second Biennial Report under the United Nations Framework Convention on Climate Change

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Executive summary

As a Party to the United Nations Framework Convention on Climate Change (UNFCCC), Germany is obliged to submit regular reports. In addition to the annual National Inventory Report and the National Communication to be submitted every four years, Biennial Reports have also been a requirement since 2014.[1] In this Second Biennial Report, Germany reports - in compliance with the biennial reporting guidelines[2] - on trends in greenhouse gas emissions, its national reduction target, measures taken to achieve the target and progress made, projections of future emissions trends and provision of financial, technological and capacity-building support to developing countries. Comprehensive information in table form is given in the common tabular format[3] in the Annex to this report.

Compared with 1990 when greenhouse gas output totalled 1,250 million tonnes of CO_2 equivalents, emissions in Germany had been reduced by 24.0 % by 2013. In 2013, the release of carbon dioxide was once again the main contributor to greenhouse gas emissions, accounting for 88.3 %. The relative share of CO_2 emissions in total greenhouse gas emissions actually rose slightly since the base year, due to the disproportionate reduction in emissions of other greenhouse gases. Methane emissions' (CH_4) share in total emissions was 6.2 %, nitrous oxide's (N_2O) 4.0 % and fluorinated gases' (known as F-gases) about 1.5 %; NF_3, a greenhouse gas which has only recently been included in the reporting, contributes a negligible share of 0.002 %. The distribution of greenhouse gas emissions in Germany is typical for a highly developed, industrialized country. When considered by source group, reductions are seen in all sectors – with the exception of transport, where emissions are at virtually the same level as in the 1990 base year – with the most marked reductions being in the waste management sector.

The German government set itself the target of reducing the country's greenhouse gas emissions by at least 40 % by 2020 in relation to 1990, which equates to a maximum level of 750 million tonnes of CO_2 equivalents. This means that Germany's national targets surpass the international and European requirements for 2020. The latter requires a 20 % reduction in greenhouse gases over 1990 by 2020 throughout the EU, two thirds of which to be achieved through the emissions trading scheme and one third outside the scheme. The government's other interim targets are a reduction of at least 55 % by 2030 and at least 70 % by 2040. It also aims to lower its emissions by 80 to 95 % by 2050 compared with 1990.

Germany has made significant progress in climate change mitigation since the beginning of the 1990s. Examples of this include the fact that it has decoupled economic growth from greenhouse gas emissions and surpassed the reduction targets it committed to under the Kyoto Protocol to the UN Framework Convention on Climate Change. In particular, the expansion of renewable energy has led to increasing reductions in energy-related greenhouse gas emissions. Renewable energy's share in

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1 UNFCCC Decision 1/CP.16

2 UNFCCC biennial reporting guidelines for developed country Parties. Annex I to UNFCCC Decision 2/CP.17

3 Common tabular format for UNFCCC biennial reporting guidelines for developed country Parties. UNFCCC Decision 19/CP.18

gross electricity consumption rose to 25.3 % in 2013, with its share in gross final energy consumption that year rising to 12.0 %. Its share in total heat consumption in 2013 was 9.1 % and in the transport sector it was 5.5 %. In 2013, a total of 146 million tonnes of CO_2 equivalents were avoided as a result of renewable energy. Germany's restructuring of its energy supply is an ongoing stimulus for growth, investment and employment.

Current projections assume that, as a result of the measures adopted in 2014 and already implemented (with-measures scenario) and taking uncertainties into account, Germany can achieve a reduction in greenhouse gases of about 32 to 35 % by 2020. Considerable additional efforts will be needed by all stakeholders in all sectors to achieve the 2020 target of cutting greenhouse gas emissions by 40 % from 1990 levels. To this end, the federal cabinet therefore approved the Climate Action Programme 2020 with its additional measures on 3 December 2014. The German government will monitor implementation of the Climate Action Programme in an ongoing process up to 2020. Part of this involves the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety preparing an annual climate action report. In addition to that, a 2050 Climate Action Plan will be drawn up by 2016, describing the further steps needed to achieve reductions right through to the 2050 target in the light of the European targets and the results of the 2015 Paris climate change conference and underpinning them with measures developed within a broad-based dialogue process.

The German government is honouring its financial commitments and is very active in the field of international climate finance. Since 2005, it has increased its climate finance from public budget funds almost fivefold to around 2.344 billion euros in 2014. In 2013, the international climate finance from public budget funds totalled 1.950 billion euros. Furthermore, at the Petersberg Climate Dialogue in June 2015, Chancellor Merkel also announced the government's goal of doubling German climate finance from budget funds by 2020. In addition to the public climate finance from budget funds, Germany has also since 2013 reported mobilised public climate finance, i.e. climate-related credit financing provided by KfW Entwicklungsbank and the Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG), which uses market funds. In 2013, this mobilised public climate finance amounted to 1.47 billion euros, so that German climate finance totalled approximately 3.42 billion euros. In 2014, mobilised public climate finance was roughly 2.79 billion euros, so that German climate finance totalled 5.135 billion euros. The German government's aim is to provide climate finance in a balanced way to projects on climate change mitigation and adaptation. This was the case in 2013, but 2014 was the first time that Germany provided more bilateral climate finance for adaption to climate change than for mitigation. The German government uses a broad range of instruments and institutions for its international cooperation activities in the field of climate and development.

1. Information on greenhouse gas emissions and trends, Greenhouse Gas Inventories including information on the National System of Emissions Inventories

In accordance with decision 3/CP.5, Germany submitted its National Inventory Report (NIR 2013) on 15 November 2015. It describes the methods and data sources on which the calculations of German greenhouse gas emissions are based, along with the Greenhouse Gas Inventories covering the period from 1990 to 2013. The descriptions in this chapter are based on the 2015 National Inventory Report.

The 2015 Greenhouse Gas Inventories use for the first time the UNFCCC Reporting Guidelines, which have been revised on the basis of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and are now mandatory under decision 23/CP.19. For further details on methodology and information on how emissions are determined and calculated for the inventories, please refer to the National Inventory Report.[4]

Detailed information on emissions can be found in the inventories published annually in the common reporting format (CRF). The data used in this report corresponds to the emission data submitted to the UNFCCC on 15 November 2015.[5]

1.1 Summary of information from the Greenhouse Gas Inventories

The countries of the world recognised early on that the new climate conditions and the anticipated changes in temperature pose a danger to ecosystems and human civilisation because they are happening relatively quickly and existing systems cannot adapt at the same pace.

In 1992, virtually all the countries of the world adopted the United Nations Framework Convention on Climate Change (UNFCCC) in Rio de Janeiro. Since 1994, the countries listed in Annex I of the Convention have been obliged to submit a Greenhouse Gas Inventory to the UNFCCC Secretariat by 15 April each year. Details must be provided of emissions and removals by sinks in the base year (1990 for CO_2, N_2O, CH_4; 1995 for HFCs, PFCs, SF_6, NF_3) for each year up to two years before the report year.

At the third Conference of the Parties (COP3) in Kyoto, legally binding commitments for the industrialised countries to limit and reduce emissions were established for the first time. Under the Kyoto Protocol, reduction targets for aggregate emissions of a basket of six greenhouse gases - carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) - were agreed for the period from 2008 to 2012. In the second commitment period of the Kyoto Protocol from 2013 to 2020, further greenhouse gases were added to the original six: nitrogen trifluoride (NF_3), additional

[4] The National Inventory Report is published at: http://www.umweltbundesamt.de/emissionen/publikationen.htm

[5] The CRF tables from the National Inventory Reports are published at: http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/deu-2013-crf-11apr.zip

hydrofluorocarbons (HFC-152, HFC-161, HFC-236cb, HFC-236ea, HFC-245fa, HFC-365mfc) and two more perfluorocarbons (c-C_3F_6, $C_{10}F_{18}$).

After a commitment to reduce emissions by 8 % from base year levels in the first commitment period, the European Union committed during the second commitment period of the Kyoto Protocol to reducing its greenhouse gas emissions by 20 % from base year levels by 2020. This commitment was distributed under the European Effort Sharing Decision (ESD)[6] across the 28 Member States and the European Union. Whereas the emissions reductions for the parts of the inventory that are subject to emissions trading are implemented at European level, the Member States themselves are responsible at national level for emissions reductions in the sectors that are not covered by emissions trading (see Chapter 2). Germany is committed to reducing its emissions in this area to 445.9 million tonnes of CO_2 equivalents. This corresponds to a reduction of 14 % from ESD base year levels (2005).

As in the first commitment period, the effectiveness and success of the second commitment period of the Kyoto Protocol in reducing global greenhouse gas emissions depend on two crucial factors: whether the Parties adhere to the Protocol's regulations and meet their commitments and whether the emission data used to check compliance is reliable. This means that national reporting and the subsequent international scrutiny of the emissions inventories play a key role.

1.2 Greenhouse gas emissions and trends

During the first commitment period of the Kyoto Protocol from 2008 to 2012, Germany was able to fully meet its commitment under the European burden sharing scheme mentioned above, compared to the base year emissions determined in 2007[7]. In 2013, emissions were up by 2.4 % on the previous year. The cold weather that winter was responsible for higher carbon dioxide emissions from households and in the trade, commerce and services sector. Overall, greenhouse gases, expressed as CO_2 equivalents, were 24.0 % lower in 2013 than in the above-mentioned base year.[8]

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6 Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009

7 As a result of the 2007 review of the initial reports submitted in 2006 as required by Article 8 of the Kyoto Protocol, the reference values for compliance with the reduction commitment under the Kyoto Protocol were established – irrespective of possible improvements to the data bases. For Germany base year emissions in the amount of 1,232,429.543 kt CO_2 equivalents have been determined. The reduction commitment for Germany, in accordance with its commitments under the Kyoto Protocol and the EU burden sharing agreement (Council Decision 2002/358/EC) is 21 %.

8 The 2015 report for 2013, which was the first year of the second commitment period of the Kyoto Protocol, incorporates comprehensive changes in the way greenhouse gases are calculated and reported in compliance with Decision 24/CP.19 of the Conference of the Parties. Primarily the changes result from the obligation to use 2006 IPCC Guidelines on Greenhouse Gas Inventories. They consist not only of a revision of the methods that must be used to calculate greenhouse gas emissions but also include greenhouse gases that were not previously part of the inventory, along with additional source groups. In the past, the GWP values from the 2nd IPCC Assessment Report published in 1995 were used to determine total emissions. This report uses for the first time, for the sake of standardisation, the GWP values given in the 4th IPCC Assessment Report. As a result of the combination of all these effects, the emissions reported for 1990 to 2012 differ from those reported using the old regulations.

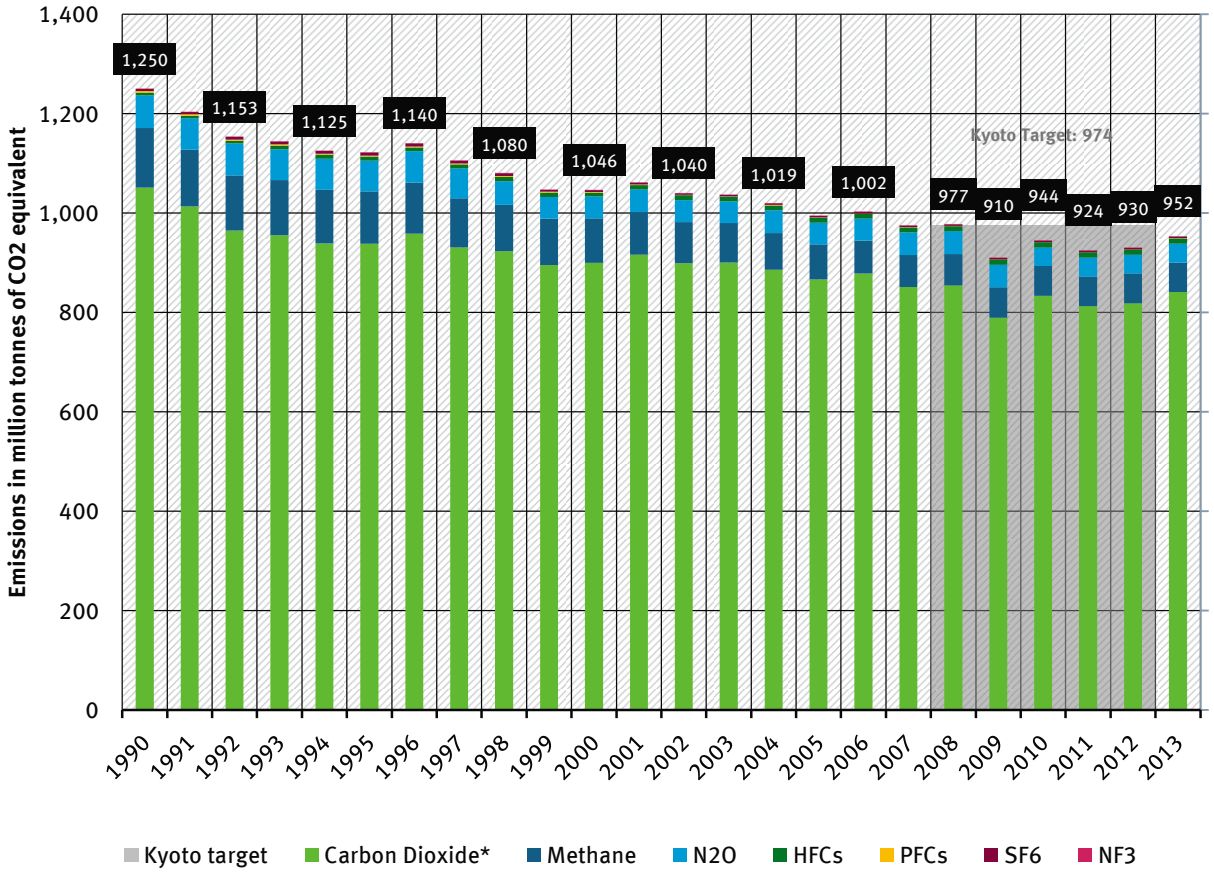

Figure 1: Trends in greenhouse gases in Germany since 1990, by individual gas[9]

In 2013, release of carbon dioxide was once again the main contributor to greenhouse gas emissions, accounting for 88.3 %. Most of them came from stationary and mobile combustion of fossil fuels. The relative share of CO_2 emissions in total greenhouse gas emissions has risen by four percentage points since the base year, due to the disproportionate reduction in emissions of other greenhouse gases. Methane (CH_4) emissions, most of which are caused by livestock raising, fuel distribution, and landfills, accounted for a 6.2 % share. Most emissions of nitrous oxide (N_2O) came from agriculture, industrial processes, and the combustion of fossil fuels, contributing 4.0 % to greenhouse gas emissions. Fluorinated gases (known as F-gases) contributed about 1.5 % to total emissions; NF_3, a greenhouse gas which has only recently been included in the reporting, contributes a negligible share of 0.002 %. The distribution of greenhouse gas emissions in Germany is typical for a highly developed, industrialized country.

1.2.1 Trends for aggregate greenhouse gas emissions between 1990 and 2013

There was a marked 24.0 % reduction in greenhouse gas emissions between 1990 and 2013. The individual greenhouse gases contributed to this change to varying degrees (see Figure *3*). Emissions of the direct greenhouse gases that dominate in terms of quantity, primarily methane, were reduced considerably. The main reasons for this are as follows:

[9] CO_2 emissions and requirements in soils are reported under land use change and forestry.

- change from the use of solid fuels to lower-emission liquid and gaseous fuels since 1990;
- increased use of renewable energy sources and the associated replacement of fossil fuels;
- more efficient plants and facilities;
- changes in livestock raising conditions and reduction of livestock populations;
- compliance with statutory provisions on waste management.

Figure 2 shows the contribution of the individual groups of sources and sinks to total greenhouse gas emissions. It clearly illustrates the absolute dominance of energy-related emissions and the fact that the relative contributions of the individual groups of sources and sinks remain largely constant. Over time, energy-related emissions have steadily decreased. The majority of deviations from the trend are temperature-related. Differences in temperature trends – especially in winter – influence heating behaviour and thus the energy consumed to produce space heating. This has a major impact on the annual trend in energy-related CO_2 emissions.

A closer look at the individual components reaffirms this trend in its varying degrees for the different gases. Changes in emissions since the base year (1995 for F-gases and NF_3, otherwise 1990) of the greenhouse gases that dominate in terms of quantity totalled -20.0 % for carbon dioxide (CO_2), -50.3 % for methane (CH_4) and -42.1 % for nitrous oxide (N_2O). By contrast, the trend for the F-gases, which account for about 1.5 % of greenhouse gas emissions, is not quite so uniform. As a result of the introduction of new technologies and the use of these substances as substitutes, emissions of SF_6 fell by 49.6 % and of PFCs by 87.7 % compared with the 1995 base year, whereas emissions of HFCs rose by 28.6 %. Emissions of NF_3, a greenhouse gas which is included in the report for the first time, have risen very markedly since 1995 – by 216.1 % - but their contribution to overall emissions is extremely small.

Total emissions in 2013 were 2.4 % up on 2012, mainly as a result of a rise in CO_2 emissions from households (+16.2 %) and trade, commerce and services (+9.8 %), which was entirely weather-related.

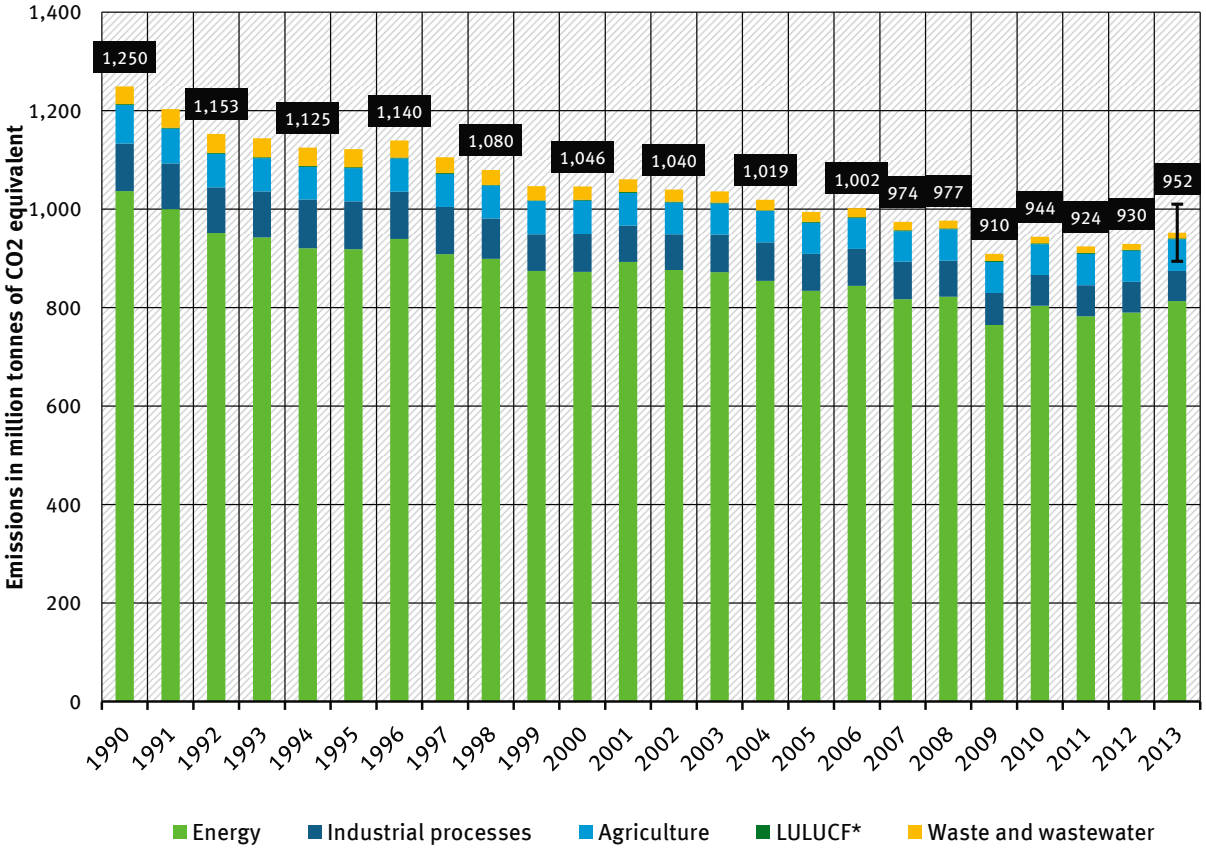

Figure 2: Emission trends in Germany since 1990, by source group[10]

Figure 3 shows the relative trend in emissions by source group since 1990. The most significant reduction here was in the waste sector, where regulations introduced to increase recycling of reusable materials (packaging legislation) and composting (legislation on organic waste) have resulted in a steep decline in the amount of waste being landfilled and therefore in a steady reduction in landfill emissions. As far as emissions from industrial processes are concerned, emission-reduction measures - especially in the area of adipic acid production from 1997 to 2009 - had a major impact. Emissions from solvent and product use fell significantly as a result of N_2O being used less frequently as an anaesthetic. Trends in emissions from agriculture essentially reflect the trends in livestock populations.

[10] CO_2 emissions and requirements in soils are reported under land use change and forestry.

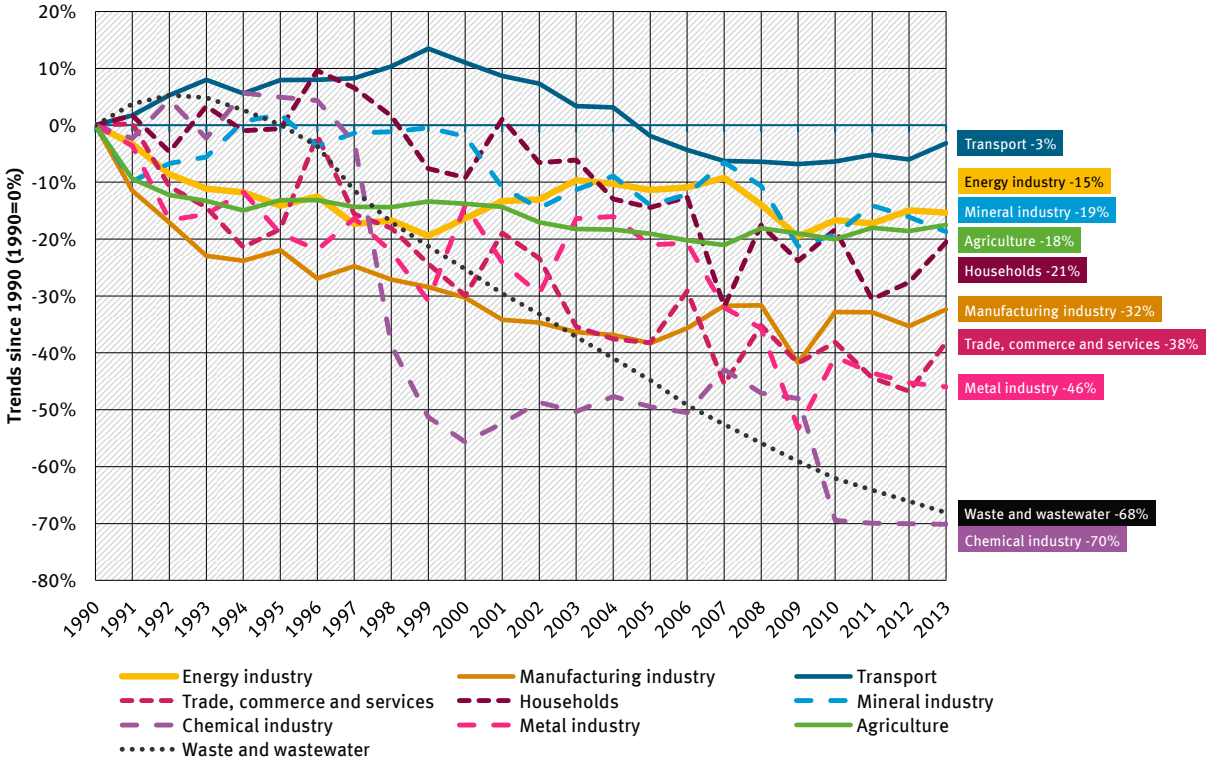

Figure 3: Relative trends in greenhouse gas emissions since 1990 by source group[11,12]

1.2.2 Emissions trends by greenhouse gas

The individual greenhouse gases contributed to the trends in greenhouse gas emissions to differing degrees. The reasons for that will be explained in greater detail in the discussion of trends below. The global economic crisis, which began to impact on Germany at the end of 2008, had a major influence on emissions; some of the annual variations between 2008 and 2013 were caused by economic fluctuations in specific sectors.

The release of carbon dioxide – the vast majority of which was caused by stationary and mobile combustion processes – dominates the overall picture regarding aggregate greenhouse gas emissions. Due to the above-average decrease in emissions of the other greenhouse gases, carbon dioxide's share in overall greenhouse gas emissions has risen since 1990. All other greenhouse gases together are responsible for only about one tenth of total greenhouse gas emissions. The distribution spectrum of greenhouse gas emissions is typical for a highly industrialised country.

Carbon dioxide (CO_2)

The reduction in CO_2 emissions is closely linked to trends in the energy sector. The sharp emissions reduction in this area seen in the early 1990s was primarily the result of restructuring in the new German Länder (former East Germany), including switching to cleaner fuels and decommissioning

11 CO_2 emissions and required values for soils are reported under land use change and forestry.

12 The reference point is emissions in 1990 (=100 %), not the base year.

obsolete facilities. The changes in the fuel mix have continued, to a somewhat lesser degree, up to the current report year.

Use of gases, primarily natural gas, as substitutes for solid and liquid fuels is also reflected in emissions trends for stationary combustion systems. While CO_2 emissions from liquid fuels decreased by about 20 % with respect to their levels in 1990, and emissions from solid fuels decreased by almost 60 %, emissions from gaseous fuels increased by nearly 40 %.

When these emissions trends are viewed at the level of individual source group, a highly consistent picture emerges. In comparison to 1990 levels, CO_2 emissions in all source groups of energy-related emissions decreased by a total of nearly 200 million tonnes.

Trends in the transport sector, which is dominated by road transport, are quite different: CO_2 emissions increased slightly up to 1999, then fell slightly as a result of consumers purchasing fuel in other countries,[13] diesel being used instead of petrol,[14] and higher biodiesel blending rates. The steady rise in average engine power is one of the reasons for the fact that the trend has stagnated since about 2007; however, it began to rise once more when transport volumes and mileage increased again and the use of biofuels decreased in 2013 (4.5 million tonnes of CO_2 more than in 2012). At 158 million tonnes, CO_2 emissions from the transport sector are only slightly lower than their starting level in 1990 (162 million tonnes).

Nitrous oxide (N_2O)

Since 1990, N_2O emissions have decreased by about 34.2 %. The main emissions sources are the use of nitrogen-containing fertilisers in agriculture, the chemical industry, use of fossil fuels, and livestock raising. Smaller amounts of emissions are caused by wastewater treatment and use of N_2O in products (for example, as an anaesthetic). Industry has had the greatest influence on reducing emissions, especially additional reduction measures in production of adipic acid and nitric acid, which had a particularly strong influence in 1997, 2006 and 2009. As a result of these measures, the chemical industry's emissions have been reduced by about 96 % with respect to 1990. Since 1999, emissions trends have been strongly influenced by economic trends in the chemical industry.

Total emissions in 2013 were slightly up on the year before. The trend in the individual sectors varies depending on the fuel used.

Methane (CH_4)

Methane emissions are caused mainly by animal husbandry in agriculture, landfilling waste and distribution of liquid and gaseous fuels. On the other hand, energy-related and process-related emissions and emissions from wastewater treatment are almost negligible. Methane emissions have been reduced by 50.3 % since 1990. This trend has been primarily the result of environmental policy

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[13] Emissions were calculated on the basis of domestic fuel sales. Amounts of fuel purchased outside Germany are therefore not reflected in the German emissions inventory.

[14] Diesel fuel's share in total fuel consumption in the road transport sector rose sharply throughout the entire period. Whereas in 1990 almost two thirds of emissions from road transport were caused by petrol consumption and one third by diesel, almost the exact opposite is now true.

measures (waste separation with intensified recycling and increasing energy recovery from waste), which have decreased landfilling of organic waste. A second important factor is that energy recovery from coal mine gas has increased, while overall production of this gas has decreased (due to the closure of coal mines). Emissions in this area have decreased by nearly 80 % since 1990. Yet another reason for the emissions reductions is the decrease in livestock populations in the first half of the 1990s, primarily in the new Länder (i.e. former East Germany). Repairs and modernisation of outdated gas distribution networks in that part of Germany, along with improvements in fuel distribution, have brought about further reductions in total emissions.

Emissions in 2013 were slightly down on the previous year. Lower landfill emissions and reductions in energy-related emissions were to some extent cancelled out by a rise in agricultural emissions.

Fluorinated gases

Emissions of fluorinated greenhouse gases (HFCs, PFCs, SF_6 and NF_3) have developed in different ways since 1990. Emissions of HFCs rose, primarily as a result of their increased use as refrigerants in refrigeration and air-conditioning systems and of increasing disposal of those systems. This more than offset emissions reductions resulting from their reduced use in PUR installation foams. The emissions reductions for PFCs were achieved primarily through the efforts of primary aluminium producers and semiconductor manufacturers. The SF_6 emissions reduction up to 2003 is due primarily to use of the gas in automobile tyres being phased out since the mid-1990s. In this area, efforts to increase environmental awareness have been successful, resulting in emissions reductions of over 100 tonnes and greenhouse gas reductions of 2.5 million tonnes of CO_2 equivalents. Similar success has been achieved with soundproof windows, for which production use of SF_6 has been reduced to nearly zero since 1995. The majority of current and future emissions of this substance will result from open disposal of old windows. Emissions from electricity transmission facilities have also decreased considerably. Important new emissions sources include welding, production of solar cells and production of glass fibre optics.

NF_3, a gas used mainly in the production of semiconductors and photovoltaic systems, is of very little relevance in German. In 2013, it accounted for 0.0018 % of Germany's total greenhouse gas emissions and for 0.0004 % in the 1995 base year.

1.3 Description of the National System of Emissions Inventories

Article 5.1 of the Kyoto Protocol mandates the establishment of national systems for preparing greenhouse gas emissions inventories. Germany's national system meets the requirements of the Guidelines for National Systems,[15] which are binding under the Kyoto Protocol and Decision 280/2004/EC. This has been confirmed by all previous reviews under the UN Framework Convention on Climate Change and the Kyoto Protocol.

1.3.1 Institutional, legal and procedural aspects of the national system

The National System of Emissions Inventories was essentially institutionalised in Germany on three levels: the ministerial level, the Federal Environment Agency level and the level outside the federal administration.

The national system has been established at ministerial level with the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as lead agency, based on an agreement between the undersecretaries of the participating ministries in a policy paper, "National Emissions Reporting System," dated 5 June 2007. The system now incorporates the Federal Ministry of Food and Agriculture (BMEL), Federal Ministry for Economic Affairs and Energy (BMWi), Federal Ministry of Transport and Digital Infrastructure (BMVI), Federal Ministry of the Interior (BMI), Federal Ministry of Finance (BMF) and Federal Ministry of Defence (BMVg), so that all of the key institutions that are in a position to make high-quality specialised contributions are now involved. The policy paper defines the responsibilities of the federal ministries and specifies that the national system will be based on existing data streams. Where the data streams are incomplete, the gaps are to be remedied by appropriate activities in the responsible ministries. The participating ministries created a Co-ordinating Committee to support the reporting process (see NIR Chapter 1.2.1.1).

The "National Emissions Reporting System" policy paper also appoints the Federal Environment Agency as the Single National Entity for Germany (see NIR Chapter 1.2.1.2). The tasks incumbent on the Single National Entity include planning, preparing and archiving the inventories, and describing the steps involved in these processes in the inventory reports, as well as quality control and assurance. The Single National Entity also serves as the central contact point for all matters relating to the Inventory and integrates other specialised units at the level of the Federal Environment Agency into the national system. It coordinates the input of all the other institutions and organisations involved in emissions reporting. A working group on emissions inventories was established to coordinate relevant work within the Federal Environment Agency (see NIR Chapter 1.2.1.3). To implement the requirements of the 2006 IPCC Guidelines for Greenhouse Gas Inventories and facilitate quality control and assurance within the Federal Environment Agency, a quality system for emissions was established in 2005 based on an in-house directive (see NIR Chapter 1.3.3.1.1).

[15] Guidelines for national systems under Article 5, paragraph 1, of the Kyoto Protocol. UNFCCC Decision 19/CMP.1; online at: http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=14

In addition to this, numerous institutions and organisations outside the federal administration were incorporated into the national system, in some cases based on special cooperation agreements with the Single National Entity (see NIR Chapter 1.2.14).

Figure 4 below provides an overview of the structure of the three levels of the national system in Germany.

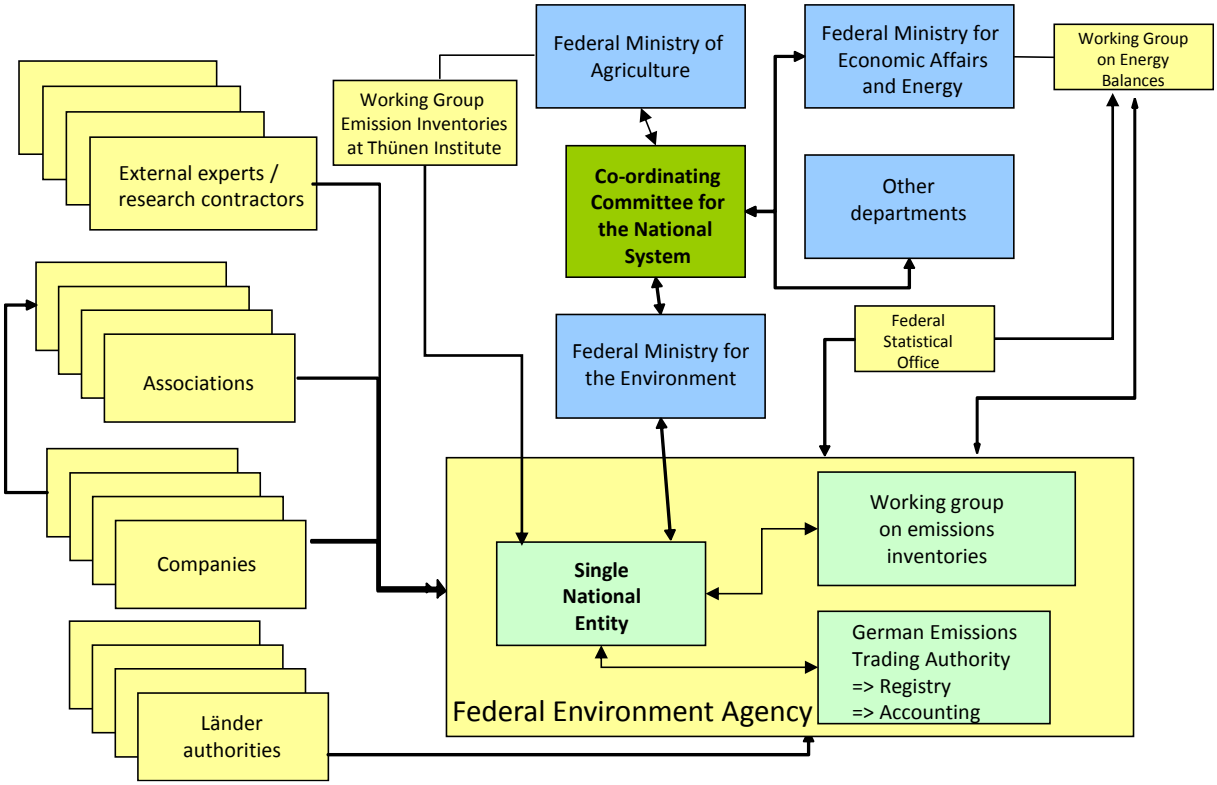

Figure 4: Structure of the National System of Emissions (NaSE)

1.3.2 Information on changes to the national system

Since the first biennial report was submitted, the main concern has been to further consolidate the improvements in institutionalising the national system achieved up 2011. In particular, this involved the extensive institutional improvements to the national system in the area of LULCUF, which were prompted by the comments in the 2010 Country Review. No other changes to the institutionalisation of the national system were made in 2013. In 2014 and 2015, the focus was on the preparation and institutional adaptation of the national system to the requirements of the second commitment period of the Kyoto Protocol and the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

1.3.3 Information on quality management

The national system in Germany serves to ensure that preparation of the inventories conforms to the principles of transparency, consistency, comparability, completeness and accuracy. This is achieved through ongoing quality management and continuous inventory improvement, for example.

A Quality System for Emissions (QSE) creates the necessary conditions for complying with good inventory practice and carrying out routine quality assurance both within and beyond the Federal Environment Agency. It was set up in the Federal Environment Agency in 2005 on the basis of an in-house directive (Hausanordnung 11/2005) and covers all the processes necessary for ongoing improvements to the quality of the Greenhouse Gas Inventories. This includes defining

responsibilities and quality targets relating to choice of method, data collection, calculation of emissions, determining uncertainties and recording the quality tests carried out and their results (confirming that targets have been achieved and, if they were not achieved, listing proposed measures for remedying that in the future).

The quality control procedures were developed with the involvement of external experts, paying special attention to the Federal Environment Agency's work structures, general quality assurance considerations and adhering to IPCC Good Practice Guidance. For the second commitment period, the quality control procedures were adapted to the requirements of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Since 2008, further government agencies, institutions and inventory experts have been incorporated into the quality management system and minimum requirements of data documentation, quality control/quality assurance and archiving have been specified so that the Quality System for Emissions has been extended to cover the entire national system. The procedure makes it possible for other organisations to develop their own quality assurance systems that are tailored to their specific needs and build on their existing structures.

2. Description of the quantified economy-wide emissions target for greenhouse gases

2.1 National target

Germany is pursuing ambitious climate change mitigation goals.

The German government set itself the target of reducing the country's greenhouse gas emissions by at least 40 % by 2020 in relation to 1990.

This is a decisive step towards achieving the government's other interim targets – a reduction of at least 55 % by 2030 and at least 70 % by 2040 and its long-term target of lowering emissions by 80 to 95 % by 2050 compared with 1990.

This means that Germany's national targets surpass the international and European requirements for 2020. Ambitious climate change action is one of the most important drivers of Germany's endeavours to restructure its energy supply, which it instigated as part of the Energy Concept, and of the innovation and technological progress it triggers.

Germany has already been able to chalk up initial successes. As part of its international commitment under the Kyoto Protocol, Germany reduced its greenhouse gas emissions far beyond its Kyoto target for the first commitment period (21 %). Between 2008 and 2012, it achieved an average reduction of 24 % compared to the 1990 base year.

In December 2014, the German government adopted its Climate Action Programme 2020 containing additional measures designed to achieve its 2020 climate target. It will monitor implementation of the Climate Action Programme in an ongoing process up to 2020. To this end, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety prepares an annual climate action report.

In addition to that, a 2050 Climate Action Plan will be drawn up by 2016, describing the further steps needed to achieve reductions right through to the 2050 target in the light of the European targets and the results of the 2015 Paris climate change conference. It will be underpinned by measures developed within a broad-based dialogue process.

Germany's national greenhouse gas emissions reduction targets include emissions of all the greenhouse gases covered by the Kyoto Protocol. They apply to domestic emissions in all sectors and do not take into consideration credits from land use, land-use change and forestry (LULUCF) nor credits from what are known as flexible mechanisms such as the Clean Development Mechanism (CDM) and Joint Implementation (JI).

2.2 European target

In 2010, the EU pledged to reduce its greenhouse gas emissions by 2020 by 20 % compared to 1990 levels (UNFCCC, 2014a). As this target under the Convention was submitted only by EU-28 and not by each of its Member States, there are no specified UNFCCC targets for individual Member States. As a

result, Germany - as part of EU-28 – has committed to a quantified economy-wide emissions target jointly with all Member States.

With its 2020 climate and energy package, the EU set internal rules to underpin the implementation of the target under the Convention. The package introduced a clear approach to achieving the 20 % reduction in total greenhouse gas emissions from 1990 levels, which is equivalent to a 14 % reduction compared to 2005 levels. This 14 % reduction objective is divided between two sub-targets, equivalent to a two-third to one-third split in the reduction effort between ETS and non-ETS sectors (EU, 2009).[16]

Under the revised EU ETS Directive,[17] one single EU ETS cap covers the EU Member States and the three participating non-EU Member States (Norway, Iceland and Liechtenstein), i.e. there are no further differentiated caps by country. For allowances allocated to the EU ETS sectors, annual caps have been set for the period from 2013 to 2020; these decrease by 1.74 % annually, starting from the average level of allowances issued by Member States for the second trading period (2008–2012). The annual caps imply interim targets for emissions reductions in sectors covered by the EU ETS for each year until 2020. For further information on the EU ETS, see EU-BR chapter 4.2.2.

Non-ETS emissions are addressed under the Effort Sharing Decision (ESD).[18] The ESD covers emissions from all sources outside the EU ETS, except for emissions from international maritime transport, domestic and international aviation (which were included in the EU ETS from 1 January 2012) and emissions and removals from land use, land-use change and forestry (LULUCF). It thus includes a diverse range of small-scale emitters in a wide range of sectors: transport (cars, trucks), buildings (in particular heating), services, small industrial installations, fugitive emissions from the energy sector, emissions of fluorinated gases from appliances and other sources, agriculture and waste. Such sources currently account for about 60 % of total greenhouse gas emissions in the EU.

While the EU ETS target is to be achieved by the EU as a whole, the ESD target was divided into national targets to be achieved individually by each Member State. In the Effort Sharing Decision, national emission targets for 2020 are set, expressed as percentage changes from 2005 levels. These changes have been transferred into binding quantified annual reduction targets for the period from 2013 to 2020 (EC 2013)[19+20], expressed in Annual Emission Allocations (AEAs). Germany committed to reduce emissions in sectors covered under the ESD by 14 % compared to 2005 levels. The quantified annual reduction targets are 487 million AEA in 2013, decreasing to 438 million in 2020.[21]

In 2013, verified emissions from stationary installations covered under the EU-ETS in Germany amounted to 481 million tonnes of million tonnes of CO_2 equivalents. ETS emissions thus account for

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16 Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (OJ L 140, 05.06.2009, p. 63) (http://eur-lex.europa.eu/ LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:00 63:0087:en:PDF)

17 Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community

18 Decision No 406/2009/EC

19 Commission decision of 26 March 2013 on determining Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council (2013/162/EU)

20 Commission Implementing Decision of 31 October 2013 on the adjustments to Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/ EC of the European Parliament and of the Council (2013/634/EU)

21 http://ec.europa.eu/clima/policies/effort/framework/docs/draft_decision_aeas_esd_en.pdf

50.5 % of the total greenhouse gas emissions of 952 million tonnes of CO_2 equivalents (not counting LULUCF).

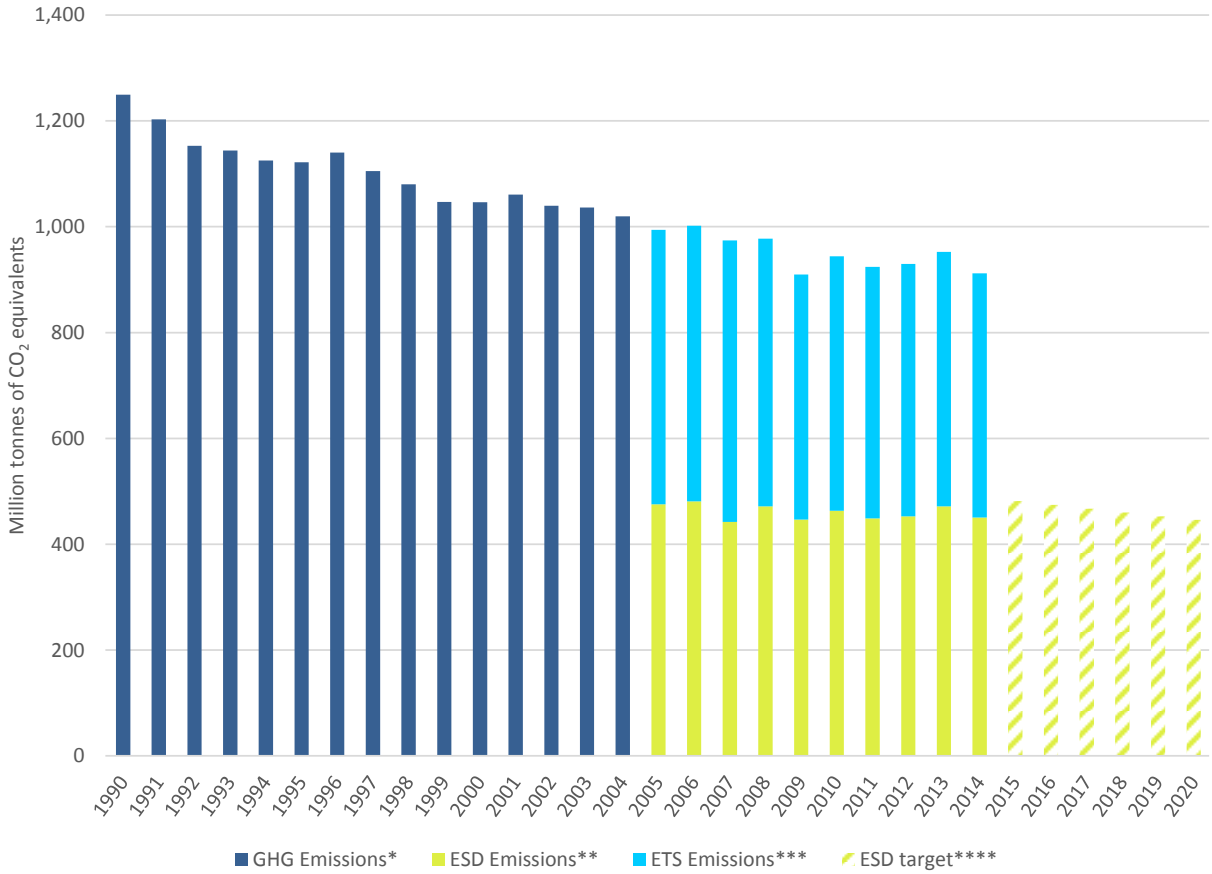

Figure 5: Trends in greenhouse gas emissions and the separation into ETS and ESD of Germany

***Note**: Greenhouse gas emissions including civil aviation but excluding sources and sinks in the LULUCF sector. ETS emissions are corrected to take into account the extended scope of the EU ETS in its third trading period.*

***Sources**: Greenhouse gas inventories (to be updated); EUTL data from EEA data viewer;[22] EC 2013[23+24]*

[22] http://www.eea.europa.eu/data-and-maps/data/data-viewers/emissions-trading-viewer

[23] Commission decision of 26 March 2013 on determining Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council (2013/162/EU)

[24] Commission Implementing Decision of 31 October 2013 on the adjustments to Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/ EC of the European Parliament and of the Council (2013/634/EU)

The monitoring process is harmonized for all European Member States and is detailed in the Monitoring Mechanism Regulation.[25] The use of flexible mechanisms is possible under the EU ETS and the ESD.

The amended EU ETS Directive 2009/29/EC (Article 11a (8)) sets the upper limit for use of credits for the period from 2008 to 2020 at a maximum of 50 % of the reduction effort below 2005 levels. This is further specified into installation-level limits in the Commission Regulation on international credit entitlements (RICE).[26] Since 2013, it has no longer been possible to track the use of flexible mechanisms in the EU ETS directly via information on the EUTL public website: CERs and ERUs are exchanged into EUAs and after the exchange they cannot be further tracked as CERs or ERUs. These exchanges at installation level will be publicized two years after transfers are conducted. Thus, information reflecting use in 2013 will not become available until 2016.

The ESD allows Member States to make use of flexibility provisions for meeting their annual targets, with certain limitations. There is an annual limit of 3 % for the use of project-based credits for each Member State. Any that are not used in a specific year can be transferred to other Member States or be banked for their own use until 2020.

[25] Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC

[26] Commission Regulation (EU) No 1123/2013 of 8 November 2013 on determining international credit entitlements pursuant to Directive 2003/87/EC of the European Parliament and of the Council

3. Progress towards meeting the national emissions reduction target

3.1 Introduction

3.1.1 National target

Germany has made significant progress in climate change mitigation since the beginning of the 1990s. Examples of this include the fact that it has decoupled economic growth from greenhouse gas emissions and surpassed the reduction targets it committed to under the Kyoto Protocol to the UN Framework Convention on Climate Change. To achieve the German government's target of cutting the country's greenhouse gas emissions by at least 40 % by 2020 compared with 1990, the emissions of about 1.250 million tonnes (megatonnes) of CO_2 equivalents in 1990 must be lowered to a maximum of 750 million tonnes of CO_2 equivalents in 2020.

According to the 2015 National Inventory Report, 952 million tonnes of greenhouse gases were emitted in Germany in 2013. That equates to a 24.0 % reduction in comparison to 1990. According to the latest estimates by the Federal Environment Agency, 902 million tonnes of greenhouse gases were emitted in 2014, which is a reduction of about 27.9 % since 1990. Current projections assume that, as a result of the measures adopted in 2014 and already implemented, a reduction in greenhouse gases of about 33 to 34 % can be achieved by 2020. When uncertainties regarding population trends, economic trends and energy prices are taken into account, in a range of about 32 to 35 % results.

Considerable additional efforts will be needed by all stakeholders in all sectors to achieve the 40-per cent target. To this end, the federal cabinet therefore approved the Climate Action Programme 2020 on 3 December 2014.

The Action Programme comprises nine components. For each component, the Programme specifies the contribution it makes to closing the mitigation gap, assuming that contribution can be quantified. Overall, the Action Programme produces a reduction in 2020 of 62-78 million tonnes of CO_2 equivalents more than envisaged under the current projection for 2020.

The savings achieved by the key policy measures are depicted in the following table.

Key policy measures	**Contribution to greenhouse gas emissions reduction** (million tonnes of CO_2 equivalents)
National Energy Efficiency Action Plan, NEEAP (not including measures in the transport sector)	Approx. 25-30 million tonnes (including energy efficiency in buildings)
Climate-friendly building and housing strategy (contains NEEAP measures specific to buildings – see Chapter 4.5.2)	In total, approx. 5.7-10 million tonnes (1.5-4.7 million tonnes of which are in addition to NEEAP)
Measures in the transport sector	Approx. 7-10 million tonnes
Reduction in non-energy-related emissions in:	
• industry, the commerce/trade/services sector and waste management	3-7.7 million tonnes
• agriculture	3.6 million tonnes
Reform of the emissions trading scheme	Dependent on details to be worked out at EU level
Further measures, especially in the electricity sector	22 million tonnes
TOTAL:	**62-78 million tonnes**

Table 1: Key policy measures – contribution to reducing greenhouse gas emissions

National Energy Efficiency Action Plan (NEEAP)

On 3 December 2014, the Cabinet also adopted the National Energy Efficiency Action Plan (NEEAP). This is geared towards increasing energy efficiency in buildings, promoting energy-saving as a business opportunity and way of achieving a return on investment and encouraging individuals to take responsibility for energy efficiency. The German government will introduce a competitive tendering model for energy efficiency, promote contracting, develop existing energy efficiency programmes and initiate energy efficiency networks.

Climate-friendly building and housing strategy

The climate-friendly building and housing strategy is crucial to achieving a virtually climate-neutral building stock by 2050. It combines the energy efficiency strategy for buildings outlined in the NEEAP with more far-reaching climate change mitigation measures, including in the areas of neighbourhood refurbishment and urban development. The Alliance for Affordable Housing and Building (Bündnis für bezahlbares Wohnen und Bauen) was launched as part of the climate-friendly building and housing strategy.

Climate change mitigation in the transport sector

With the measures it plans to introduce in the transport sector, the German government is also aiming to reduce the sector's final energy consumption by 10 % and increase the number of electric vehicles to one million by 2020. Climate-friendly organisation of freight and passenger transport, strengthening the role of environment-friendly modes of transport such as rail, public transport and cycling, increased use of electric drives and promoting drive efficiency in vehicles are key components of the measures planned for this sector.

Reducing non-energy related emissions in industry, trade, commerce, services, waste management and agriculture

The Climate Action Programme 2020 promotes greater waste avoidance, recycling, re-use and resource efficiency. Another field of action is reducing emissions of F-gases, which are particularly climate damaging. In the area of waste management, landfill aeration is a promising option for cutting emissions. In agriculture, the German government's main tools are the amendment to the Fertiliser Application Ordinance (Düngeverordnung) and an increased share of land used for organic farming. The conservation of permanent grassland and moorlands also contributes to climate change mitigation, although achievements in this area (land use and land-use change) do not count towards the national target.

Reform of the emissions trading scheme

The German government supports the planned reform of the EU emissions trading scheme, which aims to retain the key role of emissions trading as a harmonised European climate policy instrument and create effective incentives to reduce emissions. In the short term, it is essential that the current surpluses be quickly and effectively reduced. Also, in the long term, emissions trading must make a key contribution to achieving the EU target of reducing emissions by at least 40 % by 2030 compared with 1990 levels.

The energy industry

To achieve a reduction in emissions in the energy industry, the expansion of renewables will be continued and the fossil fuel power station fleet will be upgraded, in addition to carrying out an effective reform of the emissions trading system. Upgrading the fossil fuel power station fleet will deliver an additional contribution to closing the mitigation gap of 22 million tonnes. To this end, the German government will focus on creating a power station reserve, providing increased support for combined heat and power generation (CHP) and promoting additional efficiency measures in the buildings sector, local authorities, industry and rail transport.

Further fields of action

The public sector must demonstrate best practice in tackling climate change. Important fields of action include energy-efficient refurbishment timetable for public buildings, public procurement, reviewing climate-damaging subsidies, and amending the federal government's 2010 programme of sustainability measures. It will also promote research and development. Two key areas here are transition research and energy research, especially in renewable energy and energy efficiency.

The progress achieved by the Climate Action Programme 2020 will be published for the first time at the end of 2015 and then annually in the German government's annual climate action report.

3.1.2 European Target

The trends in greenhouse gas emissions are the key indicator for quantifying progress towards 2020 targets. The UNFCCC target of reducing emissions by 20 % from 1990 to 2020 refers only to EU-28

emissions as a whole, which are calculated as the sum of emissions from all Member States. Germany's greenhouse gas emissions account for 20.7 % of EU-28 emissions.[27]

The trends in greenhouse gas emissions for Germany are reported in CTF Table 4.

Emissions in the land use, land-use change and forestry sector (LULUCF) are not included in the UNFCCC target and are therefore not included in CTF Tables 4 and 4(a). However, emissions in this sector are accounted for under Kyoto targets. In the first commitment period, the LULUCF sector was a net sink for Germany due to an overall removal of 15.7 million tonnes of CO_2 equivalents.[28]

Flexible mechanisms are used, on the one hand, by operators in the EU emissions trading system (ETS) and, on the other hand, by governments seeking to meet their ESD targets.

Information on the use of flexible mechanisms under the EU ETS does not become publicly accessible at installation level until two years after transfers have been conducted. Thus, information reflecting use in 2013 will not become available until 2016.

Similarly, the use of flexible mechanisms under the ESD cannot be quantified immediately: as the compliance assessment for the first year under the ESD (2013) will not take place until 2016, any potential use of units for the first year will likewise not take place until 2016. Thus, for the second biennial report, the EU and its Member States can only report that no units have been used under the ESD so far. This is why no quantitative information can be given for the use of flexible mechanisms in CTF Table 4b of the second biennial report.

Germany does not currently plan to make use of flexibility provisions under the ESD.

3.2 Strategies and measures

Below is a list of the instruments that are included in the with-measures scenario (WMS) used in a research project entitled "GHG projection: further development of the methods and implementation of the EU Effort Sharing Decision in the 2015Projection Report" and were reported in the German Projection Report.[29] The report also contains a more detailed description of the measures.

A with-additional-measures scenario (WAMS), which first and foremost takes into account the additional measures contained in the above-mentioned Action Programme, is currently being developed and is scheduled to be available by the beginning of 2016.

Preliminary remarks on flanking instruments

There are a number of instruments - both in the area of cross-sectoral instruments and sector-specific instruments – where the effect is either difficult to quantify or difficult to distinguish from

[27] http://ec.europa.eu/clima/policies/g-gas/docs/kyoto_progress_2014_en.pdf

[28] EEA 2014 Progress towards 2008-2012 Kyoto targets in Europe, Table 4.1

[29] http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/

the effect of other instruments. Nevertheless, they may have an important flanking effect. Their influence on greenhouse gas emissions was either not quantified in the model or was only given as a total.

3.3 Cross-sectoral strategies and measures

Instruments under the with-measures scenario:

- Economic instruments
  - **EU emissions trading scheme**
  - **The First Step Toward an Environmental Tax Reform Act (Gesetz zum Einstieg in die ökologische Steuerreform) and other changes to the taxation of energy products and electricity**
- Funding programmes
  - **Special Energy and Climate Fund (EKF) (**financial framework for carrying out energy and climate policy measures)
  - **National Climate Initiative (NKI) (funding for climate action projects)**
  - **Renewable Energy Sources Act 2014 (EEG 2014)**
- Regulatory law
- **Minimum efficiency standards - EU Ecodesign Directive (**in the WMS the key implementation measures that had been approved by 30.9.2014 were quantified)
- Flanking instruments
  - **Energy Research Programme:** (3.5 billion euros to fund research and development in the field of energy)
  - **High-Tech Strategy**

3.4 Sector-related strategies and measures

3.4.1 Energy sector

Instruments under the with-measures scenario:

- Economic instruments
  - **Introduction of the EU emissions trading scheme** (see Chapter 3.2).
- Funding
  - **2002 Combined Heat and Power Act and its amendments in 2008 and 2011 to 2013** (Gesetz zur Förderung der Kraft-Wärme-Kopplung)
  - **Promotion of micro CHP units**

3.4.2 Industry & trade, commerce and services - electricity and process heat/steam

Instruments under the with-measures scenario:

- Economic instruments
  - **EU emissions trading scheme** (see also Chapter 3.2)

- **Environmental tax reform** (see also Chapter 3.2)
  - **Tax capping under the Energy Tax Act (EnergieStG) and Electricity Tax Act (StromStG**) (Two conditions have to be fulfilled to be eligible for tax capping: 1. **Introduction of** an energy management system and 2. Increase in energy intensity by a target value)

- Funding programmes
  - **EEG surcharge** (see also Chapter 3.2)
  - **Special Equalisation Scheme (BesAR) under the Renewable Energy Sources Act (EEG)** (preferential treatment for energy-intensive companies that have introduced an energy management system)
  - **Energy advice in small and medium-size enterprises (SMEs)**
  - **Funding programme offering grants to promote cross-cutting energy-efficient technologies in SMEs**
  - **Programme funding energy-efficient and climate-friendly production processes**
  - **Funding cooling and air conditioning systems in commercial applications available under the National Climate Initiative (NKI)**
  - **Energy efficiency networks (funded under the NKI) based on the LEEN-Standard (Lernende Energie-Effizienz-Netzwerke)** (companies wanting to set energy efficiency and CO_2 reduction targets and to learn from one another come together in energy efficiency networks)
- Regulatory law
  - **Minimum efficiency standards - EU Ecodesign Directive** (see also Chapter 3.2)
- Flanking instruments
  - **Public procurement of energy-efficient products**
  - **Electronic electricity meters (see section on private households)**
  - **KfW programmes to promote energy efficiency in industry and trade, commerce and services**
  - **Voluntary product labelling for energy-driven products (Blue Angel, Energy Star, EU Flower)**
  - **An initiative to support small and medium-sized enterprises in participating in Germany's energy transition and in particular aiming to step up the dialogue between policymakers and SMEs (**Mittelstandinitiative Energiewende und Klimaschutz)

3.4.3 Industrial processes and use of products (fluorinated greenhouse gases)

Instruments under the with-measures scenario:

- Regulatory law
  - The with-measures scenario is primarily based on **EU Regulation 517/2014 on fluorinated greenhouse gases**, which entered into force on 9 June 2014, repealing the previous Regulation (EC) 842/2006 on certain fluorinated greenhouse gases with effect from 1 January 2015. However, it is anticipated that the amendment's effect on reducing emissions will predominately occur after 2020. Beyond Regulation (EU) 517/2014 the following measures are also included in the scenario:
  - **Adherence to limit values for specific refrigerant losses from stationary applications as required by the Chemicals - Climate Protection Ordinance;**

- **Compliance with Directive 2006/40/EC (MAC Directive)**

- Funding programmes
  - **Climate protection incentive programme for commercial refrigeration plants funded under the National Climate Initiative**
- Economic instruments
  - **Including F-gas emissions from the primary aluminium industry in the European emissions trading scheme**
- Other instruments
  - **Voluntary commitment by German switchgear manufacturers and users, and SF_6 producers to take measures to limit SF_6 emissions from electrical equipment**

3.4.4 Transport

Instruments under the with-measures scenario:

- Regulatory law
  - **CO_2 emissions standards for cars** (Regulation (EC) 443/2009 and Regulation (EU) 333/2014)
  - **CO_2 emission standards for light commercial vehicles (**Regulation (EU) 510/2011)
  - **Biofuel blending** (Biofuel Quota Act and the subsequent Act Amending Legislation on the Promotion of Biofuels)
- Economic instruments
  - **HGV toll**
  - **Change in the motor vehicle tax** (basing the amount of motor vehicle tax on specific CO_2 emissions)
  - **Emissions trading for aviation**
  - **Air transport tax**
  - **Energy tax**

3.4.5 Agriculture

German regulatory law and the funding instruments of the EU's Common Agricultural Policy (CAP) create the conditions framing agriculture. However, added to that are resource and energy policy decisions that influence the extent to which material and energy from crops and residues in agriculture are used. This has a very specific impact on land use and emissions in this sector.

3.4.6 Land use and land-use changes

The land use and land-use changes sector was not modelled. See Chapter 3.4.5 for details of climate change mitigation instruments in this sector.

3.4.7 The waste management sector

The key regulatory framework for waste management has consisted of the Technical Instructions on Municipal Waste (TA Siedlungsabfall – TASi) since 1993, the Circular Economy Act (Kreislaufwirtschafts- und Abfallgesetz – KrW/AbfG) since 1996 and, since 2001, the Ordinance on Environmentally Compatible Storage of Waste from Human Settlements (Abfallablagerungsverordnung – AbfAblV), which was integrated into the Landfill Ordinance (Deponieverordnung) in 2009. The German government approved the **amendment to the Circular**

Economy Act on 30 March 2011. The Act entered into force on 1 June 2012. It requires recycling to be given priority over energy recovery; at least 65 % of all municipal waste is to be recycled by 2020. From 1 January 2015, organic waste must be collected separately and wherever possible priority given to material and energy recovery (cascading use).

3.4.8 Buildings

Instruments under the with-measures scenario:

- Funding programmes
  - **KfW Energy-Efficient Refurbishment programmes**
  - **Energy-efficient refurbishment of municipal and social infrastructure**
  - **KfW Energy-Efficient Construction programme**
  - **Market Incentive Programme (MAP)** (to promote the installation of heating/cooling generation systems and certain heat storage facilities and local heating networks using renewable energy)
- Regulatory law
  - **Energy Conservation Act/Energy Saving Ordinance (Energieeinsparungsgesetz/Energieeinsparverordnung** - minimum energy requirements for buildings)
  - **Renewable Energies Heat Act (Erneuerbare-Energien-Wärmegesetz -** mandatory requirement that a portion of the energy consumption for heating and cooling be supplied from renewable energy sources)
  - **Requirements of the Ecodesign Directive**
- Flanking instruments designed to provide information
  - **Energy performance certificate** (statutory requirement for new buildings).
  - **Information services of the German Energy Agency (DENA)** (The German Energy Agency provides private households and companies with information about available measures and the background to efficient, rational use of energy)
  - **On-site energy advice** (funding for on-site energy advice)
  - **Other measures to provide energy advice to private households** (advice for private households)
  - **Energy-efficient urban refurbishment – grants for integrated neighbourhood concepts and refurbishment managers**
  - **IKU energy-efficient urban refurbishment – neighbourhood utilities** (funding for local authority investment in energy-efficient heating, water and sewage systems in neighbourhoods)
  - **EEG surcharge:** (see section on cross-sectoral measures)
  - **Environmental tax reform** (see section on cross-sectoral measures)
  - **Delegated Regulation (EU) 1254/2014 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of residential ventilation units.**

3.4.9 Households - electricity

Instruments under the with-measures scenario:

- Economic instruments
  - **Environmental tax reform and EEG surcharge** (see Chapter 3.2).
- Regulatory law
  - **Minimum efficiency standards I (EU Ecodesign Directive)**
  - **Mandatory energy consumption labelling based on the Energy Consumption Labelling Act (Energieverbrauchskennzeichnungsgesetz – EnVKG) and Energy Consumption Labelling Ordinance (Energieverbrauchskennzeichnungsverordnung – EnVKV)**
- Flanking instruments
  - **Introduction of electronic meters (smart meters) to measure electricity consumption**
  - **Electricity-saving checks and a refrigerator replacement programme for low-income households.**

3.5 Information on changes to institutional climate change mitigation arrangements

3.5.1 Regulations in the European context

The regulations in the European context are part of the EU biennial report.

3.5.2 Regulations in the national context

Interministerial Working Group on CO_2 reduction

The German government developed a comprehensive climate change mitigation strategy early on. With its decision of 13 June 1990, it set up an Interministerial Working Group on CO_2 reduction with BMUB as lead agency. The working group's remit is to draft guidelines for climate action, identify areas where action is needed, identify potential for reducing greenhouse gases and propose comprehensive packages of measures to reduce greenhouse gas emissions in Germany and submit them to the federal cabinet. The Interministerial Working Group on CO_2 reduction submitted reports on nationally appropriate mitigation action to the federal cabinet in November 1990, December 1991, September 1994, November 1997, October 2000 and July 2005. In 2014, the federal government developed its Climate Action Programme 2020.

Working Group on Emissions Trading as a Means to Combat the Impacts of Greenhouse Gases (AGE)

On 18 October 2000, the federal cabinet set up the Working Group on Emissions Trading as a Means to Combat the Impacts of Greenhouse Gases in conjunction with the Federal Ministry of the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), as part of its National Climate Action Programme. The federal cabinet expressly welcomed the working group's consultations and extended its remit in the 2005 Climate Action Programme. The working group is tasked with reviewing issues arising in connection with the use of emissions trading as part of a package of climate change mitigation measures and making recommendations on the specifics of this

instrument. The background to the working group's consultations are discussions at international level (Framework Convention on Climate Change, Kyoto Protocol) on the use of flexible mechanisms (such as the Clean Development Mechanism (CDM), Joint Implementation (JI) and international emissions trading) and the process of fleshing out and implementing the European Climate Change Programme (ECCP).

National System of Emissions Inventories and the Single National Entity

Article 5 of the Kyoto Protocol requires each Party listed in Annex B to establish a national system for emissions reporting, which must include the information that is available nationally in preparing the Greenhouse Gas Inventories. From 2013, the revised reporting regulations under the UNFCCC contain similar provisions requiring the establishment of an institutional framework.

This requirement was implemented in Germany on the basis of a decision on 5 June 2007 by the undersecretaries of the ministries involved in providing the data. A coordinating committee of all ministries involved in reporting was created to provide support for the emissions reporting process and discuss all questions that must be clarified within the context of the national system, particularly problems in data flows, and to officially approve the inventories and the reports required under Articles 5, 7 and 8 of the Kyoto Protocol. BMUB is the lead agency.

The Federal Environment Agency, Section I 2.6 Emissions Situation has been designated as the Single National Entity for reporting under the UN Framework Convention on Climate Change and the Kyoto Protocol. The Single National Entity is responsible for planning and generating the national inventory, for quality control and quality assurance at each relevant step in the process, for making constant improvements to the inventory, and carrying out preparatory work for the coordinating committee's decisions. The Single National Entity also serves as the central contact point and coordinates and provides information to everyone involved in the national system.

German Emissions Trading Authority (DEHSt)

The German Emissions Trading Authority at the Federal Environment Agency is the national authority responsible for implementation of market-based climate change mitigation instruments in the area of emissions trading, as well as project-based mechanisms under the Kyoto Protocol. It performs a wide range of duties, the details of which are defined in the EU Emissions Trading Directive, the Greenhouse Gas Emissions Trading Act (Treibhausgas-Emissionshandelsgesetz – TEHG), the Allocation Ordinance (Zuteilungsverordnung – ZuV 2020) and the Project Mechanisms Act (Projektmechanismengesetz – ProMechG).

The German Emissions Trading Authority actively supports plant operators, aircraft operators and specialised agencies (verifiers) in the proper implementation of requirements related to emissions trading and carries out corresponding checks to this end. Apart from monitoring the annual emissions reporting, this essentially involves calculating and issuing the free allocation of allowances, managing the auctioning of emissions allowances in Germany and managing all accounts in the German section of the EU emissions trading scheme's registry. Since 2014, the German Emissions Trading Authority has also been responsible for paying allowances to energy-intensive companies as part of a scheme known as electricity price compensation designed to offset indirect CO_2 costs. The German Emissions Trading Authority also carries out analyses and evaluations, which are made available to the public in the form of reports in German and often in English. This includes, for

example, the annual reports analysing the results of the emissions reporting by operators of stationary facilities and aircraft operators and the monthly auction reports. As required by statutory provisions, the German Emissions Trading Authority cooperates with the Single National Entity and the National System of Emissions Inventories.

Joint Implementation Coordination Office (JIKO)

BMUB created the Joint Implementation Coordination Office in 1995 to promote, approve, and monitor the joint implementation (JI) and clean development mechanism (CDM) projects specified in Articles 6 and 12 of the Kyoto Protocol. JIKO's overarching objective will continue during the second commitment period of the Kyoto Protocol, with the addition of new tasks related to the carbon market. Goals continue to be to create appropriate background conditions for cooperation between Germany and third countries which will promote and implement specific CDM/JI projects with an emphasis on the least developed countries, and to support the reform processes for CDM and JI. JIKO also supports the development of new market mechanisms (NMMs) with a view to developing perspectives for long-term international cooperation in the carbon market. The German Emissions Trading Authority at the Federal Environment Agency is responsible for the formal participation that is necessary for CDM and JI projects under international requirements, i.e. approval of and consent to individual projects. The Joint Implementation Coordination Office's work concentrates on implementing and further developing existing and new carbon market mechanisms at both political and administrative level. Another key area, in addition to technical input to the national implementation of EU legal provisions, is the international cooperation with CDM/JI host countries, which has been taking place since 2008 as part of BMUB's CDM/JI initiative. One of the key areas of work since 2009 has been programmatic approaches and sectoral aspects of market mechanisms. The Joint Implementation Coordination Office also helps to develop new market mechanisms (NMM), which are designed to enable reduction measures to be upscaled and to make a contribution to net emissions reduction as a result of the participation of economically stronger developing countries in the additional emissions reduction measures.

National Focal Point for Education on Climate Protection

As part of implementation of Article 6 of the UN Framework Convention on Climate Change, the National Focal Point for Education on Climate Protection (climate-education@bmu.bund.de) was created to make the diverse educational activities in the area of climate change more visible as an essential subsector of sustainable development, thereby creating a basis for further development. The Focal Point is used as a platform for public and private players in the educational sector. The many different governmental and non-governmental players in the educational field and their diverse educational activities are to be networked more within Germany's federal system. An intensive exchange will make it possible to better harness synergies.

Competence Centre on Climate Impacts and Adaptation (KomPass)

The Competence Centre on Climate Impacts and Adaptation (KomPass) provides scientific expertise to support BMUB in preparing and further developing the German Strategy for Adaptation to Climate Change (DAS). A large part of the Competence Centre's work is geared to creating the new knowledge bases needed to further develop the national strategy and to playing an active role in shaping the European adaptation strategy.

KomPass devises research projects on climate risks and adaptation to support Germany's climate resilience and sustainability. It is the lead agency in the network of government agencies working on vulnerability. A consistent, cross-sectoral and nationwide vulnerability analysis has been developed within the network, which will make it possible to produce an overall picture of Germany's vulnerability. This creates a basis for identifying the areas where the government needs to act. KomPass also coordinates national monitoring of climate change adaptation.

Bilateral Standing Working Groups on the Environment and Energy

The German government participates in bilateral working groups in Russia and Ukraine based on bilateral government agreements in the environmental sector. In addition to cooperation and advice to governments on general issues of climate policy, the tasks of the working groups are primarily project-based cooperation and capacity building in the carbon market (use of flexible Kyoto mechanisms or development of emissions trading systems).

The work structure of the Conference of Federal and Länder Environment Ministers (UMK)

The Conference of Federal and Länder Environment Ministers is an important forum for environment, climate and energy policy. In particular, in its special conference on climate change and its consequences held in Düsseldorf on 22 March 2007, it made it very clear that Germany and its Länder (states) have a vital interest in developing a proactive climate change mitigation policy at national, European and global level.

The Conference's eight working groups ensure that environmental law in Germany is enforced as uniformly as possible across all the Länder. They undertake a climate-relevance review of their areas to identify any potential for reducing emissions of the greenhouse gases regulated under the Kyoto Protocol. Of particular importance in this respect are:

- The Joint Working Party of the Federal Government and the Länder on Climate, Energy, Mobility - Sustainability (**BLAG KliNa**), which was established in November 2007 and includes committees on environmental information systems and adaptation to the effects of climate change, along with at the moment two Länder Working Groups - one on sustainability indicators and the other on implementation of the Renewable Energies Heat Act (EEWärmeG).
- The Joint Working Group of the Federal Government and the Länder on Protection of Environmental Quality (**LAI**), which was established in 1964 and has four standing committees working on legal issues connected with implementation and enforcement, installation-based environmental quality control/prevention of major accidents (AISV), air quality / impacts / transport (LWV) and physical agents.

  AISV and LWV deal with all technical questions connected with installation law under the Act on the Prevention of Harmful Effects on the Environment Caused by Air Pollution, Noise, Vibration and Similar Phenomena and its secondary legislation. It covers interfaces with European Community law – IPPC Directive (best available techniques), the Seveso II Directive, the Waste Incineration Directive and the Emissions Trading Directive. The LWV also deals with issues of nitrogen oxide pollution in Germany: status, causes and reduction measures in the transport sector.
- The Joint Working Group of the Federal Government and the Länder on Waste (**LAGA**), which was established in 1963, has three standing committees responsible for waste management law including EU law (ARA), technical waste issues (ATA), and product responsibility and take-back

obligations (APV). Its current ad-hoc sub-committees work on landfill technology (ATA), professional disposal companies (ARA) and persistent organic pollutants in waste legislation enforcement (ATA). To resolve waste management problems, LAGA produces fact sheets, guidelines and information publications. It also drafts model administrative regulations for enforcement of waste management law.

- Joint Working Group of the Federal Government and the Länder on Chemical Safety (**BLAC**), which was established in 1996, has standing committees dealing with chemical law (ChemR), technical issues and enforcement (FuV), and good laboratory practice and other quality assurance systems (GLP).

3.5.3 Monitoring and evaluation of climate change mitigation activities

The EU target compliance architecture is described in the biennial report of the EU.

3.6 Evaluating the effects of reduction measures

To date there has been no comprehensive ex-post evaluation of climate change mitigation measures in Germany, neither in terms of their effect on the climate nor their effect on the economy. However, the first progress report on the Energiewende analysed in more depth the contribution of expanding renewable energy and the macroeconomic effects of the Energiewende. The next two chapters make reference to this publication.

In future, the monitoring of the Climate Action Programme 2020 will deliver valuable information for chapters 3.6.1 and 3.6.2.

3.6.1 Effects of policies and measures on trends in greenhouse gas emissions

Trends in emissions avoided by using renewable energy

Renewable energy is increasingly reducing the levels of energy-related greenhouse gas emissions. This trend is helping Germany to achieve its climate targets. Renewable energy's share in the electricity, heat and transport sector rose in 2013. Its share in gross electricity consumption in 2013 was 1.7 percentage points higher than the previous year, rising to 25.3 %. Its share in gross final energy consumption in 2013 was 12.0 %. Currently, the majority of Germany's electricity is generated from renewable sources. From the beginning of 2014 until August of the same year, the cumulative gross electricity generated from renewables was 109 TWh. Renewable energy's share in total heat consumption fell slightly in 2013 to 9.1 %. However, in absolute terms, consumption of heat from renewable energy sources rose to 134.4 TWh in 2013. Renewable energy's share in the transport sector in 2013 was 5.5 %.

Figure 6 shows the trend in avoided emissions. All upstream process chains involved in extracting and supplying energy sources and manufacturing plant and equipment were included in the calculations to determine greenhouse gases avoided. The emissions from conventional energy sources that were replaced by renewables were compared with the emissions caused by the upstream chains and operation of renewable energy generation facilities.

Renewable energy's greatest contribution to avoiding greenhouse gas emissions is in the electricity generation sector. In 2013, a total of 145.8 million tonnes of CO_2 equivalents were avoided by using renewables (see Figure 6). Of that, 105.4 million tonnes of CO_2 equivalents were accounted for by the electricity sector, 35.6 million tonnes by the heat sector and 4.8 million tonnes by the transport sector. In the electricity generation sector, fewer fossil-fuel power stations are used to meet electricity demand than in a scenario without renewable electricity generation in Germany. The emissions reduction is not fully reflected in the power station sector's greenhouse gas balance because of contrary trends in other key influencing factors – in particular the trend in domestic electricity consumption, increasing foreign trade surpluses and a price rise in coal-fired electricity production and consequently a fall in natural-gas-based electricity production driven by rises in fuel and CO_2 prices in recent years.

These avoided emissions across all sectors are to a great extent achieved by biomass. Approximately 64.1 million tonnes of CO_2 equivalents were avoided by the use of solid, liquid and gaseous biomass in all three sectors and a further 40 million tonnes of CO_2 equivalents were avoided by the use of wind energy, 21.9 million tonnes through photovoltaics and 17 million tonnes through hydropower.

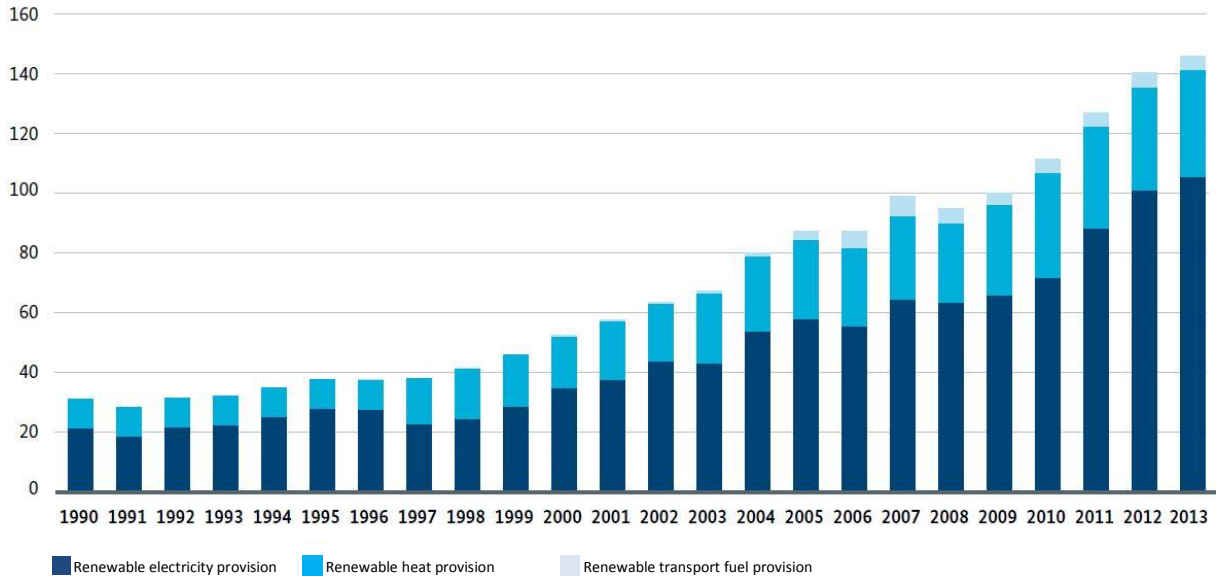

Figure 6: Greenhouse gas emissions avoided as a result of using renewable sources of energy in Germany in million tonnes of CO_2 equivalents[30]

3.6.2 Socio-economic effects of reduction measures

Socio-economic effects of reduction measures on developments in Germany

Germany's restructuring of its energy supply also stimulated growth, investment and employment in 2013. The stimulus effect of the energy transition on macroeconomic developments in Germany is to some extent also subject to the influence of other growth and demand effects. These effects in turn are the result of other factors such as the overall global economy. To depict the concrete effects of

[30] Federal Ministry for Economic Affairs and Energy based on data supplied by the Working Group on Renewable Energies-Statistics (AGEE-Stat)

the energy transition it is essential to distinguish the effects that are a result of the energy transition from those other effects.

Investment in renewable energy facilities in Germany in 2013 is estimated (on the basis of data supplied by the Zentrum für Sonnenenergie- und Wasserstoff-Forschung) to have fallen by 16.1 billion euros. In particular as a result of significantly falling prices for new instillations, it was possible to continue the expansion path even with lower investment volumes. In terms of share, investment in wind power installations rose in 2013, outstripping investment in photovoltaic installations. **Investment in energy efficiency** is being driven mainly by public funding and regulatory measures. For energy-efficient building refurbishment, which is a key area, the Deutsches Institut für Wirtschaftsforschung (DIW) ascertained investment levels in 2013 of around 39 billion euros in existing residential buildings and about 15 billion euros for non-residential buildings. Additional investment was made in all sectors on the demand side as a result of all the efficiency measures introduced. According to a macroeconomic cost/benefit analysis carried out as part of a study, the additional investment triggered by the decisions on energy policy taken in 2010/11 in connection with the country's energy transition rose to 5 billion euros in 2013. In 2012, this figure was only 4.1 billion euros net (GWS, Prognos, EWI 2014).

The expansion of renewable energy and increase in energy efficiency contribute to **savings in fossil primary energy sources** in Germany. Germany imports most of the fossil fuels it uses as energy sources. The exception is lignite, which accounts for a 25.4 % share in electricity generation. In 2013, net imports of natural gas totalled 86.8 %, of coal 87.2 % and of oil as much as 97.7 %. In 2013, Germany imported fossil energy sources worth a total of 92 billion euros (2012: 93 billion euros). The computed dampening effect on the demand for fossil fuel imports in 2013 was 9.1 billion euros gross. Taking imports of biogenic fuel into account, this figure was around 8.2 billion euros (ISI, DIW, GWS, IZES 2014).

With its energy research policy and its promotion of renewable energy and energy efficiency, the German government has created an enabling environment that is conducive to the development and dissemination of innovative energy technologies from Germany. This opens up new opportunities for companies on the international markets. Since the 1990s, Germany has been one of the leading exporters of goods in the renewable energy technology industry. **Exports of renewable energy goods** totalled 10.0 billion euros in 2011. Germany also exports **energy efficiency goods**. These are goods that are used in connection with efficiency measures in the field of rational use and conversion of energy. They can be found in numerous sectors, such as more energy-efficient electronic appliances or insulating materials in the construction industry. In 2011, the value of exports of these goods totalled some 9.8 billion euros, putting them on a par with exports of renewable energy goods.

A number of different individual stimuli determine the influence of energy prices on trends in the economy as a whole. Electricity prices are particularly influenced by price components set by government regulation. The expansion of renewable energy has led to **rising electricity prices** for certain consumer groups, resulting from the surcharges imposed. In its attempts to offer a conducive environment for energy production, Germany is faced with tough international competition from other countries - especially the USA. For that reason, electricity-intensive companies are granted exemption from the EEG surcharge, provided they meet certain requirements. A positive trend can be seen in the **falling trading price of electricity**, which additional renewable energy capacity, in combination with the high number of conventional power stations, contributed to in 2013.

In addition to these price effects, high investment in renewable energy from 2010 to 2012 was the predominant influencing factor on GDP (see Chapter I.10.1). According to a study, it contributed to the fact that **gross domestic product** (GDP) was 10 billion euros a year higher than when compared to a similar scenario without measures to achieve an energy transition. According to this, GDP was 0.4 to 0.6 % higher than in the comparison case. In 2013, this stimulus was weaker due to rising electricity prices and declining investment in renewable energy, falling by six billion to an additional four billion euros or 0.2 % of GDP (GWS, Prognos, EWI 2014).

The expansion of renewable energy and investment in energy efficiency are having **effects on employment** as a result of demand for goods and services. In 2013, the expansion of renewable energy provided around 371,400 jobs (gross calculation). Of those, 261,500 were attributable to the Renewable Energy Sources Act according to a study (GWS, DLR, DIW, Prognos 2014). These calculations, which include electricity, heat and biofuel production, take not just energy generation but also input/output relationships into account. Compared with the previous year (2012) when this

figure was almost 400,000 jobs, the employment effect decreased. Structural changes and net employment effects must be taken into consideration here. In 2013, the net stimulus was 25,000 additional jobs. This decline is predominantly the result of a consolidation process in the photovoltaics industry.

Information on minimisation of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol

Most of the climate change mitigation measures implemented by Germany are not expected to have an impact on developing countries. In the remaining cases, the anticipated impacts are estimated as being predominantly positive, resulting, for example, from the establishment of technical and administrative structures for climate change mitigation. For the handful of exceptional cases, every attempt will be made to put measures in place to minimise the anticipated negative effects.

For example, promoting biofuels that have not been sustainably produced could have negative effects such as destruction or adverse shifts in resources in developing countries. This effect will be ruled out in the future when the Biofuel Sustainability Ordinance is implemented. It regulates sustainability standards and corresponding certification systems, thus implementing the EU Renewables Directive (2009/28/EC), so that, for example, the production of biofuels in developing countries does not lead to conflicts with food security at local or international level.

On the other hand, the phase-out of subsidies for domestic fossil energy sources helps to avoid negative impacts on third countries from climate change mitigation measures.

In addition to designing its own climate change policies and measures, the German government is playing an active role in devising measures in this field at European level, and is particularly active in its work on the European emissions trading scheme. This instrument does not per se have any direct impact on third countries. However, since 2008 Germany has used some of the revenue from auctioning emission allowances in the emissions trading system to fund climate change projects in developing countries. The International Climate Initiative (IKI) is responsible for allocating funding and finances projects in the fields of emissions reduction, adaptation to climate change and conservation of tropical rainforests. On the other hand, the inclusion of international aviation in the European emissions trading scheme starting in 2012 could potentially have negative consequences

for third countries (European Commission 2006). However, analyses based on the Eurocontrol data suggest that airlines from third countries make up only a small part of the flight movements covered by the emissions trading scheme and are therefore only marginally affected by cost increases. Furthermore, due to the possibility of using CDM credits, the inclusion of aviation in the ETS leads to a higher demand for CDM projects, which has positive indirect impacts for developing countries in the form of additional investment in climate change mitigation technology.

More detailed information on the estimated effects in accordance with Article 3, paragraph 14 of the Kyoto Protocol can be found in Chapter 15 of the latest National Inventory Report to the Secretariat of the UNFCCC.

3.7 Use of credits from market mechanisms to achieve national reduction targets

Germany does not plan to use credits from market mechanisms to achieve its climate change targets.

4. Projections

The projections described here are based on calculations from 2014 and have already been used in the 2015 Projection Report submitted in compliance with the reporting requirements set out in Regulation (EU) No 525/2013, Articles 13 and 14.

For Germany's 2015 Projection Report, a research consortium developed a "with-measures" scenario (WMS) for the trends in greenhouse gas emissions in Germany for the 2005 to 2035. It comprises all new climate and energy measures launched by 31 August 2014 (WMS) and existing ones that have been substantially modified by the same date.

The German government does not fully endorse the results of the scenarios for the trend in greenhouse gas emissions in Germany for the period 2005 to 2035. Any scenario that looks as far ahead as 2035 is bound to be fraught with major uncertainties. Different trends have been estimated, depending on the assumptions made and methodology used. For example, studies and forecasts that the German government commissioned in preparation for the cabinet decisions of 3 December 2014 come to diverging conclusions on individual points.

4.1 Description of the methodology used

An energy system model and an emissions calculation model were used to develop the scenario by consolidating the results of detailed sectoral analyses, some based on models, into consistent and exhaustive figures for energy demand and greenhouse gas emissions. These models are fully compatible with the German Greenhouse Gas Inventories in the first commitment period (as of the date of the 2014 National Inventory Report). To calculate the reduction effect of the instruments in the WMS, the Projection Report uses the methods set out in the Revised IPCC Guidelines 1996 and the global warming potentials (GWP) given in the IPCC's Second Assessment Report (SAR).[31] Specific studies were done for space heating and hot water, electrical appliances, industry, the trade, commerce and services sector, transport, electricity generation from renewable energies and fossil electricity generation, as well as for fugitive emissions in the energy sectors and process-related CO_2, CH_4 and N_2O emissions. The results of other studies were used or adapted for other source areas (HFCs, PFCs and SF_6 emissions and agriculture).

The 2015 Projection Report contains a more detailed description of the methodology used. The Projection Report and a factsheet for the models used can be found on the EEA's[32] data server.

[31] As described in footnote 8, the Greenhouse Gas Inventories from 2015 onwards comply with the statutory requirement to use the methods set out in the 2006 IPCC Guidelines and the GWP values given in the 4th IPCC Assessment Report. The emission figures in the scenarios depicted here are therefore no longer fully comparable with current inventories.

[32] http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/

4.2 Projection results

4.2.1 Cross-cutting trends

The trends in total greenhouse gas emissions are calculated from energy-related greenhouse gas emissions and those from industrial processes, product use, agriculture and waste management. This kind of estimate of emissions trends - even for short periods of time - is fraught with serious uncertainties. Economic trends, energy prices and other underlying conditions can have a strong influence on actual trends. The results must therefore be evaluated in the light of the assumptions made about the underlying data. The corresponding sensitivity analyses show the potential order of magnitude of the uncertainties.

For *total greenhouse gas emissions* (not counting land use, land-use change and forestry), the *with-measures scenario* shows a reduction of 154 million tonnes of CO_2 equivalents or 15 % for the period 2005 to 2020. By 2030, the reduction since 2005 is about 279 million tonnes of CO_2 equivalents or 28 % and by 2035 343 million tonnes of CO_2 equivalents or 34 %. By comparison with 1990, this equates to a reduction of 32.7 % by 2020, 43 % by 2030, and 48 % by 2035.

If the sensitivities analysed in the report are taken into consideration, the possible corridor for emissions reduction in 2020 is between 31.9 % (higher population growth accompanied by higher fuel prices) and 35.0 % (lower economic growth accompanied by a lower electricity export balance) lower than 1990.

However, it must also be pointed out that the emissions trends described do not include developments in *international aviation* (and to a lesser extent deep-sea shipping). In particular the very dynamic trend in international aviation causes the relevant greenhouse gas emissions in the with-measures scenario from 2005 to 2020 to increase by over 6 million tonnes of CO_2 equivalents, which equates to 28 % growth.

4.2.2 Electricity generation

Table 2 shows the trends in net electricity generation.

Electricity demand decreases slightly during the scenario horizon. However, as a result of the sometimes extremely significant electricity exports (between 20 and 50 TWh), net electricity generation remains at around the 600 TWh mark until 2020 and then decreases down to approx. 566 TWh in 2035.

Year	2012	2015	2020	2025	2030	2035
Energy source	*TWh*					
Nuclear energy	94	94	63	0	0	0
Lignite	148	154	140	132	119	72
Coal	107	111	99	93	61	73
Natural gas	75	32	34	38	41	55
Other	23	20	19	19	17	16
Oil	6	2	2	2	1	1
Furnace gas	7	7	7	7	6	6
Coke-oven gas	2	2	2	2	2	2
Refuse	7	7	7	7	7	7
Other	1	1	1	1	1	1
Renewables[33]	**140**	**183**	**242**	**295**	**332**	**344**
Hydro	22	21	22	23	23	24
Wind	51	82	131	176	216	232
Onshore wind	50	73	110	137	160	171
Offshore wind	1	9	21	39	56	60
PV	26	34	41	50	56	59
Biogas	26	28	29	27	16	6
Biomass	15	17	17	17	18	18
Geothermal	0	0	1	3	4	6
Pumped storage	6	5	6	5	5	7
Total	**593**	**599**	**604**	**581**	**575**	**566**
Export/import balance (imports positive)	-23	-34	-51	-47	-42	-26
Total, minus exports	**570**	**566**	**552**	**535**	**533**	**540**

Table 2: Net electricity generation in the with-measures scenario, 2012-2035 (Source: AGEB (2012–2014), model calculations by Öko-Institut)

Based on gross electricity consumption, renewable energy's share in electricity generation increases from 23 % in 2012 to 63 % in 2035, with the greatest increase occurring between 2015 and 2025.[33]

[33] It should be noted - especially for onshore wind – that, at just less than 2,100 hours at full load, significantly higher values were assumed than those that we are seeing today, which can be explained by the fact that the configurations of the new wind turbines have been altered. This means that a correspondingly higher level of electricity generation is being approved for the installed capacity in 2020 than it would be reasonable to assume for today's mix of turbines. However, if the trend for the additional turbine types changes, a situation could develop in which there are fewer hours at full load and therefore lower levels of electricity generation from onshore wind turbines from the same capacity (up to 10 to 20 % lower amounts of electricity for onshore wind).

Emission trends

Greenhouse gas emissions from electricity generation fall in the with-measures scenario from 377 million tonnes of CO_2 equivalents (2012) to 213 million tonnes of CO_2 equivalents in 2035, with about 60 million tonnes of that reduction occurring in the period up to 2020 and another 103 million tonnes in the period up to 2035. Between 1990 and 2035, emissions from electricity generation fall by more than 50 %. This is a decrease of almost 45 % by comparison with 2005.

4.2.3 Other energy conversion sectors

Emissions from the remaining energy conversion sectors decreased by about 12 % between 1990 and 2012, but as a result of the increasing use of natural gas will rise again to 2035, when they will be only about 3 % below the 1990 level. This represents a 3 % rise by comparison with 2005. CO_2 emissions dominate the total emissions from the remaining energy conversion sectors, accounting for 97 % of all emissions. However, it also becomes clear that emissions from biomass – especially nitrous oxide – are not entirely negligible.

4.2.4 Transport

Compared with 2005, the final energy consumption for domestic transport falls by about 4.5 % by 2020.[34] By 2035, a 15 % decrease in final energy consumption for the domestic transport sector by comparison with 2005 is achieved.

On the other hand, final energy consumption for international transport continues to rise so that, compared with 2005, final energy consumption for transport as a whole remains more or less constant up to 2020 and by 2035 is only 6 % below 2005 levels.

Emission trends

Following a rise in emissions in 2005, 2012 and 2015, emissions in 2020 fall to slightly more than 187 million tonnes of CO_2 equivalents. This is a slight rise of 1.3 % over 1990 and a fall of 3.1 % over 2005. In the years that follow, emissions continue to decrease and in 2035 are just over 171 million tonnes of CO_2 equivalents, which equates to a reduction of 7.3 % on 1990 and 11.2 % on 2005. The emission reductions per five-year period between 2015 and 2035 are very low at only 2-3 %.

It should be noted that that the emissions for electricity used for the transport sector are accounted for in the electricity sector only. The increasing use of electricity means that emissions accounted for in the transport sector are decreasing (but may be rising as a result in the electricity sector).

4.2.5 Buildings sector - heat supply

In 2020, emissions of the gases CO_2, CH_4 and N_2O fall to below 77 million tonnes of CO_2 equivalents, which is 41.6 % down on 1990. In percentage terms, the emissions reduction between 2015 and 2020 is - at 8.5 percentage points - the highest within any of the five-year periods considered, which is largely due to a significant decline in heating oil consumption, accompanied by an increase in the use

[34] However, of these 4.5 %, almost one percentage point is due to the fact that apparently in the energy balance, which is the basis for the depicted values up to 2012, the electricity consumption of the transport sector from 2012 onwards was corrected downwards. The value reported for 2005 in the energy balance most likely represents an overestimation of electricity consumption.

of renewable energy. Emissions continue to decrease up to 2035, overall by almost 60 % by comparison with 1990, to just under 53 million tonnes of CO_2 equivalents; this is a 52.5 % reduction on 2005.

4.2.6 Private households - electricity

Private households saw a continual decrease in electricity consumption from 107.42 TWh in 2012 to 99.21 in 2035.

4.2.7 Industry

Energy-related emissions from industry decrease by over 45 % between 1990 and 2035 but, by comparison with 2005, this is a decline of only about 8 %. After emissions between 2005 and 2012 rose to over 70 million tonnes of CO_2 equivalents, they initially continued to rise up to 2015. They then decrease to 59 million tonnes of CO_2 equivalents in 2035. In percentage terms, N_2O emissions see the greatest decrease, with a 62 % fall between 1990 and 2035; CH_4 and CO_2 emissions drop by 45-47 % during this period.

4.2.8 Trade, commerce and services - appliances and processes

In 2020, emissions of the three gases CO_2, CH_4 and N_2O fall to just over 42 million tonnes of CO_2 equivalents, which equates to a 52.6 % decrease on 1990. They continue to decrease overall up to 2035 to slightly over 28 million tonnes of CO_2 equivalents, which is 68 % lower than 1990; this equates to a 40.6 % reduction on 2005.

The greatest reduction occurred between 1990 and 2005, when emissions decreased by 46 %. In the future five-year periods under consideration, emissions decrease in increments of about five percentage points.

4.2.9 Fugitive emissions in the energy sector

The decrease in fugitive emissions from the energy sector of approx. 7.8 million tonnes of CO_2 equivalents in the period from 2005 to 2035 is largely due to the total phase-out of coal mining in Germany by 2020, which alone accounts for 5.6 million tonnes of the CO_2 equivalents cut during that period. Furthermore, emissions from natural gas, particularly from the production process and leaks, decrease by almost 1.8 million tonnes of CO_2 equivalents, as a result of the decline in its use in private households and in the trade, commerce and services sector.

4.2.10 Industrial processes and use of products (CO_2, CH_4 and N_2O emissions)

With regard to the particularly relevant process-related CO_2 emissions, it is possible to lower emissions by 24 % by 2035 compared with 2005 under the WMS, as a result of slight production changes that use less emissions-intensive secondary processes (such as electric arc furnace).

4.2.11 Industrial processes and use of products (fluorinated greenhouse gases)

Total emissions of fluorinated greenhouse gases (F-gases) decreased by 2 % between 2005 and 2010, but then rose to 2 % above the 2005 level in the period up to 2012. The reason was the fact that HFC emissions rose steadily at the same time as PFC and SF_6 emissions fell. By 2015, given rising HFC and SF_6 emissions, a further rise in F-Gas emissions to 7 % above the 2005 level is forecast; since 2010,

PFCs emissions are no longer significant in quantitative terms, accounting for less than 2 % of F-gas emissions.

Under the WMS, HFC emissions after 2015 fall by 2030 to a third of their 2015 level, influenced by the EU-wide HFC phase-down, after which they rise slightly to 2035. SF_6 emissions under the WMS also continue to rise after 2015 to 2020 to about 25 % of their 2005 level, after which they fall by 2035 to about 20 % of their 2020 level. Emissions of fluorinated greenhouse gases as a whole fall by 2030 to almost a third of their 2005 and 2015 levels, after which there is a minimal rise. By comparison with 1995 - the base year for Germany's F-gas emissions under the Kyoto Protocol - this equates to a 70 % decline by 2035.

4.2.12 Agriculture

Total emissions from agriculture rise to 72.7 million tonnes of CO_2 equivalents by 2035, which is 1.9 % up on 2005. By 2035, emissions from agriculture are 17.2 % down on 1990.

4.2.13 Waste management

Methane emissions from landfills are the predominant component of greenhouse gas emissions from the waste management and wastewater sector. Because landfilling untreated waste was phased out in 2005 – a measure that was publicised a long time in advance – these emissions have been steadily decreasing since 1990. Since 2005, the volumes of waste that are still sent to landfill are for the most part pre-treated (incineration, biomechanical treatment) household waste, commercial waste similar to household waste, and waste from industry, consisting predominantly of the inert fractions. The methane and nitrous oxide emissions from other sources, especially composting, biomechanical waste treatment and municipal wastewater differ from these emissions only marginally. Overall, greenhouse gas emissions in 2012, expressed as CO_2 equivalents, were almost 70 % down on 1990 and almost 37 % down on 2005. The forecast to 2035 shows a decrease of roughly 86 % compared with 1990 and 72 % compared with 2005.

4.3 Estimate of the aggregate impact of strategies and measures

Impact of the individual measures in the with-measures scenario

Table 3 shows the total effects of emission reductions of the quantified instruments in the with-measures scenario. It should be noted here that some of the instruments in the demand sectors do not lead to a reduction in direct emissions - at least not exclusively - but also reduce electricity consumption. The overall impact of this reduction is quantified in the electricity supply sector (electricity savings resulting from measures in other sectors). The model calculations took interactions between instruments into account, especially in the electricity supply sector. The last two rows of the Table therefore show both the computed overall impact and the overall impact taking these interactions into account.

Direct emission reductions	2015	2020	2025	2030	2035
Sector	*million tonnes of CO_2 equivalents*				
Electricity supply	134.0	197.0	238.0	255.0	236.0
Heat	0.5	2.9	4.8	6.5	7.8
Industry	1.4	3.1	4.3	4.5	4.8
Trade, commerce and services	0.1	0.3	0.4	0.4	0.4
Transport	12.8	17.3	20.4	21.2	20.3
Total	**148.8**	**220.6**	**267.9**	**287.6**	**269.3**
Total, taking overlap effects into account	**141.8**	**196.6**	**181.9**	**250.6**	**236.3**

Table 3: Emissions reductions[35] achieved through climate policy instruments under the with-measures scenario – summarised by sector (for a detailed breakdown by instrument see CTF Table 3)

4.4 Trends in total greenhouse gas emissions and their components in the with-measures scenario

Results of the projection under the with-measures scenario

The trends in greenhouse gas emissions under the with-measures scenario are described below. They have been aggregated in two different ways: the first depicts the contributions of the different greenhouse gases, the second shows the contributions by individual source category. Each of these depictions shows the total greenhouse gas emissions defined in two different ways: once with and once without emissions from deep-sea shipping and international aviation. These two types of international transport are included in the national Greenhouse Gas Inventories, but only for information as "memo items." Projections on the release or sequestration of greenhouse gases in the land use, land-use change and forestry sector (LULUCF) were not carried out for this report and are therefore not included in the Tables. Emissions from international fuel bunkers (deep-sea shipping and international aviation) and LULUCF are not usually included in calculations to ascertain whether Germany's national climate targets have been met; this report follows this convention.

4.4.1 Trends in greenhouse gas emissions by gas

Table 4 shows a summary of trends in emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) , hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6). This summary shows the greenhouse gas emissions from international fuel bunkers (deep-sea shipping and international aviation) as a separate item, and does not give a differentiated breakdown of that item by individual gas. They are included only in the lower of the two rows showing totals.

By 2012, total domestic greenhouse gas emissions were already just less than 25 % down on 1990 and almost 6 % down on 2005. By comparison with the 1990 reference year, total greenhouse gas emissions fall by just under 33 % (-15 % compared with 2005) by 2020 and by almost 48 % (-34 %

[35] Note: deviations from the emissions stated in the current inventories are a result of different methods having been used (see Chapter 4.1 Description of the methodology used).

compared with 2005) by 2035. The German government's goal to reduce greenhouse gas emissions by 40 % by 2020 and 55 % by 2030 compared with 1990 is not achieved under the with-measures scenario.

Taking international maritime transport and aviation into account, emissions were just under 22 % and just over 5 % lower than in 1990 and 2005 respectively and fall by 29 % compared with 1990 (-14 % compared with 2005) by 2020 and by 44 % by 2035 compared with 1990 (-32 % compared with 2005).

Between 1990 and 2012, annual emissions of carbon dioxide[36] were cut by about 21 %. Both historically and in the projection, CO_2 is the gas with the largest share in Germany's total greenhouse gas emissions. In 1990, it accounted for 83 % and in 2012 for almost 88 % of total greenhouse gas emissions. By 2035, this share will fall to about 85 %.

In the case of methane, the greatest emissions reductions have already been achieved: in 1990, CH_4 ranked second only to CO_2 as a principal greenhouse gas, accounting for almost 9 % of total emissions. However, since a 55 % cut in CH_4 emissions had been achieved by 2012, their share in total emissions fell to only slightly more than 5 %. By 2035, CH_4 emissions are almost 66 % down on 1990. However, since the emissions reductions here are disproportionately low – especially after 2020 – their share rises again slightly to almost 6 % by 2035. In 1990, nitrous oxide accounted for almost 7 % of total greenhouse gas emissions. Here too an almost 35 % cut was achieved by 2012 so that its share in total emissions fell from 7 % to 6 %. However, by contrast with methane, there were no further reductions in emissions for nitrous oxide. In 2035, they are at almost exactly the same level as in 2012. This explains why nitrous oxide emissions account for over 8 % in 2035.

In 1990, fluorinated gases accounted for 1.0 % of total greenhouse gas emissions; by 2012, this figure had risen to 1.4 %. By 2020, it will increase slightly to 1.6 %, after which it falls to 0.7 % by 2035. Hydrofluorocarbons are the major group within the fluorinated greenhouse gases. Between 1990 and 2012, HFC emissions more than doubled and will continue to rise until 2015. However, since they will then decrease significantly, the emissions level in 2035 will be 24 % down on 1990. Since emissions of perfluorocarbons had already been cut by 92 % by 2012, only slight reductions are expected in the future. By 2012, sulphur hexafluoride emissions had been cut by almost 29 % from their 1990 level. However, since an initial increase in SF_6 emissions is projected, their 2020 level will be only 6 % below their 1990 level. On the other hand, a very marked decline is expected from 2020, so that by 2035 SF_6 emissions will be 80 % lower than in 1990. Thus, overall there is a clear shift in the significance of the individual F-gases: in 1990, SF_6 and HFCs each accounted for 39 % of total greenhouse gas emissions, the remaining 22 % were accounted for by PFCs. By 2035, HFCs will account for the majority of emissions - 75 % - whereas sulphur hexafluoride's share will fall to 20 % and PFCs will account for only about 4 %.

The reductions compared with Kyoto Protocol base year emissions (for which emissions in 1990 were used for CO_2, CH_4 and N_2O and emissions in 1995 for fluorinated gases) are in each case slighter higher than reductions compared with 1990.

[36] CO_2 emissions from incinerating biomass are not included here nor in any of the CO_2 emissions discussed in this report.

	2005	2010	2012	2015	2020	2025	2030	2035
Greenhouse gas	*million tonnes of CO_2 equivalents*							
Carbon dioxide	861.7	829.4	821.7	794.2	730.5	685.1	617.5	554.8
Methane	59.3	50.1	48.7	44.6	41.5	40.1	38.6	37.2
Nitrous oxide	60.8	54.6	55.8	54.9	55.3	55.3	55.0	54.8
HFC	8.4	8.9	9.3	9.8	8.7	6.8	3.3	3.5
PFCs	0.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2
SF_6	3.5	3.2	3.3	3.6	4.4	2.7	1.0	0.9
Total	**994.5**	**946.4**	**939.1**	**907.4**	**840.5**	**790.2**	**715.6**	**651.4**
Compared with 2005	-	-4.8 %	-5.6 %	-8.8 %	-15.5 %	-20.5 %	-28.0 %	-34.5 %
Compared with 1990	-20.3 %	-24.2 %	-24.8 %	-27.3 %	-32.7 %	-36.7 %	-42.7 %	-47.8 %
Compared with base year [a]	-20.6 %	-24.4 %	-25.0 %	-27.5 %	-32.9 %	-36.9 %	-42.8 %	-48.0 %
For information only:								
International civil aviation and maritime transport	31.4	33.7	33.8	36.0	39.0	41.6	43.6	44.9
Total, incl. memo items	**1.025.8**	**980.1**	**972.9**	**943.4**	**879.5**	**831.8**	**759.2**	**696.3**
Compared with 2005	-	-4.5 %	-5.2 %	-8.0 %	-14.3 %	-18.9 %	-26.0 %	-32.1 %
Compared with 1990	-17.5 %	-21.2 %	-21.8 %	-24.1 %	-29.3 %	-33.1 %	-39.0 %	-44.0 %
Compared with base year [37]	-17.8 %	-21.4 %	-22.0 %	-24.4 %	-29.5 %	-33.3 %	-39.1 %	-44.2 %

Table 4: Trends in total greenhouse gases by gas 2005-2035[38, 39]

4.4.2 Trends in greenhouse gas emissions by source category

Table 5, along with Figure 7 and Figure *8*, provides an overview of emission trends under the with-measures scenario, broken down by source category.

Over half the emissions reductions from 2012 to 2035 are achieved by the energy industry. In this sector, emissions fall by 2020 in absolute terms by 61 million tonnes of CO_2 equivalents compared

[37] The base year is 1990 for carbon dioxide, methane and nitrous oxide and 1995 for HFCs, PFCs and sulphur hexafluoride. The calculations of base year emissions take this into account.

[38] BMUB (2015): Projektionsbericht 2015 der Bundesregierung zur Entwicklung der Treibhausgasemissionen in Deutschland gemäß Verordnung 525/2013/EU. online: http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/

[39] Calculations in the 2015 Projection Report were carried out using model calculations performed by Fraunhofer ISI and Öko-Institut on the basis of: UBA (2014a): Berichterstattung unter der Klimarahmenkonvention der Vereinten Nationen und dem Kyoto-Protokoll 2014. Nationaler Inventarbericht zum Deutschen Treibhausgasinventar 1990-2012. Climate Change 24/2014. Dessau-Roßlau, CRF inventory submission to UNFCCC of April 2014, UBA (2014b): extract of data from the Central System for Emissions (ZSE) of 05.11.2014. Dessau-Roßlau.

with 2012 and by 160 million tonnes of CO_2 equivalents by 2035. That equates to a 17 % reduction in 2020 compared with 2012 (-29 % compared with 1990) and represents a 43 % reduction in 2035 (48 % lower than in 1990). Whereas the energy industry's share in total emissions rose from just over 32 % in 1990 to almost 39 % in 2012, it falls to about 31 % by 2035.

Energy-related industrial emissions remain virtually constant until 2020 at roughly 35 % below their 1990 level, and then fall up to 2035 by just under 15 million tonnes of CO_2 equivalents or 5 % from their 2012 level (43 % lower than their 1990 level). Overall, industrial emissions' share rises from 12 % in 2012 to 15 % in 2035.

Greenhouse gas emissions from the trade, commerce and services sector fall by 2020 by just under 4 million tonnes of CO_2 equivalents, which is 4 % down on 2012 (53 % down on 1990) and by 17 million tonnes of CO_2 equivalents or 6 % by 2035 (68 % down on 1990). The sector's share in total emissions falls slightly from just under 5 % in 2012 to just over 4 % in 2035.

The second largest contribution to the projected reduction in emissions comes from private households: they reduce their emissions between 2012 and 2020 by 18 % or 17 million tonnes of CO_2 equivalents (41 % down on 1990) and by 42 % or 40 million tonnes of CO_2 equivalents by 2035 (58 % below 1990 levels). Furthermore, private households' share falls from 10 % in 2012 to just 8 % in 2035.

After the energy industry and private households, the transport sector achieves the greatest emissions reductions in absolute terms. It sees a reduction of 7 million tonnes of CO_2 equivalents or 4 % by 2020 compared with 2012 (a 10 % cut compared with 1990) and in 2035 of 29 million tonnes of CO_2 equivalents or 19 % compared with 2012 (a 23 % cut compared with 1990). Nevertheless, the historically rising trend in transport emissions' percentage share continues: whereas in 1990 transport's share in total emissions was still a little over 13 %, it rises to almost 17 % in 2012 and will exceed 19 % by 2035. It must also be noted that, due to the expansion of electromobility, some of the emissions from the transport sector are shifted to the energy industry, because public electricity generation is accounted for in the latter.

Reductions in fugitive emissions from the energy sectors are low in absolute terms but high in relative terms: emissions reductions of 3 million tonnes of CO_2 equivalents between 2012 and 2020 and of 4 million tonnes of CO_2 equivalents by 2035 equate to decreases of 28 % in 2020 (75 % down on 1990) and 39 % in 2035 (79 % down on 1990). The relative percentage remains the same at around 1 %.

Of the total non-energy emissions in 1990, emissions from industrial processes were the most important, accounting for 8 % of total emissions. This share has remained more or less constant since then. Nevertheless, between 2012 and 2020, emissions from industrial processes fall by 3 million tonnes of CO_2 equivalents or 5 % (29 % down on 1990) and by 19 million tonnes of CO_2 equivalents or 28 % by 2035 (46 % down on 1990).

Emissions from use of products remains more or less constant but play only a minor role, accounting for less than 1 % of total greenhouse gas emissions.

Although emissions from agriculture decreased between 1990 and 2012, agriculture has nevertheless become the most important source of greenhouse gases apart from the energy sector. Furthermore, agriculture is the only sector that experiences rises in emissions in the projection: by almost 2 million tonnes of CO_2 equivalents or 2 % compared with 2012 and by 3 million tonnes of CO_2 equivalents or

5 % compared with 2012. This also means that agriculture's share in total emissions will rise from 7 % to 11 %. Nevertheless, agriculture's emissions are still 19 % (2020) or 17 % (2035) lower than in 1990.

Waste management is the sector with the historically highest emissions reductions in relative terms, experiencing a 68 % decline in emissions between 1990 and 2012. Nevertheless, emissions from the waste management sector are reduced by a further 5 million tonnes of CO_2 equivalents or 34 % between 2012 and 2020 and by as much as 7 million tonnes of CO_2 equivalents or 55 % by 2035. This means that waste management continues to be the sector with the greatest emissions reductions in relative terms – namely 79 % in 2020 and 86 % in 2035 (compared with their 1990 levels).

The rise in agricultural emissions and only slight decrease in emissions from the waste management sector explain the below average decrease in methane and nitrous oxide emissions noted in Chapter 4.4.1.

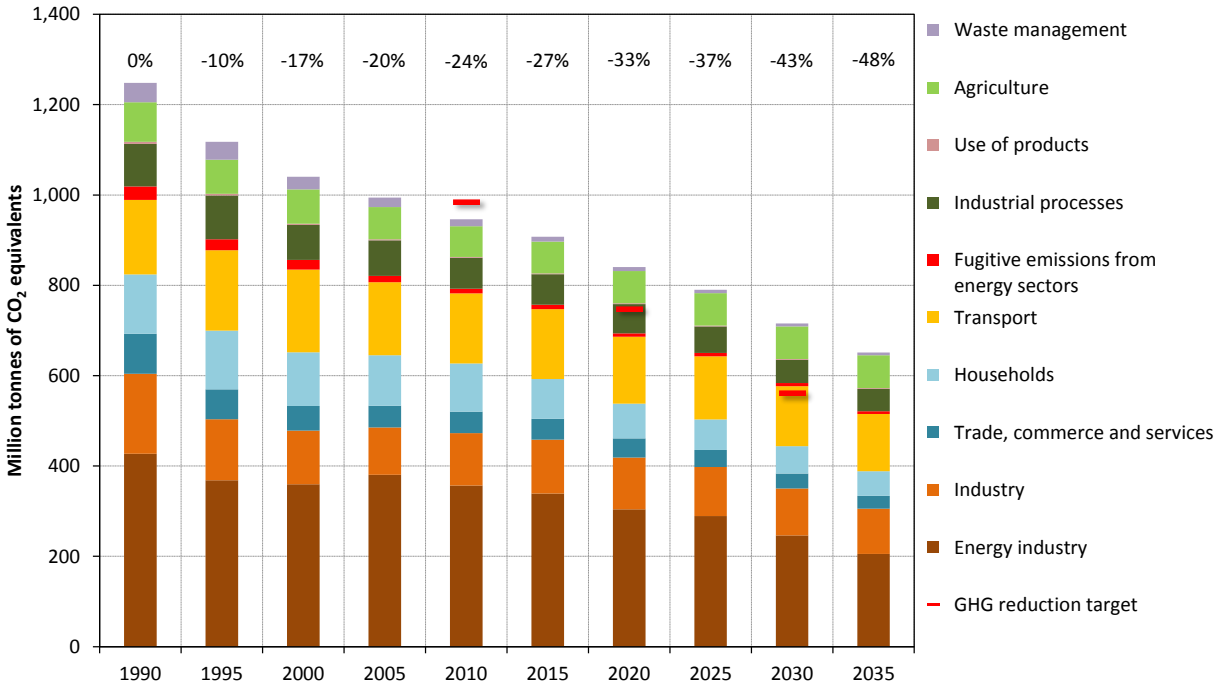

Figure 7: Trends in total greenhouse gas emissions by source category 1990-2035 (not counting international fuel bunkers)[40]

[40] BMUB (2015): Projektionsbericht 2015 der Bundesregierung zur Entwicklung der Treibhausgasemissionen in Deutschland gemäß Verordnung 525/2013/EU. online: http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/; see also Footnote 39

Source category	2005	2010	2012	2015	2020	2025	2030	2035
	million tonnes of CO_2 equivalents							
Energy industry	380.8	356.7	364.8	339.3	304.1	289.1	246.3	205.1
Industry	104.6	116.2	115.1	119.2	114.8	108.8	104.1	100.3
Trade, commerce and services	47.8	47.4	45.6	46.1	42.1	37.4	33.0	28.4
Households	111.9	106.8	94.5	87.9	77.1	67.7	60.5	54.6
Domestic transport	161.8	155.0	155.5	154.8	148.2	140.1	132.7	126.5
Fugitive emissions from energy sectors	14.2	10.2	10.6	9.7	7.6	7.4	6.9	6.4
Industrial processes	78.6	68.5	68.3	67.8	64.8	58.5	51.1	49.4
Product use	2.1	1.9	1.8	1.8	1.7	1.8	1.8	1.8
Agriculture	71.4	68.4	69.5	70.1	71.2	71.7	72.2	72.7
Waste management	21.3	15.3	13.6	10.7	8.9	7.7	6.8	6.1
Total	**994.5**	**946.4**	**939.1**	**907.4**	**840.5**	**790.2**	**715.6**	**651.4**
Compared with 2005	-	-4.8 %	-5.6 %	-8.8 %	-15.5 %	-20.5 %	-28.0 %	-34.5 %
Compared with 1990	-20.3 %	-24.2 %	-24.8 %	-27.3 %	-32.7 %	-36.7 %	-42.7 %	-47.8 %
Compared with base year [a]	-20.6 %	-24.4 %	-25.0 %	-27.5 %	-32.9 %	-36.9 %	-42.8 %	-48.0 %
Memo items:								
International civil aviation and international maritime transport	31.4	33.7	33.8	36.0	39.0	41.6	43.6	44.9
Total incl. memo items	**1.025.8**	**980.1**	**972.9**	**943.4**	**879.5**	**831.8**	**759.2**	**696.3**
Compared with 2005	-	-4.5 %	-5.2 %	-8.0 %	-14.3 %	-18.9 %	-26.0 %	-32.1 %
Compared with 1990	-17.5 %	-21.2 %	-21.8 %	-24.1 %	-29.3 %	-33.1 %	-39.0 %	-44.0 %
Compared with base year [41]	-17.8 %	-21.4 %	-22.0 %	-24.4 %	-29.5 %	-33.3 %	-39.1 %	-44.2 %

Table 5: Trends in total greenhouse gases by source category 2005-2035[42]

[41] The base year is 1990 for carbon dioxide, methane and nitrous oxide and 1995 for HFCs, PFCs and sulphur hexafluoride. The calculations of base year emissions take this into account.

[42] BMUB (2015): Projektionsbericht 2015 der Bundesregierung zur Entwicklung der Treibhausgasemissionen in Deutschland gemäß Verordnung 525/2013/EU. online: http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/; see also Footnote 39

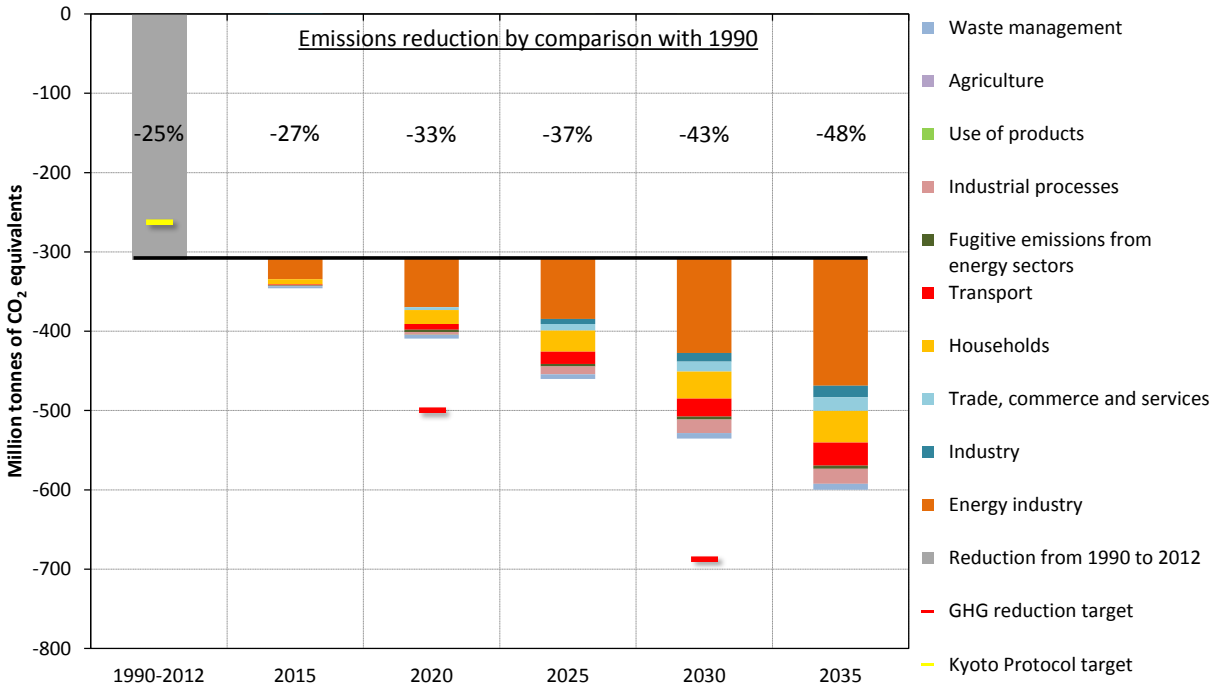

Figure 8: Contribution of the individual source groups to the emissions reductions between 2012 and 2035 (not counting international fuel bunkers)[43]

[43] BMUB (2015): Projektionsbericht 2015 der Bundesregierung zur Entwicklung der Treibhausgasemissionen in Deutschland gemäß Verordnung 525/2013/EU. online: http://cdr.eionet.europa.eu/de/eu/mmr/art04-13-14_lcds_pams_projections/envvqlq8w/; see also Footnote 39

5. Financial and technical support and capacity-building in developing countries

The German government is honouring its financial commitments and is very active in the field of international climate finance. Since 2005, it has increased its climate finance from public budget funds almost fivefold to around 2.344 billion euros in 2014. In 2013, the international climate finance from public budget funds totalled 1.950 billion euros. Furthermore, at the Petersberg Climate Dialogue in June 2015, Chancellor Merkel also announced the government's goal of doubling German climate finance from budget funds by 2020. In addition to the public climate finance from budget funds, Germany has also since 2013 reported mobilised public climate finance, i.e. climate-related credit financing provided by KfW Entwicklungsbank and the Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG), which uses market funds. In 2013, this mobilised public climate finance amounted to 1.47 billion euros, so that German climate finance totalled approximately 3.42 billion euros. In 2014, mobilised public climate finance was roughly 2.79 billion euros, so that German climate finance totalled 5.135 billion euros.

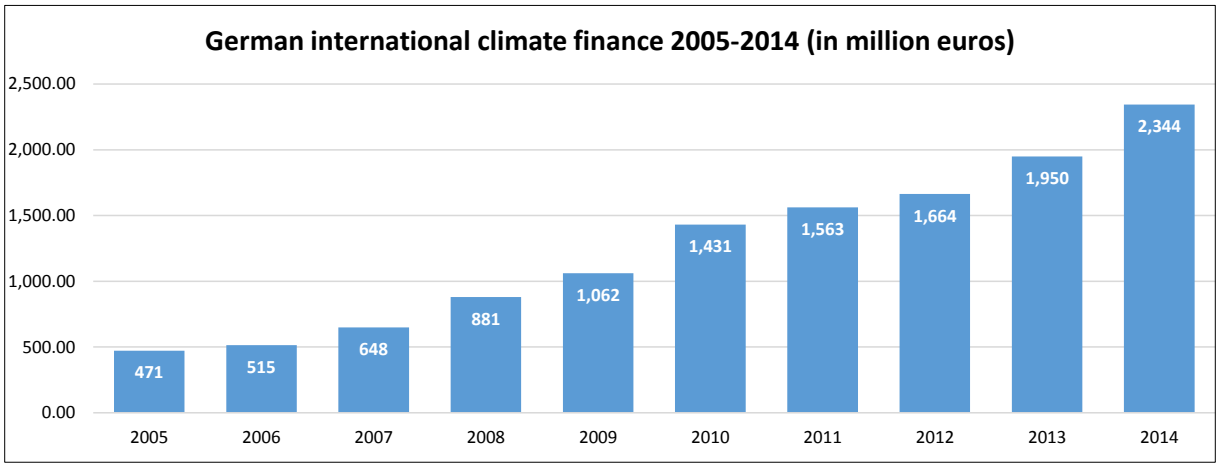

Figure 9: Increase in German climate finance from public budget funds (2005-2014)

The German government's aim is to provide climate finance in a balanced way to projects on mitigation and adaptation to climate change. In 2013 and 2014, bilateral climate finance for mitigation, adaptation to climate change and forest and biodiversity conservation (including REDD+) was allocated as shown in Figure 10 and Figure 11. Germany's funding for forest and biodiversity conservation in both years was split almost 50/50 between mitigation-related and adaptation-related projects. The bottom line was that for 2013 there was a balanced relationship between climate change mitigation and adaptation. 2014 was the first year in which Germany provided more bilateral climate finance for adaptation to climate change than for mitigation.

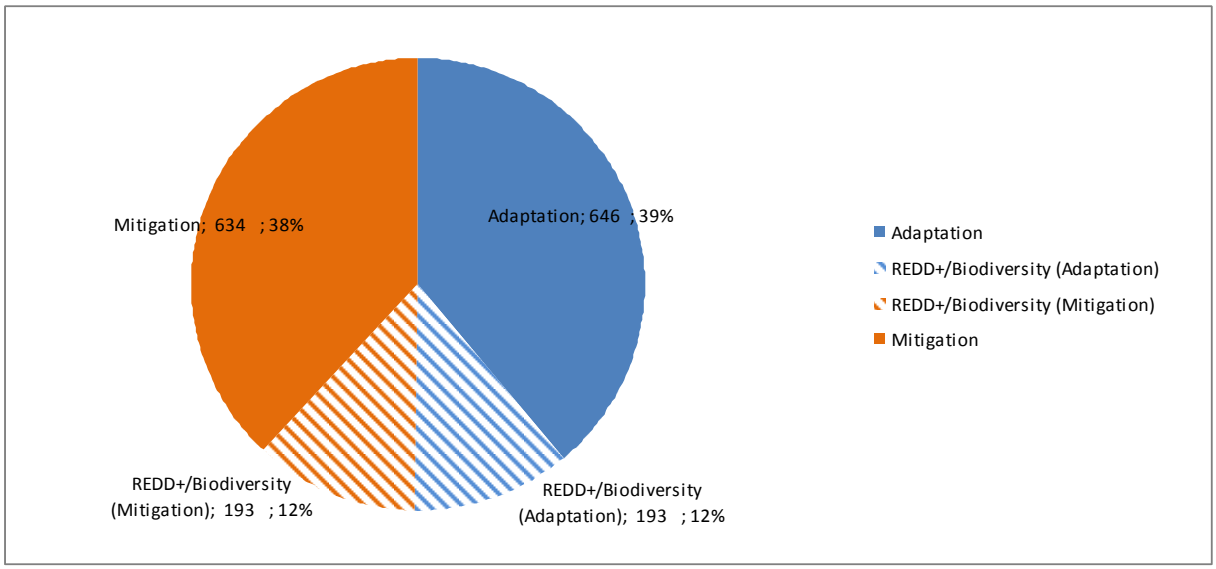

Figure 10: Breakdown by subject area of German bilateral climate finance in 2013 (in million euros and as a percentage)

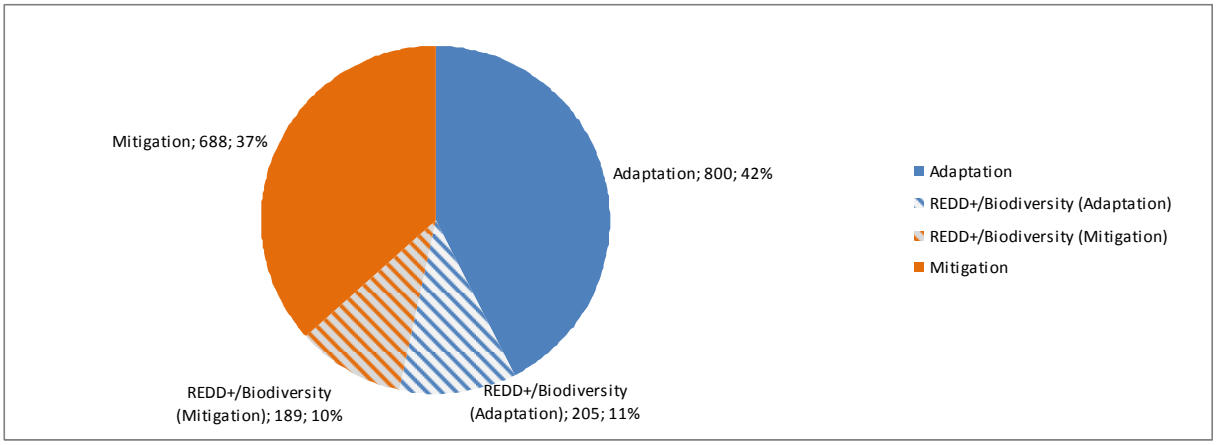

Figure 11: Breakdown by subject area of German bilateral climate finance in 2014 (in million euros and as a percentage)

The German government uses a broad range of instruments and institutions for its international cooperation activities in the field of climate and development:

- bilateral financial, technical and scientific cooperation, especially through KfW, GIZ, and civil society and scientific institutions;
- multilateral cooperation, for example through the Green Climate Fund (GCF), the Climate Investment Funds (CIFs), the Kyoto Protocol's Adaptation Fund (AP), the Global Environment Facility (GEF), the Forest Carbon Partnership Facility (FCPF), the Biocarbon Fund Initiative for Sustainable Forest Landscape (Bio CF ISFL) and various multilateral development banks and UN organisations.

For two decades, Germany has addressed issues and implemented goals in the field of climate change mitigation and adaptation in collaboration with its partner countries. This has taken place in grand style as part of its development cooperation work, primarily in the energy, urban development, transport, water management, environmental protection, resource conservation and agriculture sectors.

Support for greenhouse gas reduction, adaptation and forest and biodiversity conservation (including REDD+) in developing countries is integrated into Germany's cross-cutting development cooperation strategies and programmes and its international research cooperation strategies. The International Climate Initiative (IKI) has complemented the German government's existing cooperation activities since 2008. The IKI is an important part of German climate finance in the context of the UN Framework Convention on Climate Change and the Convention of Biological Diversity (CBD). Funding climate and biodiversity projects has positive side effects, especially in improving the conditions in which people in the partner countries live. In implementing its policies, the government takes guidance both from the resolutions of the Parties to the United Nations Framework Convention on Climate Change and from the principles of the Paris/Accra/Busan Agenda to increase aid effectiveness, which include ownership by the partner countries, supporting and using the partner institutions, national programmes, strategies and procedures, coordination among donors, results orientation and mutual accountability on the part of partners and donors.

At the same time, climate change mitigation and adaptation are important cross-cutting issues in development cooperation and are therefore taken into consideration in all bilateral development cooperation projects. The Federal Ministry for Economic Cooperation and Development (BMZ) has produced guidelines for including environment and climate considerations in bilateral governmental development cooperation entitled "Handreichung für die Prüfung und Berücksichtigung von Umwelt- und Klimaaspekten in der bilateralen staatlichen Entwicklungszusammenarbeit," which contain specific details to ensure these cross-cutting issues are taken into account. The guidelines are binding on BMZ and the organisations implementing Germany's development cooperation policies. Their aim is to ensure that adverse impacts on the environment and climate are minimised and negative impacts are avoided when planning and implementing development strategies and activities. They also aim to ensure that potential for improving the quality of the environment and avoiding greenhouse house gases be analysed when devising measures and harnessed when implementing them. Finally, they state that the effects of climate change should be taken into account in such a way as to ensure that the positive impacts of the measures are not jeopardised. In this way, climate considerations are systematically taken into account at strategy level. On an operational level, climate considerations are explored and taken into account in greater detail and then integrated into the further development of the programmes. In 2013, BMZ - in conjunction with the implementing organisations the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Kreditanstalt für Wiederaufbau (KfW) - received an Institutional Award from the International Association for Impact Assessment for their work in drafting and implementation of these guidelines.

Table 7a in the Annex details Germany's multilateral contributions to climate finance in 2013 and 2014.

The Green Climate Fund (GCF) was established as part of the climate negotiations by the Conference of the Parties to the UNFCCC in Cancun (COP 16) in 2010. The GCF complements existing bilateral and multilateral instruments and is an important new building block in the international climate finance architecture. The idea is for the GCF to provide financial support to developing countries – especially those that are poor and particularly vulnerable – to enable them to advance their development on a low-carbon path and to protect themselves against the effects of climate change. In this way, the GCF also sends out a signal that is important for the successful negotiation of a new global climate agreement in 2015. 10.2 billion US dollars were pledged for the initial capitalisation of the Fund. That

means that the GCF is already the largest multilateral climate fund. Germany pledged 750 million euros for its initial capitalisation.

The Global Environment Facility (GEF) is a finance instrument for environmental conventions on biodiversity, climate change, persistent organic pollutants, combatting desertification and, since 2013, cutting mercury emissions. The GEF makes a crucial contribution to ensuring that global environmental protection is anchored in the development strategies of developing and transition countries. Contributions to the GEF Trust Fund are an important way for industrialised countries to meet their financing commitments under the above-mentioned environmental conventions. Germany's contribution accounts for 12.43 % of GEF's funding, making it the third largest donor after Japan and the United States. Germany has a seat on the GEF Council, where it advocates for results orientation and quality assurance.

5.1 Methods, assumptions, approaches to adaptation to climate change

Developing countries are particularly hard hit by the effects of climate change: rising temperatures, changing precipitation patterns, and an increase in extreme weather events such as droughts, flooding and storms. At the same time, their knowledge about climate change and its risks and consequences is often inadequate and access to existing information - including early warning systems - is difficult. Climate change can, for example, lead to higher food prices, damage to infrastructure, economic losses, loss of ecosystem services and biodiversity and can endanger human health. It can hamper development and progress or even destroy progress that has already been made. For this reason, Germany sees supporting developing countries in adapting to climate change as an important task and is currently supporting 80 countries through bilateral and global projects. This international responsibility is one of the four pillars of the German Strategy for Adaptation to Climate Change (2008) and of the Adaptation Action Plan designed to implement it (2011). Key areas of Germany's technical support to developing countries in the fields of adaptation to climate change and climate variability are described below.

Integrating adaptation into national development planning and building adaptation capacity

A key aspect of Germany's international cooperation is integrating climate considerations into national development and budget planning. Germany supports its partner countries in designing participation processes, for example, or developing National Adaptation Plans. In conjunction with other countries, Germany launched the NAP Global Network in 2014, which works towards national and global coordination of donors in the field of climate change adaptation and acts as a communication forum for experts and government representatives. Since 2014, it has also offered specific support in developing and implementing National Adaptation Plans in up to 20 countries, including for example Cambodia (see below), Togo, Albania and Thailand. Germany launched a Trust Fund Programme jointly coordinated by UNDP and FAO to integrate the agriculture sector into National Adaptation Plans (NAPs) and is its principal donor. (See also the section later in this document on integrating agriculture into National Adaptation Plans).

Agriculture/food security, land degradation, sustainable land use

Agriculture is particularly affected by the effects of climate change. Climate change can increase land degradation and have a negative effect on agricultural productivity. The main problems are insufficient water availability, temperatures exceeding the upper limits that crops can tolerate, droughts, changing precipitation patterns, the occurrence of new pests and diseases, and soil erosion. Small farmers are the most important target group for Germany's international cooperation work. Its technical advisory services promote, for example, optimisation of cultivation methods, the introduction of more sustainable irrigation systems, inclusion of climate-adapted agriculture in development planning and sectoral strategies, and better access to financial and technical services (such as drought early warning systems and building climate expertise in agricultural advisory services), whereas financial cooperation includes funding measures to improve water efficiency in smallholder irrigation farming and the introduction of integrated water resource management (IWRM).

In addition to this, scientists are also working in interdisciplinary collaborative research teams coordinated by the Federal Ministry of Education and Research (BMBF) towards a better understanding of the interactions between land management, climate change mitigation and ecosystem services. Throughout the world, regionally adapted solutions for sustainable land use are being developed and implemented as examples.

Water

Precipitation and evaporation are changing as a result of climate change. The declining availability and quality of water is impacting negatively on food security, health and energy production. Poor people are particularly hard hit and conflicts may result. Measures such as integrated water resource management (IWRM), improving the soil water balance, and creating incentives to save water can be taken to assure sustainable development, effective poverty reduction, and preservation of ecosystems and biodiversity.

Funded by the Federal Ministry of Education and Research, the integrated water resource management approach is being established to demonstrate best practice in selected model regions in Asia, Africa and the Middle East, considering the needs of and involving all relevant stakeholders. Monitoring programmes, modelling and analysis are improving collection of data on hydrology and climate and the ability to make forecasts, and enabling cross-sectoral plans to be developed. Technical cooperation projects are advising on water sector reforms, legislation, cross-sectoral planning and in some cases cross-border water management. Measures to improve water efficiency in urban water supply networks, for example, are being implemented as part of financial cooperation projects.

Ecosystem-based adaptation (EbA)

Ecosystems perform important services for people. For example, they preserve soil fertility, provide clean water and protect against flooding and erosion. These ecosystem services can also help to mitigate the impact of climate change on people. The concept of ecosystem-based adaptation (EbA) is therefore concerned with using biodiversity, natural resources and their ecosystem services to increase people's capacity to adapt to the negative effects of climate change. Development projects funded by the German government advise partner countries on integrating the EbA approach into their planning processes and implementing it. Model projects test EbA measures and process and

disseminate the results. The experience gained is then fed into the international negotiation processes under the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change. Financial cooperation projects fund work to conserve mangrove forests, for example, as a way of protecting coastlines.

Management of the risks associated with climate change - disaster preparedness, innovative insurance schemes

Climate change is causing more intensive and – depending on the location – more frequent extreme weather events such as flooding, drought and cyclones, and developing countries are particularly hard hit. Each year, many people lose their livelihoods or even their lives and the damage to the economy is vast. Disaster preparedness includes reducing the dangers of climate change and limiting the damage. As a signatory to the Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction, Germany supports developing countries in their endeavours to take precautions to protect critical infrastructure such as schools, hospitals and power stations. Innovative insurance schemes that provide cover against extreme weather events offer the option of transferring risks and provide financial support to households and businesses forced to start afresh after a natural disaster.

Financial cooperation projects are working, for example, on funding hydrological monitoring networks, multi-purpose shelters or the start-up phase of risk management systems at country level, such as the African Risk Capacity (ARC).

Examples of climate change adaptation initiatives/projects

G7 Initiative on Climate Risk Insurance

Germany is involved in the G7 Initiative on Climate Risk Insurance, known as InsuResilience, which was adopted under its presidency at the G7 Summit in Elmau in May 2015. The G7 aims to increase access to direct or indirect insurance cover against the negative impacts of climate change for people in most vulnerable developing countries; its goal is to raise the number of people reached from the current figure of 100 million to up to 400 million by 2020. In this context, the G7 will support the development of early warning systems in the most vulnerable countries. It intends to build on lessons learned from existing risk insurance schemes such as the African Risk Capacity and Caribbean Catastrophe Risk Insurance Facility.

Drought insurance for African countries – the African Risk Capacity (ARC)

African countries face a particularly high threat from drought; this threat will become more severe as a result of climate change. A single destroyed harvest can jeopardise the livelihood of small farmers in particular. Germany is therefore taking part in establishing the African Risk Capacity and has contributed 50 million euros. In the event of a drought, this insurance scheme funds an emergency programme that has been agreed in advance with the individual country. The insurance also creates incentives to prepare for future droughts and thus mitigate their impact on the economy. All the member states of the African Union are eligible for cover through this insurance scheme. Kenya, Mauritania, Niger and Senegal have already taken out policies. Niger, Mauritania and Senegal already received an initial payout of 26 million US dollars at the beginning of 2015 to finance emergency drought assistance programmes. Other insurance products, such as flood cover, are set to follow.

Supporting national adaptation planning processes in Cambodia

With financial backing from USAID, Germany is supporting the environment ministry in Cambodia in developing and implementing its national adaptation planning (NAP) process. Building on the Cambodia Climate Change Strategic Plan 2014-2023 and the National Climate Change Committee, building climate finance capacity, mainstreaming adaptation and developing a financing strategy for adaptation measures are contributing to the institutionalisation and implementation of the country's national adaptation planning process. The project is also supporting efforts to mainstream adaptation to climate change into sectoral planning processes and their monitoring systems with a view to reducing climate risks in all affected sectors.

Integrating agriculture into National Adaptation Plans – Kenya, Nepal, the Philippines, Thailand, Uganda, Uruguay and Zambia

National Adaptation Plans are an essential tool for focused, coordinated and integrated adaptation planning. The project supports the partner countries in building the technical capacity they need to integrate important adaptation requirements for the agriculture sector into their ongoing planning and budgeting processes. To this end, experience gained in previous or current projects funded by IKI and other donors is used to provide advisory input into policymaking processes. Furthermore, the capacity building activities are closely linked with the NAP Global Support Programme (NAP-GSP). The two agencies implementing the project - UNDP and FAO – have combined their expertise in the project to develop an integrated planning approach that sets an example for other sectors. The project currently has 10 million euros in funding and a term of four years (2014-2018). Other donors can also pay into the Trust Fund.

Ecosystem-based adaptation (EbA) in the Caribbean

The coastal zones of small island states in the Caribbean are particularly endangered by climate change. Damage caused by tropical cyclones and storm surges is increasing. Ecosystems, especially coral reefs, seagrass meadows and mangrove forests, mitigate the negative effects of tropical storms and storm surges. They provide protection against coastal erosion and are important as a food source and breeding grounds for fish as well as for biodiversity and tourism.

As part of an EbA project with the Caribbean Community Climate Change Centre, the German government has awarded a 10.8 million euro grant to support measures to promote sustainable management, conservation and rehabilitation of these ecosystems that are important for adaptation in St. Lucia, Grenada, St. Vincent & the Grenadines and Jamaica.

5.2 Methods, assumptions, approaches to reducing greenhouse gases

To limit the global temperature rise to a maximum of 2° Celsius, as internationally agreed, emissions must be reduced and economic development made climate friendly. This will also help to safeguard the progress in economic and social development that has already been achieved but which is now threatened by climate change. For this reason, Germany believes it is important to promote endeavours to combat climate change worldwide and to support developing countries not only in their sustainable, low-emission and climate-resilient development but also in their endeavours to reduce greenhouse gases.

Together the energy and forestry and agriculture sectors account for more than half the world's greenhouse gas emissions - at 35 and 24 % respectively. Emissions are also rising sharply worldwide in the transport sector. Climate-friendly urban development has considerable potential for reducing emissions. Germany therefore focuses particularly on these areas in its cooperation with developing countries and emerging economies.

Energy

Cooperation in the field of energy aims to achieve an energy transition in emerging economies and developing countries with a shift towards a sustainable, low-emission and climate-resilient energy supply structure. Germany supports, in particular, efforts to increase energy efficiency and expand the use of renewables. It does this through innovative financing mechanisms and investment measures and by providing know-how transfer and policy advice in partner countries. Many projects aim to create a better technical and policy framework in the partner countries in order to ultimately recruit the support of the private sector as a key actor in the broad-based marketing of appropriate technologies. Energy is the largest funding area in Germany's international climate finance. In the context of the UN negotiations, the energy cluster offers the possibility of creating important synergies between climate policy and energy policy. Projects in the field of renewable energy and energy efficiency not only demonstrate how the resolutions of the climate negotiations are put into practice but also how the projects can create synergies between energy policy and climate policy.

Forestry and agriculture

Forestry and agriculture is another important field of activity in Germany's cooperation on climate change action. The German government's international forest policy aims to halt deforestation and forest degradation and to preserve or restore forests as greenhouse gas sinks. Its activities in the agriculture sector are working towards climate-friendly agriculture that permits crop yields to be sustainably increased while avoiding or reducing emissions from agricultural production. In the field of forest conservation, BMZ and BMUB primarily support concepts that reconcile forest protection and sustainable use. The German government is currently supporting bilateral and regional projects that both protect and sustainably manage forests in more than 40 countries and 20 regions.

Transport

Transport is becoming an increasingly high priority in cooperation projects on climate change. Sustainable development is virtually impossible without a well-functioning transport system. However, the fact that road traffic accounts for a major part of transport systems is causing a sharp rise in greenhouse gas emissions in many developing countries. The German government is supporting the establishment and expansion of public transport systems in developing countries and

emerging economies, along with the introduction of regulations and measures for environmentally friendly transport, making vehicle fleets more energy efficient and environmentally sound and improving transport planning in towns and cities. Its funding in the transport sector focuses particularly on investment measures in environmentally friendly public transport.

Urbanisation

Towns and cities play a particularly important role in effective climate policy, reducing greenhouse gases and protecting the population from the negative effects of climate change. The German government therefore sees towns and cities as key players in endeavours to achieve a global sustainability agenda. Their high population density and concentration of industry, transport, trade and consumer activities makes them ideal starting points for effective measures to combat climate change. Low-emission transport systems, effective urban planning that focuses on minimising the distances people need to travel, energy-efficient buildings and a functioning circular waste management system in cities can help to conserve resources on a grand scale and avoid greenhouse gas emissions. In promoting climate-friendly urban development, the German government focuses on systemic approaches and supports the development of adapted strategies, policies and goals at national and local authority level, as well as establishing and strengthening relevant institutions. In bilateral academic projects, Germany supports urban growth centres in different target countries in the strategic decisions they have taken on their direction of travel. The findings of the research cooperation have been integrated into a toolbox with a broad range of application-oriented and transferable approaches to dealing with the challenges posed by energy efficiency, resource consumption and climate change. Germany also provides low-interest loans to finance, for example, modern waste management systems, climate-friendly wastewater collection and treatment, or the establishment of express bus or suburban rail systems.

Cooperation on research and technological development

The Research for Sustainable Development framework programme consists of international partnerships in which funding is provided for bilateral joint projects to research, develop and implement innovations in environmental and climate change mitigation technology and services. One of the main aims is to trigger developments on lead markets in the fields of climate change mitigation, resource use and land and water management. Cooperation with Brazil, Russia, India, China, South Africa, Vietnam and Chile is funded through collaborative and seedcorn projects.

The International Climate Initiative (IKI) also focuses particularly on the use of and research into climate-friendly technologies. Through projects funded in the fields of renewable energy, energy efficiency, climate-friendly cooling, and transport, innovative technologies demonstrate their use in practice, cost effectiveness and transferability to the specific conditions of different countries. This is a major factor in increasing the acceptance and use of technology within the interest groups that are of key importance for combating climate change and thus a crucial component in achieving a climate-friendly transformation of the economy.

Examples of projects to reduce greenhouse gases

Supporting selected partner countries in developing their intended nationally determined contributions (INDCs) – the example of Peru

This bilateral project supports Peru in developing what are known as intended nationally determined contributions (INDCs) in the field of greenhouse gas reduction. The project is one of numerous funding programmes with which Germany has contributed to developing INDCs in partner countries since COP 19 in Warsaw. The project's activities comprise technical and policy advice to the Peruvian environment ministry on developing their national contribution to reducing greenhouse gas emissions in a future global climate agreement. On the technical level, analyses and studies are carried out to generate information and process it so that it can be fed into the policymaking process. In this way, it was possible, for example, to successfully prioritise sectors for the INDCs and analyse reduction potential. At political/institutional level, a dialogue between the relevant ministries is being supported with the aim of agreeing sectoral goals and framing the national contribution in specific terms. With this aim in mind, a multi-sectoral commission at minister level was set up, which reviews and approves the INDCs. Support for the first stages of implementing the agreements reached completes the advisory services. In this way, the project was able to fund the preparation of a proposal for an internal monitoring system for reviewing progress on implementing the sectoral contributions to the INDCs.

Support for the EcoCasa energy-efficient housing programme - Mexico

Half a million new homes are being built in Mexico each year; 8 % of the population works in the construction industry. Energy consumption is also rising steadily with roughly 17 % accounted for by private households. In the light of this, the Mexican housing development bank launched the EcoCasa programme. The programme's aim is to create sustainable housing for low- and medium-income people and at the same time reduce greenhouse gas emissions. The programme plans to mobilise roughly half a billion US dollars in private investment over seven years up to 2020 and use it to build over 38,000 energy-efficient houses and 600 *Passivhaus* homes. Their CO_2 emissions will be up to 20 % lower than would normally be the case with conventional houses. For the first time, different international funds are being used in combination to provide the financing. They include the Clean Technology Fund (CTF) and the European Commission's Latin American Investment Facility. BMZ is contributing to the programme's funding with a reduced-interest loan of 105.5 million US dollars from KfW. The NAMA Facility, which Germany supports, is also financing a sustainable housing NAMA with 14 million euros, which is the basis for the EcoCasa project.

Integration of Renewable Energies into the Indian Electricity System - India

With its National Action Plan on Climate Change (NAPCC), the Indian government has sent a signal that it is a committed partner in the transition to a sustainable energy supply. It has underlined this commitment not least by increasing its expansion target for solar energy fivefold – from 20 GW to 100 GW by 2022. This aims to tackle the key challenges posed by climate change mitigation, energy security and the rapid rise in energy demand. The project supports the Indian Ministry of New and Renewable Energy (MNRE) in developing the country's energy sector in a climate-friendly way. To this end, it concentrates firstly on the electricity market and on analysing existing energy systems and secondly on funding mechanisms, especially those designed to disseminate decentralised photovoltaic systems on the roofs of buildings. Studies and training events strengthen the expertise of the ministry's employees on these issues. The activities will be fed into a nationally appropriate

mitigation action (NAMA), which is being drafted with support from the project. The project's term is 2014 to 2017 and its funding volume is roughly 2 million euros.

5.3 Methods, assumptions, approaches to REDD+

According to the latest IPCC estimates, CO_2 released as a result of deforestation accounts for about 12 % of global greenhouse gas emissions. In addition to this, forests are the most important terrestrial carbon sinks, which means that forest conservation plays a key role in mitigating climate change. A marked reduction in - or even complete halt to - global deforestation is therefore an important element of climate change mitigation. Conversely, a further rise in temperature will endanger the forest ecosystem in its ability to act as a habitat and provide space for economic activity. For over 1.6 billion people - especially indigenous people and Indigene and small farmers – survival depends either directly or indirectly on forests. Successful forest conservation as part of climate change mitigation thus also has a direct positive impact on preserving the livelihoods of these population groups and on the ability of people and nature to adapt to climatic changes and their consequences. Thus, promoting sustainable development and conserving important functions of forest ecosystems go hand in hand.

The REDD+ mechanism (Reducing Emissions from Deforestation and Forest Degradation) is a key approach to mitigating climate change by preserving forests. It works by creating financial incentives to protect forests, with performance-based payments being made for verifiable emission reductions resulting from avoided deforestation. The German government believes that implementing REDD+ plays a crucial role in limiting the global temperature rise to a maximum of 2° Celsius and in conserving biodiversity. For that reason, Germany has for many years been providing high levels of funding to BMZ and BMUB initiatives to promote REDD+ and forest conservation measures.

The German government believes that the key factors in the success of REDD+ are involving the people who depend on the forest at local level and creating economic alternatives to destructive expansion of forest land use. Germany therefore advocates for the major portion of REDD payments for verifiable emission reductions to go to the local small farmers and indigenous populations who work actively towards conserving the forest and practising farming without deforestation.

The German government is currently concentrating on promoting the three phases of REDD+. In the readiness phase, it works in numerous partner countries to help build the structures and capacity needed to implement REDD+ in the future; it is also active in the second phase, promoting activities to implement national REDD+ strategies. The German government's REDD Early Movers (REM) programme is designed to pilot the final phase of REDD+ - performance-based finance. It is one of the first of its kind to promote global emissions reduction through forest conservation (see the example below). Overall, the German government is one of the major REDD+ donors in the world, having already invested over 900 million euros, including as part of the multilateral Forest Carbon Partnership Facility.

Examples of projects working on implementing REDD+

REDD Early Movers (REM) – Brazil, Ecuador and Colombia

In 2012, BMZ launched its global programme entitled REDD Early Movers REM to support REDD pioneers. REM is a performance-based mechanism that pays compensation through KfW for unequivocal and verifiable emissions reductions and provides support through GIZ to enable early movers to quickly establish any components in the REDD+ system that are still missing. The government of the Brazilian state of Acre - REM's first partner – successfully established institutions and instruments to ensure forest conservation and implement REDD, anchoring them in state legislation. As a result, deforestation has been declining since 2006. Acre has now lowered its rate of deforestation by 60 % and in 2011 accounted for only 4 % of deforestation in the Amazon region as a whole. Two other REM country components are being prepared for Ecuador and Colombia and will be jointly implemented with Norway's International Climate and Forest Initiative (NICFI). The United Kingdom and Colombia also maintain close relations in this field. To date, BMZ has provided 56 million in funding for REM and BMUB has provided an additional 9 million euros for the Acre/Brazil country component. The majority of the funding directly benefits small farmers, local forest communities and indigenous peoples; the remaining funds are invested in government measures to promote forest conservation and further reduce deforestation.

Restoring degraded forests – Brazil, Indonesia, Rwanda

Many developing countries, emerging economies and countries in transition have a high potential for restoring large expanses of forest. A project entitled Forest and Landscape Restoration in Key Countries aims to support policymakers in developing regionally and locally adapted restoration strategies. The project and the organisations implementing it - the World Resources Institute (WIR) and the International Union for Conservation of Nature (IUCN) – are seeking to contribute to a global movement that is restoring several million hectares of forest and improving ecosystem services. To this end, it works closely with the Global Partnership on Forest and Landscape Restoration (GPFLR). Suitable areas for reforestation were initially identified in Brazil, Indonesia, Rwanda, Peru and Kenya. Different interest groups from politics, business and civil society were then brought together to develop strategies and methods for restoring degraded forests. The project is funded through BMUB's International Climate Initiative with a total of approximately 3.0 million euros and its term is 2013 to 2017.

5.4 Methodology used to measure German climate finance

Germany attaches great importance to measuring and communicating its climate finance transparently and comprehensively. For this reason, it has reported its bilateral climate finance in Table 7b on a project-specific basis in order to depict the individual projects in as much detail as possible. Supplementary information on the individual projects can also be accessed on the websites of the ministries concerned: BMZ[44] and BMUB[45]. Furthermore, the methodology for recording

[44] www.bmz.de/climatefinance

[45] www.international-climate-initiative.com/en/projects

Germany's climate finance has been further developed since the last reporting period (1st Biennial Report) so that it now includes systematic and transparent reporting of all public climate finance, including mobilised public climate finance.

Germany distinguishes between two sub-categories of public climate finance:

a) **Climate finance from budgetary sources.** Climate finance provided from the public budget is recorded in this category. For the first time in the 2014 report, the imputed climate-relevant contributions to the MDBs were recorded using the methodology developed by the OECD Joint ENVIRONET and WP-STAT Task Team to Improve Rio Markers, Environment and Development Finance Statistics (JTT). In future, the grant elements of development loans will also be recorded, provided data on them is available.
b) **Mobilized public finance** is the nominal amount of climate-related credit awarded through the KfW Entwicklungsbank and the Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG) minus the funds already recorded under a). It predominantly takes the form of finance streams that count as ODA in the form of concessional loans.

Germany uses what are known as the Rio Markers to ensure its climate finance is measured transparently. Since the 2011 reporting year, Germany has used these climate markers developed by the OECD (Organisation for Economic Co-operation and Development) to ascertain the level of climate finance within its bilateral development cooperation funding. A distinction is made between climate change mitigation-related and adaptation-related markers. The Rio markers are scored differently depending on the project's objective. If one of the project's principal objectives is mitigation or adaptation to climate change, the project is given a marker with a score of 2, which means that 100 % of the funding is allocated to that particular climate area. If mitigation or adaptation is only a secondary objective, the Rio marker is scored as 1 and only 50 % of the funding is allocated to the particular climate area. Projects that receive a 0 score do not make a significant contribution to climate change mitigation or adaptation and therefore do not contain climate-related funding. The total scores for the climate markers awarded for a project may not exceed 2. For example, a project that has "climate change mitigation" as its principal objective (score of 2) cannot have "adaptation to climate change" as a secondary objective (score of 1). This rules out a project being counted twice as climate finance (double counting).

The description of German climate finance is broken down into different categories: reduction of greenhouse gases, adaptation to climate change and forest and biodiversity conservation including REDD+. Forest and biodiversity conservation is, in fact, a completely separate area, which also includes REDD+. To date there are no international markers for REDD+. The aim of projects in this field is the conservation and sustainable use of forests and other ecosystems and the biodiversity associated with them, which is why they are assigned the Rio marker for biodiversity with a score of 2. These projects are highly relevant to the climate and contribute both to mitigation and adaptation to climate change. As described in the previous paragraph, the finance volume of these projects that can be counted as climate finance is determined on the basis of the scores for the climate change mitigation and adaptation to climate change markers. The methodology makes it possible to measure forest and biodiversity conservation activities incl. REDD+ in a way that is transparent and comprehensible and includes their climate finance relevance.

Technology transfer and capacity building are components of virtually all the German government's bilateral cooperation projects and cannot be categorised separately.

The statistical data in Tables 7, 7a and 7b in the Annex to this document contain the funds allocated from public budgetary sources for all climate-related bilateral development cooperation projects that were approved in the year in question. In the case of contributions to multilateral climate finance, the year in which the funds are actually paid out is the basis for the listing. In this Biennial Report, mobilised public climate finance is still reported in a summarised form. Germany is aiming to submit a breakdown of data on this in its Third Biennial Report.

Germany defines new and additional climate finance as newly committed or disbursed climate finance during the period 2013 and 2014 respectively.

Germany's climate-related ODA for 2013 was 4.44 billion US dollars/3.344 billion euros (3.991 billion US dollars in bilateral funding and 451 million US dollars in multilateral funding) and for 2014 it was 7.756 billion US dollars/5.846 billion euros (7.315 billion US dollars in bilateral funding and 441 million US dollars in multilateral funding). There is a deviation from the sums reported here because a different method was used to determine the Rio markers. Furthermore, for our climate finance reporting to UNFCCC, the funding approval used is the date at which government approval is given (minutes of negotiations or a verbal note). This is not the same as the date used for ODA reporting, which is the date the project is commissioned or the agreement with the partner institution is signed.

Germany is not currently including mobilised private climate finance in its Biennial Report. To achieve the greatest possible transparency, it is following the common reporting method for mobilised private climate finance, which was adopted by a group of donors in September 2015. Details on this method can be found in the Annex to this document. On the basis of this method, donor countries will submit a joint report on this in future. This joint reporting ensures that double counting is ruled out as far as possible.

5.5 Report on strategies and measures that promote the mobilisation of private investment and climate change mitigation and adaptation measures in developing countries

The German government supports strategies and measures to mobilise private investment in climate change mitigation and adaptation.

The aim is to use limited public funds effectively to mobilise private funds for climate change mitigation activities that have a transformational effect wherever possible. It is thus not just a matter of achieving a direct mobilisation effect but also bringing about structural changes as a contribution to a sustainable development of the financial markets in the partner countries. To do this, not only the use of appropriate financing instruments but also the integration of the target countries' national systems is crucial. Measures in areas such as the following are being supported:

- Advice on taking business risks and opportunities related to climate change into account (e.g. developing adapted financial products).
- Developing specific methods and instruments to integrate environmental considerations into investment and lending decisions.

- Promoting and establishing cooperative ventures with the private sector and the academic/scientific community in partner countries to mobilise expertise and resources for climate change adaptation.
- Developing and using innovative funding instruments that focus on private sector investment in developing countries and emerging economies. In recent years, there has been increased development and use of instruments aiming to mobilise private investment for climate change mitigation and adaptation in the partner countries of German development cooperation projects.
- Support for emerging economies and developing countries in developing their financial markets – both on the supply and demand side. That includes capacity building in national financial institutions (especially private ones) to increase their willingness to become involved in funding green energy projects and develop and roll out new climate finance products. Other types of project such as providing start-up finance for projects and advising project development companies on climate change mitigation projects create incentives for investors on the demand side.
- Preparing public financial institutions for access to international climate finance (readiness) and improving the institutional and political conditions for climate finance (e.g. the programme BMUB and BMZ are collaborating on with the GCF secretariat to prepare recipient countries for Green Climate Fund support so that they can plan the use of GCF finance effectively and efficiently).
- Close cooperation between the private sector and governments in the field of climate risk management in order to provide the population of affected areas with risk management strategies that safeguard both their incomes, food security and employment opportunities and access to loans in times of climate change. Two of the main actors to be mentioned here are the African Risk Capacity and Climate Insurance Fund, which are funded by BMZ through KfW.

KfW development loans and DEG funding flank and reinforce these endeavours in projects that are close to the profitability threshold but cannot find finance that is acceptable in the long-term from a business point of view on the private capital market or in some cases are unable to access any finance at all.

Exemplary projects

Global project to strengthen private sector capacity to adapt to climate change (PSACC)

Small and medium-sized enterprises (SMEs) in the retail and manufacturing industry provide the majority of employment and income-generation opportunities in the cooperation countries. The project supports SMEs in these countries to enable them to better assess climate-related risks and opportunities and develop adaptation strategies. The PSACC project supports private sector actors in using instruments with which companies can analyse the effects of climate change on the supply of primary products, availability of energy and water, production and sales of their products and services. It also helps chambers of commerce, business associations and management consultants to use these methods and to advise SMEs on how to integrate climate change adaptation into their business strategies. The PSACC project also develops instruments to raise awareness and advise the private sector. It then adapts them to individual sectors and economic actors and tries them out. The BMZ project receives funding of roughly 3.6 million euros and its term is 2014 to 2019.

Global Climate Partnership Fund (GCPF)

The GCPF was initiated in 2010 by BMUB and KfW. Currently seven shareholders and one private investor have pledged over 327 million US dollars to the Fund. BMUB is currently one of the largest shareholders with a stake of 55.5 million US dollars. The portfolio currently comprises 15 investments in 13 countries. The GCPF, which has the organisational structure of a company governed by public law and is professionally managed, provides funding for energy efficiency and renewable energy projects in emerging economies and developing countries. On the investor side, it offers various risk classes for public and private investors. The public shareholders in the fund take the first loss and thus act as a risk buffer for private capital. This new and innovative approach motivates private investors to invest in energy efficiency and renewable energy. The GCPF mainly uses the funds mobilised to award loans to financial institutions in developing countries and emerging economies, which they then pass on through their own credit programmes to SMEs or private households.

In addition to finance, the Fund also offers advisory services for financial institutions, supporting them with expertise either in the development of credit products for investment in renewable energy and energy efficiency or in further developing social and environmental standards in their companies.

5.6 Technology cooperation

Technology transfer is part of virtually all the German government's climate-related bilateral development cooperation projects. It is therefore not possible to report separately finance streams used exclusively for technology transfer. CTF Table 8 includes a selection of projects that reflect experience and best practice in the field of technology transfer.

Germany is also actively involved in technology cooperation through the following initiatives and through its close support for the Technology Mechanism established under the United Nations Framework Convention on Climate Change.

German Climate Technology Initiative (DKTI)

The German Climate Technology Initiative was set up in 2011. Within the federal government, BMZ and BMU initially had joint responsibility for policy and implementation. In the 2015 federal budget, it was merged with BMZ's Initiative for Climate and Environmental Protection (IKLU), which has been operational since 2007. BMZ now has sole responsibility and is further developing the DKTI both instrumentally and in terms of content. The DKTI aims to accelerate the spread of technologies to reduce greenhouse gases and assist adaptation to climate change in emerging economies, developing countries and transition countries. The fields of technology it focuses on are renewable energy, smart grids, energy efficiency in industry and buildings, urban development, waste management and climate-friendly mobility, agriculture and water management. The German Climate Technology Initiative integrates the various instruments of technical and financial cooperation. It uses low-interest loans to create special leverage for climate change mitigation. Projects with a total volume of 1.77 billion and 1.93 billion euros were approved in 2013 and 2014 respectively. Within the Initiative for Climate and Environmental Protection, a total of 10.92 billion euros in reduced-interest loans were approved between 2007 and 2014 for renewable energy and energy efficiency for developing countries and emerging economies.

Climate Technology Centre and Network (CTCN)

One of the decisions taken by the Parties to the Framework Convention on Climate Change at the climate negotiations in Cancun at the end of 2010 was to set up the Technology Mechanism to strengthen cooperation on climate-relevant technologies. It consists of a policy arm, the Technology Executive Committee (TEC), and an operational arm, the Climate Technology Centre and Network (CTCN). CTCN forms the basis for more intensive cooperation in the field of climate-relevant technologies, both for reducing greenhouse gases and for adapting to climate change. It also aims to improve networking opportunities. CTCN has been operational since early 2013.

Each country has a National Designated Entity (NDE) to support CTCN's work. The NDEs act as the first point of contact for enquiries about available technology and cooperation opportunities. The Federal Ministry for Economic Affairs and Energy (BMWi) has been appointed as the German NDE. To fulfil its remit, BMWi conducted a study to analyse the technologies and services available or needed for climate change mitigation and adaptation, developed a system for structuring technologies and areas of need especially in the field of climate change adaptation and produced an overview of what is available in Germany and of instruments, actors and institutions involved in technology transfer. The idea is that the National Designated Entity will in future describe Germany's offers of cooperation and carry out technology workshops in developing countries and emerging economies to facilitate easier access to climate change mitigation and adaptation technologies and cooperation partners in Germany. Furthermore, the Gesellschaft für International Zusammenarbeit (GIZ), one of Germany's implementing organisations is part of the CTCN consortium of 13 partner organisations on behalf of BMZ and supports its work, in particular through a range of different technical cooperation projects.

5.7 Cooperation activities on capacity building in developing countries

In the field of capacity building, Germany is involved in both bilateral and multilateral activities and in a number of cooperation projects with the private sector. To support partner countries in effectively implementing the UN Framework Convention on Climate Change and in combating climate change, the German government has put comprehensive support measures in place to build capacity in the fields of greenhouse gas reduction, adaptation to climate change, technology development and transfer and access to climate finance. Capacity building is, in fact, an integral part and core instrument of virtually all the German government's bilateral cooperation projects. It is therefore not possible to separately report finance streams used exclusively for capacity building. CTF Table 9 therefore includes a selection of activities that support capacity building, which aim to strengthen capacities in the partner countries to enable them to effectively implement the UN Framework Convention on Climate Change and combat climate change. The activities to support capacity building are context-specific, results-focused and tailored to individual national priorities. They are based on principles of national ownership, and the inclusion and participation of relevant stakeholders and on a bottom-up approach.

6. Other relevant information

Monitoring implementation of the Climate Action Programme

The German government will monitor implementation of the Climate Action Programme in an ongoing process up to 2020. To that end, BMUB will produce an annual climate action report.

The climate action report will contain information on the latest emissions trends in the various areas for action, implementation progress and a forecast of the reduction effects that can be expected by 2020. The results from the government's projection report will be incorporated in an appropriate form.

BMUB's annual climate action report will in turn be incorporated in an appropriate form into the annual monitoring reports on the Energiewende or energy transition, published by the Federal Ministry for Economic Affairs and Energy (including a triennial progress report).

The German government will consider whether and how institutional capacity for the continuous reporting and review process needs to be strengthened to ensure international and European reporting obligations can be met. That includes primarily producing emissions reports (such as the National Inventory Reports on Germany's greenhouse gas emissions) and projections to estimate the effect of implemented and proposed measures (known as projection reports). This will require a review of the national legal framework relating to the collection and use of data needed for the reports.

Furthermore, the government will also set up a national climate action alliance, comprising representatives from all groups of society with BMUB as lead agency. The aim of the action alliance is to support implementation of measures adopted, make it easier to activate potential that is currently rated as "not quantifiable," and identify further options for action.

Annex 1: CTF tables

BR CTF submission workbook

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Contents

Table 1

Emission trends: summary [(1)]
(Sheet 1 of 3)

GREENHOUSE GAS EMISSIONS	Base year[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt CO_2 eq								
CO_2 emissions without net CO_2 from LULUCF	1,050,885.01	1,050,885.01	1,012,909.32	964,647.65	955,113.33	938,938.98	938,024.15	958,363.15	930,801.88
CO_2 emissions with net CO_2 from LULUCF	1,016,519.77	1,016,519.77	980,921.45	932,095.21	922,883.41	903,591.73	902,059.53	922,293.83	892,955.50
CH_4 emissions without CH_4 from LULUCF	118,887.42	118,887.42	113,321.64	109,877.84	110,440.53	106,609.93	104,436.91	101,836.70	97,639.31
CH_4 emissions with CH_4 from LULUCF	119,742.24	119,742.24	114,173.79	110,747.60	111,295.66	107,463.62	105,288.43	102,692.10	98,491.26
N_2O emissions without N_2O from LULUCF	64,846.24	64,846.24	62,431.31	63,414.53	60,641.30	61,435.18	60,778.87	62,022.69	59,163.04
N_2O emissions with N_2O from LULUCF	65,825.26	65,825.26	63,402.19	64,390.66	61,601.41	62,387.98	61,723.90	62,963.95	60,095.70
HFCs	50.32	50.32	45.92	287.56	2,492.33	2,680.68	2,597.46	3,389.34	4,135.47
PFCs	3,060.23	3,060.23	2,654.62	2,407.12	2,256.39	1,918.78	2,085.72	2,041.19	1,653.48
Unspecified mix of HFCs and PFCs	5,703.88	5,703.88	5,232.46	5,213.58	5,203.09	5,474.99	5,756.95	4,304.66	4,188.35
SF_6	4,428.00	4,428.00	4,745.88	5,237.81	5,973.59	6,249.23	6,467.15	6,162.49	6,108.84
NF3	6.88	6.88	6.88	6.88	6.88	6.88	5.29	7.22	7.85
Total (without LULUCF)	1,247,867.98	1,247,867.98	1,201,348.04	1,151,092.98	1,142,127.45	1,123,314.64	1,120,152.48	1,138,127.45	1,103,698.23
Total (with LULUCF)	1,215,336.58	1,215,336.58	1,171,183.19	1,120,386.43	1,111,712.77	1,089,773.88	1,085,984.43	1,103,854.78	1,067,636.46
Total (without LULUCF, with indirect)	1,247,867.98	1,247,867.98	1,201,348.04	1,151,092.98	1,142,127.45	1,123,314.64	1,120,152.48	1,138,127.45	1,103,698.23
Total (with LULUCF, with indirect)	1,215,336.58	1,215,336.58	1,171,183.19	1,120,386.43	1,111,712.77	1,089,773.88	1,085,984.43	1,103,854.78	1,067,636.46

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt CO_2 eq								
1. Energy	1,037,164.78	1,037,164.78	1,000,478.64	951,866.79	942,838.61	920,509.13	918,693.10	939,847.59	908,886.42
2. Industrial processes and product use	96,377.58	96,377.58	92,491.62	92,528.38	93,565.32	99,156.15	97,349.35	95,570.89	95,834.76
3. Agriculture	77,889.43	77,889.43	70,570.50	68,332.37	67,520.89	66,240.21	67,653.26	67,627.74	66,716.67
4. Land Use, Land-Use Change and Forestry[b]	-32,531.40	-32,531.40	-30,164.85	-30,706.55	-30,414.68	-33,540.77	-34,168.06	-34,272.67	-36,061.77
5. Waste	36,409.36	36,409.36	37,780.46	38,341.61	38,178.80	37,385.31	36,438.90	35,066.33	32,242.50
6. Other	26.82	26.82	26.82	23.84	23.84	23.84	17.88	14.90	17.88
Total (including LULUCF)	1,215,336.58	1,215,336.58	1,171,183.19	1,120,386.43	1,111,712.77	1,089,773.88	1,085,984.43	1,103,854.78	1,067,636.46

Note: All footnotes for this table are given on sheet 3.

[1] The common tabular format will be revised, in accordance with relevant decisions of the Conference of the Parties and, where applicable, with decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol."

Emission trends: summary [1]
(Sheet 2 of 3)

GREENHOUSE GAS EMISSIONS	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
CO_2 emissions without net CO_2 from LULUCF	922,815.45	895,425.26	899,385.87	915,681.65	899,265.21	900,522.21	885,909.59	865,931.26	877,970.56	850,860.75
CO_2 emissions with net CO_2 from LULUCF	884,702.11	856,401.01	858,303.67	873,772.82	892,759.42	892,126.69	874,591.74	852,039.81	863,457.46	836,766.36
CH_4 emissions without CH_4 from LULUCF	92,503.32	91,979.96	89,099.70	85,427.38	81,529.30	78,092.41	73,067.72	69,833.20	65,867.10	63,398.42
CH_4 emissions with CH_4 from LULUCF	93,354.50	92,831.41	89,952.16	86,277.19	82,378.73	78,947.57	73,917.16	70,681.80	66,716.90	64,246.72
N_2O emissions without N_2O from LULUCF	46,265.74	42,824.35	42,814.26	44,201.53	43,392.80	43,035.21	45,177.35	43,155.43	42,882.14	44,760.69
N_2O emissions with N_2O from LULUCF	47,191.57	43,744.09	43,728.45	45,100.08	44,277.38	43,910.05	46,035.11	43,999.51	43,736.50	45,623.73
HFCs	4,848.36	5,176.20	5,966.01	7,338.69	7,932.65	8,091.85	8,519.09	8,697.92	9,057.97	9,340.47
PFCs	1,781.79	1,484.77	956.32	869.60	945.65	1,015.56	977.42	836.79	667.93	586.45
Unspecified mix of HFCs and PFCs	4,087.11	3,924.30	2,053.87	1,770.41	1,847.12	995.25	855.83	883.44	725.89	544.70
SF_6	5,888.91	4,289.75	4,072.50	3,751.78	3,087.04	3,034.16	3,243.55	3,319.87	3,241.50	3,180.59
NF3	7.58	6.69	8.92	7.82	12.22	19.38	22.81	34.49	27.84	12.02
Total (without LULUCF)	1,078,198.26	1,045,111.28	1,044,357.45	1,059,048.85	1,038,011.99	1,034,806.02	1,017,773.36	992,692.39	1,000,440.93	972,684.10
Total (with LULUCF)	1,041,861.94	1,007,858.21	1,005,041.89	1,018,888.37	1,033,240.20	1,028,140.50	1,008,162.72	980,493.62	987,631.99	960,301.06
Total (without LULUCF, with indirect)	1,078,198.26	1,045,111.28	1,044,357.45	1,059,048.85	1,038,011.99	1,034,806.02	1,017,773.36	992,692.39	1,000,440.93	972,684.10
Total (with LULUCF, with indirect)	1,041,861.94	1,007,858.21	1,005,041.89	1,018,888.37	1,033,240.20	1,028,140.50	1,008,162.72	980,493.62	987,631.99	960,301.06

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	899,262.38	874,950.89	873,037.05	893,043.92	876,716.16	872,078.51	854,523.89	834,623.37	844,150.24	817,163.21
2. Industrial processes and product use	82,036.45	73,998.17	76,931.42	73,647.36	72,339.48	76,162.81	78,125.99	74,909.43	75,652.33	76,736.69
3. Agriculture	66,682.73	67,473.25	67,159.74	66,708.38	64,605.57	63,677.27	63,612.41	63,045.71	62,121.05	61,506.45
4. Land Use, Land-Use Change and Forestry[b]	-36,336.32	-37,253.06	-39,315.56	-40,160.48	-4,771.78	-6,665.52	-9,610.64	-12,198.77	-12,808.94	-12,383.04
5. Waste	30,201.80	28,674.06	27,211.36	25,634.29	24,338.85	22,869.56	21,490.21	20,096.00	18,496.46	17,259.88
6. Other	14.90	14.90	17.88	14.90	11.92	17.88	20.86	17.88	20.86	17.88
Total (including LULUCF)	1,041,861.94	1,007,858.21	1,005,041.89	1,018,888.37	1,033,240.20	1,028,140.50	1,008,162.72	980,493.62	987,631.99	960,301.06

Note: All footnotes for this table are given on sheet 3.

Table 1 DEU_BR2_v0.2

Emission trends: summary [(1)]
(Sheet 3 of 3)

GREENHOUSE GAS EMISSIONS	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							(%)
CO_2 emissions without net CO_2 from LULUCF	854,061.34	789,106.59	833,111.60	812,664.55	817,913.29	840,605.23	-20.01
CO_2 emissions with net CO_2 from LULUCF	832,523.76	768,407.44	813,701.65	793,808.97	800,397.21	823,124.67	-19.03
CH_4 emissions without CH_4 from LULUCF	62,588.71	60,364.53	59,502.98	58,431.54	59,234.75	58,628.79	-50.69
CH_4 emissions with CH_4 from LULUCF	63,438.16	61,214.94	60,351.94	59,278.64	60,081.93	59,475.04	-50.33
N_2O emissions without N_2O from LULUCF	45,206.84	44,383.54	36,347.64	37,631.63	36,803.70	37,162.13	-42.69
N_2O emissions with N_2O from LULUCF	46,080.55	45,270.54	37,246.54	38,542.33	37,727.14	38,102.66	-42.12
HFCs	9,296.65	9,565.34	9,884.74	10,319.49	10,535.10	10,567.70	20,901.00
PFCs	564.87	404.57	343.99	277.06	240.67	256.79	-91.61
Unspecified mix of HFCs and PFCs	784.18	1,094.30	357.74	165.32	174.92	174.27	-96.94
SF_6	2,971.21	2,923.98	3,047.04	3,163.07	3,154.89	3,261.13	-26.35
NF3	29.60	29.08	61.43	61.21	35.21	16.72	143.00
Total (without LULUCF)	975,503.40	907,871.93	942,657.17	922,713.87	928,092.54	950,672.77	-23.82
Total (with LULUCF)	955,688.98	888,910.19	924,995.07	905,616.09	912,347.09	934,978.99	-23.07
Total (without LULUCF, with indirect)	975,503.40	907,871.93	942,657.17	922,713.87	928,092.54	950,672.77	-23.82
Total (with LULUCF, with indirect)	955,688.98	888,910.19	924,995.07	905,616.09	912,347.09	934,978.99	-23.07

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							(%)
1. Energy	822,662.83	764,675.18	804,207.87	782,861.54	790,281.29	813,439.22	-21.57
2. Industrial processes and product use	72,944.25	65,188.17	62,365.18	62,928.11	62,054.31	61,359.52	-36.33
3. Agriculture	63,801.99	63,100.03	62,259.77	63,847.36	63,397.58	64,242.50	-17.52
4. Land Use, Land-Use Change and Forestry[b]	-19,814.42	-18,961.74	-17,662.09	-17,097.77	-15,745.45	-15,693.77	-51.76
5. Waste	16,076.46	14,896.63	13,809.45	13,061.96	12,347.44	11,619.61	-68.09
6. Other	17.88	11.92	14.90	14.90	11.92	11.92	-55.56
Total (including LULUCF)	955,688.98	888,910.19	924,995.07	905,616.09	912,347.09	934,978.99	-23.07

Notes:

(1) Further detailed information could be found in the common reporting format tables of the Party's greenhouse gas inventory, namely "Emission trends (CO_2)", "Emission trends (CH_4)", "Emission trends (N_2O)" and "Emission trends (HFCs, PFCs and SF_6)", which is included in an annex to this biennial report.

(2) 2011 is the latest reported inventory year.

(3) 1 kt CO_2 eq equals 1 Gg CO_2 eq.

Abbreviation: LULUCF = land use, land-use change and forestry.

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

[b] Includes net CO_2, CH_4 and N_2O from LULUCF.

Table 1 (a) DEU_BR2_v0.2

Emission trends (CO_2)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year*[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	989,930.25	989,930.25	955,861.78	910,498.86	900,611.50	881,820.44	881,105.84	903,423.70	873,049.28
A. Fuel combustion (sectoral approach)	985,866.64	985,866.64	951,954.04	906,656.77	896,998.03	878,288.79	877,696.32	899,831.76	869,446.71
1. Energy industries	423,905.59	423,905.59	409,874.83	387,485.35	376,740.12	373,995.58	363,951.77	370,987.08	350,443.45
2. Manufacturing industries and construction	185,117.04	185,117.04	163,911.82	153,468.15	142,705.80	141,105.90	144,516.52	135,311.93	139,331.93
3. Transport	161,953.93	161,953.93	165,008.40	170,779.97	175,185.35	171,349.87	175,114.24	175,173.47	175,703.34
4. Other sectors	203,098.18	203,098.18	204,715.02	188,495.41	197,204.30	187,053.25	190,109.40	215,218.76	200,934.80
5. Other	11,791.90	11,791.90	8,443.98	6,427.88	5,162.47	4,784.19	4,004.39	3,140.52	3,033.19
B. Fugitive emissions from fuels	4,063.61	4,063.61	3,907.73	3,842.09	3,613.47	3,531.65	3,409.53	3,591.94	3,602.57
1. Solid fuels	1,832.80	1,832.80	1,506.08	1,417.36	1,179.17	980.37	933.06	883.31	907.57
2. Oil and natural gas and other emissions from energy production	2,230.80	2,230.80	2,401.65	2,424.73	2,434.30	2,551.28	2,476.47	2,708.63	2,695.00
C. CO2 transport and storage	NA	NA	NA	NA	NA	NA	NA	NA	NA
2. Industrial processes	59,198.29	59,198.29	55,327.87	52,516.90	52,834.74	55,290.53	54,797.17	52,816.29	55,533.94
A. Mineral industry	22,780.12	22,780.12	20,537.63	21,250.68	21,507.06	22,936.98	23,209.31	21,944.13	22,471.27
B. Chemical industry	8,021.46	8,021.46	7,032.14	7,001.31	6,581.18	6,594.59	7,859.71	7,828.49	7,923.84
C. Metal industry	25,073.48	25,073.48	24,467.71	21,048.18	21,507.14	22,942.48	20,794.02	20,065.43	22,094.79
D. Non-energy products from fuels and solvent use	3,323.23	3,323.23	3,290.39	3,216.73	3,239.36	2,816.47	2,934.15	2,978.24	3,044.04
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	NA	NA	NA	NA	NA	NA	NA	NA	NA
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	1,756.47	1,756.47	1,719.67	1,631.90	1,667.10	1,828.01	2,121.13	2,123.17	2,218.67
A. Enteric fermentation									
B. Manure management									
C. Rice cultivation									
D. Agricultural soils									
E. Prescribed burning of savannas									
F. Field burning of agricultural residues									
G. Liming	1,276.87	1,276.87	1,285.95	1,233.97	1,216.08	1,410.56	1,643.88	1,642.29	1,722.61
H. Urea application	479.60	479.60	433.73	397.93	451.02	417.45	477.25	480.88	496.06
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NO	NO
J. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
4. Land Use, Land-Use Change and Forestry	-34,365.24	-34,365.24	-31,987.87	-32,552.44	-32,229.92	-35,347.25	-35,964.62	-36,069.33	-37,846.38
A. Forest land	-74,537.16	-74,537.16	-74,666.31	-74,820.39	-74,931.89	-75,084.34	-75,215.26	-75,344.62	-75,477.82
B. Cropland	15,474.54	15,474.54	15,340.72	15,341.53	15,112.49	15,104.45	14,980.24	14,847.55	14,735.65
C. Grassland	20,882.06	20,882.06	21,037.29	21,103.55	21,321.70	21,393.80	21,542.67	21,697.14	21,837.87
D. Wetlands	2,626.47	2,626.47	2,567.33	2,780.40	2,768.93	2,921.53	2,802.53	2,743.55	2,734.26
E. Settlements	2,548.86	2,548.86	2,546.10	2,496.47	2,526.86	2,480.31	2,474.20	2,471.04	2,460.65
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products	-1,360.00	-1,360.00	1,187.00	546.00	972.00	-2,163.00	-2,549.00	-2,484.00	-4,137.00
H. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
5. Waste	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO
A. Solid waste disposal	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO
B. Biological treatment of solid waste									
C. Incineration and open burning of waste	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Waste water treatment and discharge									
E. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	NA	NA	NA
Memo items:									
International bunkers	18,275.11	18,275.11	17,137.23	17,273.64	19,782.57	19,860.82	20,436.52	21,166.37	22,118.69
Aviation	11,870.10	11,870.10	11,749.24	12,880.68	13,830.66	14,456.70	14,988.66	15,723.75	16,223.54
Navigation	6,405.01	6,405.01	5,388.00	4,392.96	5,951.91	5,404.12	5,447.86	5,442.62	5,895.15
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass	21,793.87	21,793.87	21,500.18	21,712.30	21,820.54	21,886.43	21,096.37	21,515.45	28,966.84
CO2 captured	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Long-term storage of C in waste disposal sites	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total CO2 equivalent emissions without land use, land-use change and forestry	1,247,867.98	1,247,867.98	1,201,348.04	1,151,092.98	1,142,127.45	1,123,314.64	1,120,152.48	1,138,127.45	1,103,698.23
Total CO2 equivalent emissions with land use, land-use change and forestry	1,215,336.58	1,215,336.58	1,171,183.19	1,120,386.43	1,111,712.77	1,089,773.88	1,085,984.43	1,103,854.78	1,067,636.46
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	1,247,867.98	1,247,867.98	1,201,348.04	1,151,092.98	1,142,127.45	1,123,314.64	1,120,152.48	1,138,127.45	1,103,698.23

Note: All footnotes for this table are given on sheet 3.

Table 1 (a) DEU_BR2_v0.2

Emission trends (CO_2)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	866,339.26	841,108.78	839,794.75	862,180.46	847,472.17	844,483.36	829,643.41	811,691.71	822,762.01	796,919.65
A. Fuel combustion (sectoral approach)	862,824.98	837,605.28	836,483.71	858,888.24	844,184.61	841,143.03	826,422.47	808,465.00	819,392.71	793,632.21
1. Energy industries	353,029.24	341,534.32	354,555.91	367,417.06	368,636.83	382,698.91	379,847.84	375,231.93	376,884.97	383,813.97
2. Manufacturing industries and construction	134,987.61	132,500.62	129,139.44	121,903.70	121,016.58	117,812.27	116,908.70	114,221.80	119,084.55	126,415.76
3. Transport	179,146.28	184,383.31	180,582.27	176,814.44	174,920.14	168,557.72	168,229.09	160,045.44	156,074.94	152,836.17
4. Other sectors	192,618.62	176,586.39	169,874.76	190,840.76	177,661.63	170,105.23	159,748.10	157,234.95	165,772.83	129,254.94
5. Other	3,043.23	2,600.64	2,331.33	1,912.28	1,949.43	1,968.90	1,688.74	1,730.88	1,575.42	1,311.37
B. Fugitive emissions from fuels	3,514.28	3,503.50	3,311.05	3,292.23	3,287.56	3,340.32	3,220.94	3,226.71	3,369.30	3,287.44
1. Solid fuels	847.01	755.04	778.64	740.19	756.04	705.66	729.68	741.01	821.31	813.34
2. Oil and natural gas and other emissions from energy production	2,667.27	2,748.46	2,532.40	2,552.04	2,531.52	2,634.66	2,491.26	2,485.70	2,547.99	2,474.10
C. CO2 transport and storage	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2. Industrial processes	54,058.10	51,800.90	56,868.42	51,026.98	49,244.72	53,649.37	53,831.62	51,960.72	52,940.22	51,559.88
A. Mineral industry	22,520.33	22,674.40	22,332.08	20,292.80	19,459.68	20,196.90	20,742.32	19,582.68	20,011.18	21,289.26
B. Chemical industry	8,098.51	7,806.75	8,307.73	7,664.04	8,283.49	8,335.04	7,844.02	8,552.30	8,680.21	9,033.89
C. Metal industry	20,308.53	18,257.58	23,459.70	20,493.39	18,917.92	22,515.28	22,512.91	21,139.18	21,493.94	18,489.04
D. Non-energy products from fuels and solvent use	3,130.74	3,062.18	2,768.91	2,576.75	2,583.62	2,602.15	2,732.36	2,686.57	2,754.89	2,747.69
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	2,418.09	2,515.58	2,722.69	2,474.20	2,548.32	2,389.48	2,434.56	2,278.83	2,268.33	2,381.22
A. Enteric fermentation										
B. Manure management										
C. Rice cultivation										
D. Agricultural soils										
E. Prescribed burning of savannas										
F. Field burning of agricultural residues										
G. Liming	1,901.89	1,955.78	2,144.17	1,833.14	1,902.95	1,756.06	1,763.04	1,680.83	1,614.55	1,740.20
H. Urea application	516.20	559.80	578.52	641.06	645.37	633.42	671.51	598.00	653.78	641.03
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
J. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
4. Land Use, Land-Use Change and Forestry	-38,113.33	-39,024.25	-41,082.20	-41,908.83	-6,505.79	-8,395.51	-11,317.84	-13,891.45	-14,513.10	-14,094.39
A. Forest land	-75,619.57	-75,749.72	-75,892.63	-76,355.51	-39,643.21	-39,567.04	-39,454.47	-39,372.00	-39,235.86	-39,137.90
B. Cropland	14,669.87	14,541.51	14,481.97	13,775.49	13,747.38	13,579.92	13,245.40	13,056.35	13,059.45	13,105.11
C. Grassland	21,948.12	22,099.72	22,205.84	21,466.79	21,925.45	21,993.96	22,273.00	22,368.44	22,254.92	22,274.19
D. Wetlands	2,912.04	2,987.70	3,016.69	2,908.40	2,639.32	2,665.70	2,712.73	2,737.24	2,900.45	2,987.10
E. Settlements	2,434.20	2,429.55	2,400.92	1,702.00	1,979.27	1,936.95	2,172.50	2,165.53	2,813.95	2,867.12
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products	-4,458.00	-5,333.00	-7,295.00	-5,406.00	-7,154.00	-9,005.00	-12,267.00	-14,847.00	-16,306.00	-16,190.00
H. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
5. Waste	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO
A. Solid waste disposal	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO
B. Biological treatment of solid waste										
C. Incineration and open burning of waste	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Waste water treatment and discharge										
E. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Memo items:										
International bunkers	22,079.33	23,547.22	25,039.94	24,675.52	25,022.96	26,151.30	28,317.22	29,795.46	31,291.82	33,828.42
Aviation	16,755.90	18,053.59	19,165.28	18,740.50	18,625.71	18,978.43	20,771.33	22,687.29	23,883.79	24,819.82
Navigation	5,323.43	5,493.63	5,874.66	5,935.02	6,397.25	7,172.88	7,545.89	7,108.17	7,408.03	9,008.60
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass	31,041.19	32,777.56	34,233.67	36,674.06	37,177.52	46,727.54	51,548.26	58,674.09	70,754.55	80,262.19
CO2 captured	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Long-term storage of C in waste disposal sites	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total CO2 equivalent emissions without land use, land-use change and forestry	1,078,198.26	1,045,111.28	1,044,357.45	1,059,048.85	1,038,011.99	1,034,806.02	1,017,773.36	992,692.39	1,000,440.93	972,684.10
Total CO2 equivalent emissions with land use, land-use change and forestry	1,041,861.94	1,007,858.21	1,005,041.89	1,018,888.37	1,033,240.20	1,028,140.50	1,008,162.72	980,493.62	987,631.99	960,301.06
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	1,078,198.26	1,045,111.28	1,044,357.45	1,059,048.85	1,038,011.99	1,034,806.02	1,017,773.36	992,692.39	1,000,440.93	972,684.10

Note: All footnotes for this table are given on sheet 3.

Table 1(a) DEU_BR2_v0.2

Emission trends (CO_2)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	802,449.87	745,857.75	784,533.69	763,120.59	769,165.09	792,594.08	-19.93
A. Fuel combustion (sectoral approach)	799,216.49	742,989.36	781,685.74	760,138.36	766,204.61	789,610.20	-19.91
1. Energy industries	363,527.18	339,413.31	351,588.65	348,679.00	358,475.67	356,646.17	-15.87
2. Manufacturing industries and construction	126,524.02	107,839.19	124,337.24	124,263.04	119,734.35	125,189.82	-32.37
3. Transport	152,625.73	151,922.44	152,587.99	154,439.69	153,050.35	157,634.06	-2.67
4. Other sectors	155,209.83	142,459.76	151,862.02	131,542.68	133,941.82	149,100.95	-26.59
5. Other	1,329.73	1,354.66	1,309.83	1,213.96	1,002.41	1,039.20	-91.19
B. Fugitive emissions from fuels	3,233.38	2,868.40	2,847.96	2,982.23	2,960.48	2,983.88	-26.57
1. Solid fuels	811.06	577.87	683.60	682.86	688.01	706.97	-61.43
2. Oil and natural gas and other emissions from energy production	2,422.32	2,290.53	2,164.36	2,299.37	2,272.47	2,276.92	2.07
C. CO2 transport and storage	NA	NA	NA	NA	NA	NA	
2. Industrial processes	49,164.96	40,703.76	46,292.48	46,952.11	46,216.18	45,359.64	-23.38
A. Mineral industry	20,353.87	17,930.21	18,409.76	19,574.26	19,107.49	18,512.67	-18.73
B. Chemical industry	8,613.24	7,551.40	8,769.68	9,061.57	9,288.79	9,201.44	14.71
C. Metal industry	17,585.35	12,823.54	16,400.89	15,695.17	15,241.70	15,024.28	-40.08
D. Non-energy products from fuels and solvent use	2,612.50	2,398.61	2,712.14	2,621.11	2,578.21	2,621.26	-21.12
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	NA	NA	NA	NA	NA	NA	
H. Other	NA	NA	NA	NA	NA	NA	
3. Agriculture	2,446.51	2,545.08	2,285.43	2,591.85	2,532.02	2,651.51	50.96
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannas							
F. Field burning of agricultural residues							
G. Liming	1,798.63	1,750.10	1,698.02	1,841.98	1,907.21	1,956.47	53.22
H. Urea application	647.88	794.98	587.41	749.87	624.81	695.04	44.92
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	
J. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	
4. Land Use, Land-Use Change and Forestry	-21,537.58	-20,699.15	-19,409.95	-18,855.58	-17,516.08	-17,480.56	-49.13
A. Forest land	-57,092.56	-56,959.43	-56,916.41	-56,857.86	-56,801.20	-56,832.24	-23.75
B. Cropland	13,092.07	13,130.85	13,404.84	13,393.81	13,433.11	13,671.37	-11.65
C. Grassland	22,311.90	22,712.08	22,668.74	22,689.77	22,699.34	22,237.57	6.49
D. Wetlands	2,843.20	2,702.44	2,548.90	2,591.23	2,669.72	2,452.97	-6.61
E. Settlements	2,940.81	3,208.91	3,208.98	3,311.48	3,395.95	3,577.77	40.37
F. Other land	NO	NO	NO	NO	NO	NO	
G. Harvested wood products	-5,633.00	-5,494.00	-4,325.00	-3,984.00	-2,913.00	-2,588.00	90.29
H. Other	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	
5. Waste	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	
A. Solid waste disposal	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	NE, NA, NO	
B. Biological treatment of solid waste							
C. Incineration and open burning of waste	NO	NO	NO	NO	NO	NO	
D. Waste water treatment and discharge							
E. Other	NA	NA	NA	NA	NA	NA	
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	
Memo items:							
International bunkers	33,781.38	32,245.42	32,314.92	31,264.83	32,403.02	32,032.66	75.28
Aviation	25,121.14	24,399.21	24,152.91	23,205.37	24,972.66	25,413.02	114.09
Navigation	8,660.24	7,846.21	8,162.01	8,059.45	7,430.36	6,619.64	3.35
Multilateral operations	NA	NA	NA	NA	NA	NA	
CO2 emissions from biomass	85,993.26	91,931.67	107,674.56	108,343.68	95,476.21	96,944.13	344.82
CO2 captured	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	
Long-term storage of C in waste disposal sites	NO	NO	NO	NO	NO	NO	
Total CO2 equivalent emissions without land use, land-use change and forestry	975,503.40	907,871.93	942,657.17	922,713.87	928,092.54	950,672.77	-23.82
Total CO2 equivalent emissions with land use, land-use change and forestry	955,688.98	888,910.19	924,995.07	905,616.09	912,347.09	934,978.99	-23.07
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	975,503.40	907,871.93	942,657.17	922,713.87	928,092.54	950,672.77	-23.82

Abbreviations: CRF = common reporting format, LULUCF = land use, land-use change and forestry.

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

[b] Fill in net emissions/removals as reported in CRF table Summary 1.A of the latest reported inventory year. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

Table 1(b) DEU_BR2_v0.2

Emission trends (CH_4)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year* [a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	1,619.74	1,619.74	1,531.55	1,412.52	1,450.25	1,312.73	1,269.44	1,223.32	1,204.16
A. Fuel combustion (sectoral approach)	210.80	210.80	154.23	123.17	110.57	91.77	93.14	90.60	94.05
1. Energy industries	11.21	11.21	11.61	11.84	12.31	12.66	15.81	17.14	18.51
2. Manufacturing industries and construction	10.00	10.00	8.78	8.37	8.01	8.10	8.90	9.31	9.13
3. Transport	53.17	53.17	43.14	40.15	36.37	30.48	29.61	27.90	25.84
4. Other sectors	125.24	125.24	83.65	58.17	50.87	39.09	38.25	35.97	40.37
5. Other	11.18	11.18	7.06	4.63	3.01	1.43	0.56	0.27	0.20
B. Fugitive emissions from fuels	1,408.94	1,408.94	1,377.31	1,289.35	1,339.68	1,220.96	1,176.30	1,132.72	1,110.10
1. Solid fuels	1,022.14	1,022.14	974.79	848.10	859.57	761.97	773.91	736.09	727.34
2. Oil and natural gas and other emissions from energy production	386.80	386.80	402.52	441.26	480.11	458.99	402.39	396.63	382.76
C. CO2 transport and storage									
2. Industrial processes	13.72	13.72	13.56	14.62	16.15	17.65	17.87	17.25	18.22
A. Mineral industry									
B. Chemical industry	13.35	13.35	13.17	14.20	15.70	17.15	17.14	16.36	17.27
C. Metal industry	0.19	0.19	0.15	0.13	0.11	0.11	0.28	0.26	0.27
D. Non-energy products from fuels and solvent use	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	0.18	0.18	0.24	0.29	0.35	0.40	0.45	0.63	0.68
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	1,709.03	1,709.03	1,516.73	1,471.40	1,458.19	1,470.70	1,463.65	1,462.03	1,424.10
A. Enteric fermentation	1,386.08	1,386.08	1,228.47	1,186.20	1,176.31	1,175.55	1,172.03	1,168.73	1,134.96
B. Manure management	322.94	322.94	288.23	285.17	281.83	295.09	291.48	293.06	288.84
C. Rice cultivation	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Agricultural soils	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Liming									
H. Urea application									
I. Other carbon-containing fertilizers									
J. Other	0.01	0.01	0.03	0.04	0.05	0.06	0.14	0.24	0.30
4. Land use, land-use change and forestry	34.19	34.19	34.09	34.79	34.21	34.15	34.06	34.22	34.08
A. Forest land	2.08	2.08	1.97	2.67	2.08	2.02	1.93	2.08	1.94
B. Cropland	10.53	10.53	10.45	10.37	10.29	10.21	10.13	10.05	9.97
C. Grassland	19.58	19.58	19.69	19.79	19.90	20.00	20.11	20.21	20.32
D. Wetlands	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products									
H. Other	1.54	1.54	1.52	1.50	1.48	1.46	1.43	1.41	1.39
5. Waste	1,413.01	1,413.01	1,471.03	1,496.57	1,493.03	1,463.32	1,426.51	1,370.87	1,259.09
A. Solid waste disposal	1,341.00	1,341.00	1,421.00	1,461.00	1,465.00	1,442.00	1,404.00	1,350.00	1,241.00
B. Biological treatment of solid waste	1.01	1.01	2.12	2.74	3.36	5.30	7.24	9.18	10.10
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
D. Waste water treatment and discharge	71.00	71.00	47.91	32.83	24.68	16.02	15.25	11.61	7.94
E. Other	NO	NO	NO	NO	NO	NO	0.03	0.08	0.05
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CH4 emissions without CH4 from LULUCF	4,755.50	4,755.50	4,532.87	4,395.11	4,417.62	4,264.40	4,177.48	4,073.47	3,905.57
Memo items:									
International bunkers	0.13	0.13	0.12	0.11	0.13	0.13	0.13	0.13	0.14
Aviation	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
Navigation	0.08	0.08	0.07	0.06	0.08	0.07	0.07	0.07	0.08
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									

Note: All footnotes for this table are given on sheet 3.

Table 1(b) DEU_BR2_v0.2

Emission trends (CH_4)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	1,095.29	1,136.56	1,116.92	1,019.48	968.03	901.35	791.77	720.70	654.07	603.09
A. Fuel combustion (sectoral approach)	86.55	84.02	80.09	79.24	76.91	86.28	83.85	85.33	93.57	101.26
1. Energy industries	19.23	19.80	19.44	18.38	19.21	32.55	32.58	35.64	41.78	51.30
2. Manufacturing industries and construction	9.26	8.86	8.97	8.74	8.57	8.71	9.64	9.89	10.91	10.63
3. Transport	24.07	21.93	19.08	17.54	15.97	14.23	13.10	11.62	10.61	9.51
4. Other sectors	33.81	33.29	32.48	34.46	33.03	30.69	28.44	28.09	30.20	29.76
5. Other	0.17	0.13	0.13	0.13	0.12	0.10	0.08	0.09	0.08	0.06
B. Fugitive emissions from fuels	1,008.75	1,052.54	1,036.82	940.24	891.13	815.07	707.92	635.37	560.50	501.83
1. Solid fuels	629.75	684.75	664.36	577.02	541.09	476.25	374.68	304.79	235.40	194.67
2. Oil and natural gas and other emissions from energy production	379.00	367.79	372.47	363.22	350.04	338.82	333.24	330.59	325.10	307.16
C. CO2 transport and storage										
2. Industrial processes	19.08	20.74	22.54	22.10	20.71	22.99	22.92	23.71	23.07	23.14
A. Mineral industry										
B. Chemical industry	18.11	19.74	21.46	21.09	19.64	21.86	21.74	22.46	21.86	21.79
C. Metal industry	0.27	0.25	0.26	0.24	0.24	0.22	0.23	0.22	0.24	0.24
D. Non-energy products from fuels and solvent use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	0.70	0.75	0.82	0.77	0.83	0.91	0.95	1.03	0.97	1.11
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	1,408.90	1,407.30	1,370.39	1,384.68	1,335.67	1,321.16	1,284.27	1,281.98	1,253.65	1,256.06
A. Enteric fermentation	1,113.86	1,112.52	1,082.49	1,092.97	1,050.36	1,034.42	1,005.42	996.87	972.96	971.89
B. Manure management	294.36	294.02	286.69	289.99	282.83	283.81	275.06	274.94	266.66	265.49
C. Rice cultivation	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Agricultural soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Liming										
H. Urea application										
I. Other carbon-containing fertilizers										
J. Other	0.67	0.77	1.21	1.72	2.48	2.93	3.79	10.16	14.03	18.68
4. Land use, land-use change and forestry	34.05	34.06	34.10	33.99	33.98	34.21	33.98	33.94	33.99	33.93
A. Forest land	1.90	1.91	1.95	1.85	1.85	2.09	1.87	1.85	1.91	1.86
B. Cropland	9.89	9.81	9.73	9.61	9.49	9.37	9.25	9.13	9.15	9.18
C. Grassland	20.42	20.53	20.63	20.73	20.82	20.91	21.01	21.10	21.06	21.02
D. Wetlands	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47	0.48	0.48
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products										
H. Other	1.37	1.35	1.32	1.34	1.35	1.37	1.38	1.40	1.40	1.40
5. Waste	1,176.86	1,114.60	1,054.14	990.83	936.76	878.20	823.76	766.94	703.90	653.64
A. Solid waste disposal	1,161.00	1,097.00	1,034.00	970.00	912.00	853.00	798.00	741.00	678.00	626.00
B. Biological treatment of solid waste	11.40	13.45	16.15	17.06	21.04	21.53	22.12	22.31	22.41	24.29
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
D. Waste water treatment and discharge	4.33	4.01	3.80	3.57	3.49	3.45	3.40	3.38	3.28	3.14
E. Other	0.13	0.14	0.19	0.20	0.23	0.23	0.23	0.25	0.20	0.21
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CH4 emissions without CH4 from LULUCF	3,700.13	3,679.20	3,563.99	3,417.10	3,261.17	3,123.70	2,922.71	2,793.33	2,634.68	2,535.94
Memo items:										
International bunkers	0.13	0.14	0.15	0.15	0.15	0.16	0.17	0.17	0.18	0.21
Aviation	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09
Navigation	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.09	0.09	0.12
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										

Note: All footnotes for this table are given on sheet 3.

Table 1(b) DEU_BR2_v0.2

Emission trends (CH_4)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	598.61	550.73	570.41	567.31	625.13	611.72	-62.23
A. Fuel combustion (sectoral approach)	107.58	111.60	138.41	142.04	159.39	161.86	-23.22
1. Energy industries	56.49	61.72	73.34	80.36	89.87	90.28	705.46
2. Manufacturing industries and construction	10.80	9.78	10.79	11.07	10.61	10.61	6.17
3. Transport	8.34	7.74	7.07	6.86	6.38	6.27	-88.20
4. Other sectors	31.89	32.30	47.16	43.70	52.48	54.64	-56.38
5. Other	0.06	0.06	0.06	0.06	0.06	0.06	-99.49
B. Fugitive emissions from fuels	491.03	439.13	432.00	425.27	465.74	449.86	-68.07
1. Solid fuels	183.27	136.97	136.85	129.90	164.19	143.21	-85.99
2. Oil and natural gas and other emissions from energy production	307.76	302.16	295.14	295.37	301.56	306.66	-20.72
C. CO2 transport and storage							
2. Industrial processes	21.74	20.47	21.19	21.12	20.46	20.21	47.30
A. Mineral industry							
B. Chemical industry	20.47	18.98	19.58	19.45	18.75	18.56	38.99
C. Metal industry	0.23	0.17	0.21	0.22	0.21	0.21	12.86
D. Non-energy products from fuels and solvent use	NA	NA	NA	NA	NA	NA	
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	1.04	1.31	1.40	1.45	1.50	1.44	694.77
H. Other	NA	NA	NA	NA	NA	NA	
3. Agriculture	1,276.83	1,284.42	1,273.02	1,264.41	1,268.34	1,286.87	-24.70
A. Enteric fermentation	990.25	993.15	985.82	973.67	973.55	988.51	-28.68
B. Manure management	265.15	264.58	254.31	250.53	251.88	253.74	-21.43
C. Rice cultivation	NO	NO	NO	NO	NO	NO	
D. Agricultural soils	NA	NA	NA	NA	NA	NA	
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	
G. Liming							
H. Urea application							
I. Other carbon-containing fertilizers							
J. Other	21.43	26.70	32.89	40.21	42.90	44.62	398,015.33
4. Land use, land-use change and forestry	33.98	34.02	33.96	33.88	33.89	33.85	-1.00
A. Forest land	1.92	1.97	1.92	1.85	1.87	1.86	-10.58
B. Cropland	9.20	9.22	9.23	9.25	9.27	9.24	-12.19
C. Grassland	20.98	20.93	20.88	20.82	20.77	20.70	5.74
D. Wetlands	0.48	0.48	0.48	0.49	0.49	0.49	5.90
E. Settlements	NO	NO	NO	NO	NO	NO	
F. Other land	NO	NO	NO	NO	NO	NO	
G. Harvested wood products							
H. Other	1.40	1.42	1.44	1.47	1.49	1.55	0.63
5. Waste	606.37	558.96	515.50	484.42	455.46	426.35	-69.83
A. Solid waste disposal	579.00	531.00	488.00	454.00	423.00	394.00	-70.62
B. Biological treatment of solid waste	24.07	24.74	24.37	27.35	29.50	29.50	2,810.77
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	
D. Waste water treatment and discharge	3.08	3.00	2.90	2.83	2.72	2.61	-96.32
E. Other	0.22	0.22	0.23	0.25	0.23	0.23	
6. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	
2C1 - N_2O Emissions	NA	NA	NA	NA	NA	NA	
Total CH4 emissions without CH4 from LULUCF	2,503.55	2,414.58	2,380.12	2,337.26	2,369.39	2,345.15	-50.69
Memo items:							
International bunkers	0.20	0.19	0.20	0.20	0.19	0.18	41.69
Aviation	0.09	0.09	0.09	0.10	0.10	0.10	112.25
Navigation	0.11	0.10	0.10	0.10	0.09	0.08	2.87
Multilateral operations	NA	NA	NA	NA	NA	NA	
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							

Abbreviations: CRF = common reporting format, LULUCF = land use, land-use change and fore

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

Table 1(c) DEU_BR2_v0.2

Emission trends (N_2O)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year*[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	22.62	22.62	21.24	20.32	20.04	19.70	19.64	19.60	19.24
A. Fuel combustion (sectoral approach)	22.62	22.62	21.23	20.32	20.03	19.70	19.63	19.60	19.24
1. Energy industries	10.63	10.63	10.06	9.51	9.12	8.94	8.49	8.41	7.94
2. Manufacturing industries and construction	4.51	4.51	3.89	3.59	3.29	3.17	3.27	3.05	3.23
3. Transport	4.00	4.00	4.23	4.68	5.10	5.23	5.63	5.77	5.79
4. Other sectors	3.27	3.27	2.89	2.41	2.41	2.24	2.15	2.31	2.20
5. Other	0.21	0.21	0.16	0.13	0.11	0.12	0.09	0.07	0.08
B. Fugitive emissions from fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. Solid fuels	NA	NA	NA	NA	NA	NA	NA	NA	NA
2. Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. CO2 transport and storage									
2. Industrial processes	79.15	79.15	81.00	88.90	81.86	90.92	84.54	88.65	79.70
A. Mineral industry									
B. Chemical industry	72.34	72.34	74.46	82.62	75.85	85.17	79.06	83.44	74.75
C. Metal industry	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Non-energy products from fuels and solvent use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	6.81	6.81	6.54	6.28	6.01	5.74	5.48	5.21	4.95
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	112.11	112.11	103.80	100.39	98.65	92.77	97.12	97.16	96.96
A. Enteric fermentation									
B. Manure management	17.16	17.16	15.19	14.95	14.91	14.17	14.15	14.23	13.96
C. Rice cultivation									
D. Agricultural soils	94.94	94.94	88.61	85.44	83.74	78.59	82.96	82.93	82.99
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Liming									
H. Urea application									
I. Other carbon containing fertlizers									
J. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
4. Land use, land-use change and forestry	3.29	3.29	3.26	3.28	3.22	3.20	3.17	3.16	3.13
A. Forest land	1.38	1.38	1.36	1.39	1.34	1.33	1.31	1.31	1.29
B. Cropland	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
C. Grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Wetlands	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
E. Settlements	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products									
H. Other	0.36	0.36	0.35	0.34	0.34	0.33	0.32	0.31	0.31
5. Waste	3.64	3.64	3.37	3.11	2.86	2.69	2.60	2.67	2.57
A. Solid waste disposal									
B. Biological treatment of solid waste	0.05	0.05	0.11	0.14	0.18	0.28	0.38	0.48	0.53
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
D. Waste water treatment and discharge	3.58	3.58	3.26	2.97	2.69	2.41	2.19	2.07	1.97
E. Other	NO	NO	NO	NO	NO	NO	0.04	0.11	0.07
6. Other (as specified in the summary table in CRF)	0.09	0.09	0.09	0.08	0.08	0.08	0.06	0.05	0.06
2C1 - N_2O Emissions	0.09	0.09	0.09	0.08	0.08	0.08	0.06	0.05	0.06
Total direct N2O emissions without N2O from LULUCF	217.60	217.60	209.50	212.80	203.49	206.16	203.96	208.13	198.53
Memo items:									
International bunkers	0.65	0.65	0.60	0.59	0.69	0.69	0.70	0.73	0.76
Aviation	0.37	0.37	0.37	0.40	0.43	0.45	0.47	0.49	0.51
Navigation	0.27	0.27	0.23	0.19	0.25	0.23	0.23	0.23	0.25
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									

Note: All footnotes for this table are given on sheet 3.

Table 1(c) DEU_BR2_v0.2

Emission trends (N_2O)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	18.59	18.22	17.85	18.04	16.92	16.98	17.07	16.49	16.90	17.34
A. Fuel combustion (sectoral approach)	18.59	18.21	17.85	18.04	16.92	16.98	17.07	16.49	16.90	17.34
1. Energy industries	7.82	7.60	7.96	8.23	8.33	8.79	9.18	8.95	9.16	9.56
2. Manufacturing industries and construction	2.95	2.93	2.69	2.60	2.48	2.54	2.46	2.38	2.45	2.56
3. Transport	5.78	5.74	5.27	5.09	4.10	3.81	3.73	3.47	3.44	3.58
4. Other sectors	1.97	1.89	1.87	2.08	1.96	1.80	1.66	1.66	1.83	1.62
5. Other	0.08	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
B. Fugitive emissions from fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. Solid fuels	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2. Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. CO2 transport and storage										
2. Industrial processes	36.54	22.81	21.62	27.95	29.37	29.47	33.90	28.80	28.24	36.69
A. Mineral industry										
B. Chemical industry	31.85	18.38	17.46	24.04	25.95	26.53	31.45	26.85	26.23	34.81
C. Metal industry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Non-energy products from fuels and solvent use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	4.69	4.42	4.16	3.91	3.42	2.93	2.44	1.95	2.00	1.88
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Agriculture	97.46	99.92	101.27	99.39	96.19	94.83	97.55	96.37	95.68	93.03
A. Enteric fermentation										
B. Manure management	13.78	13.73	13.62	13.87	13.59	13.59	13.32	13.46	13.30	13.43
C. Rice cultivation										
D. Agricultural soils	83.65	86.16	87.60	85.46	82.52	81.15	84.12	82.59	81.97	79.08
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Liming										
H. Urea application										
I. Other carbon containing fertlizers										
J. Other	0.02	0.03	0.04	0.06	0.08	0.09	0.12	0.31	0.41	0.52
4. Land use, land-use change and forestry	3.11	3.09	3.07	3.02	2.97	2.94	2.88	2.83	2.87	2.90
A. Forest land	1.27	1.26	1.25	1.23	1.21	1.20	1.17	1.15	1.14	1.11
B. Cropland	0.90	0.90	0.90	0.87	0.84	0.82	0.79	0.76	0.79	0.83
C. Grassland	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
D. Wetlands	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
E. Settlements	0.24	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.28	0.29
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products										
H. Other	0.30	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.31	0.31
5. Waste	2.62	2.72	2.88	2.90	3.09	3.07	3.01	3.10	3.02	3.08
A. Solid waste disposal										
B. Biological treatment of solid waste	0.57	0.64	0.75	0.75	0.89	0.89	0.89	0.89	0.89	0.95
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
D. Waste water treatment and discharge	1.86	1.86	1.84	1.82	1.82	1.81	1.77	1.77	1.76	1.76
E. Other	0.19	0.21	0.29	0.32	0.38	0.37	0.34	0.44	0.37	0.37
6. Other (as specified in the summary table in CRF)	0.05	0.05	0.06	0.05	0.04	0.06	0.07	0.06	0.07	0.06
2C1 - N_2O Emissions	0.05	0.05	0.06	0.05	0.04	0.06	0.07	0.06	0.07	0.06
Total direct N2O emissions without N2O from LULUCF	155.25	143.71	143.67	148.33	145.61	144.41	151.60	144.82	143.90	150.20
Memo items:										
International bunkers	0.75	0.80	0.85	0.84	0.86	0.90	0.98	1.02	1.07	1.17
Aviation	0.53	0.57	0.60	0.59	0.59	0.60	0.65	0.71	0.75	0.78
Navigation	0.23	0.24	0.25	0.25	0.27	0.31	0.32	0.30	0.32	0.38
Multilateral operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										

Note: All footnotes for this table are given on sheet 3.

Table 1(c) DEU_BR2_v0.2

Emission trends (N_2O)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	17.61	16.94	18.17	18.65	18.42	18.63	-17.64
A. Fuel combustion (sectoral approach)	17.61	16.94	18.17	18.65	18.42	18.63	-17.63
1. Energy industries	9.32	8.97	9.26	9.45	9.48	9.23	-13.14
2. Manufacturing industries and construction	2.65	2.34	2.65	2.77	2.58	2.66	-40.90
3. Transport	3.75	3.91	4.19	4.45	4.70	4.97	24.07
4. Other sectors	1.87	1.71	2.04	1.96	1.64	1.76	-46.40
5. Other	0.02	0.02	0.02	0.02	0.01	0.01	-94.09
B. Fugitive emissions from fuels	0.00	0.00	0.00	0.00	0.00	0.00	-83.84
1. Solid fuels	NA	NA	NA	NA	NA	NA	
2. Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	-83.84
C. CO2 transport and storage							
2. Industrial processes	32.18	33.41	6.20	4.91	3.98	4.09	-94.84
A. Mineral industry							
B. Chemical industry	30.47	31.78	4.62	3.36	2.53	2.75	-96.20
C. Metal industry	NA	NA	NA	NA	NA	NA	
D. Non-energy products from fuels and solvent use	0.00	0.01	0.00	0.01	0.00	0.01	161.68
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	1.71	1.62	1.57	1.54	1.44	1.34	-80.40
H. Other	NA	NA	NA	NA	NA	NA	
3. Agriculture	98.77	95.45	94.46	99.48	97.84	98.72	-11.94
A. Enteric fermentation							
B. Manure management	13.48	13.55	13.29	13.11	13.03	13.13	-23.51
C. Rice cultivation							
D. Agricultural soils	84.73	81.25	80.41	85.51	84.08	84.83	-10.65
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	
G. Liming							
H. Urea application							
I. Other carbon containing fertlizers							
J. Other	0.56	0.66	0.76	0.86	0.74	0.77	195,950.10
4. Land use, land-use change and forestry	2.93	2.98	3.02	3.06	3.10	3.16	-3.93
A. Forest land	1.10	1.09	1.08	1.06	1.05	1.05	-24.09
B. Cropland	0.86	0.90	0.93	0.97	1.00	1.04	15.25
C. Grassland	0.01	0.01	0.01	0.01	0.01	0.01	194.13
D. Wetlands	0.04	0.04	0.04	0.04	0.04	0.04	7.55
E. Settlements	0.30	0.30	0.31	0.31	0.32	0.33	36.67
F. Other land	NO	NO	NO	NO	NO	NO	
G. Harvested wood products							
H. Other	0.31	0.31	0.32	0.32	0.33	0.34	-4.54
5. Waste	3.08	3.10	3.09	3.19	3.22	3.22	-11.36
A. Solid waste disposal							
B. Biological treatment of solid waste	0.94	0.95	0.93	1.01	1.07	1.07	1,889.44
C. Incineration and open burning of waste	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	
D. Waste water treatment and discharge	1.75	1.75	1.75	1.73	1.73	1.73	-51.67
E. Other	0.40	0.40	0.42	0.45	0.43	0.43	
6. Other (as specified in the summary table in CRF)	0.06	0.04	0.05	0.05	0.04	0.04	-55.56
2C1 - N_2O Emissions	0.06	0.04	0.05	0.05	0.04	0.04	-55.56
Total direct N2O emissions without N2O from LULUCF	151.70	148.94	121.97	126.28	123.50	124.71	-42.69
Memo items:							
International bunkers	1.16	1.11	1.11	1.07	1.10	1.08	67.10
Aviation	0.79	0.77	0.76	0.73	0.79	0.80	114.11
Navigation	0.37	0.34	0.35	0.34	0.32	0.28	3.01
Multilateral operations	NA	NA	NA	NA	NA	NA	
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							

Abbreviations: CRF = common reporting format, LULUCF = land use, land-use change and fore

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

Table 1(d) DEU_BR2_v0.2

Emission trends (HFCs, PFCs and SF_6)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year*[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
Emissions of HFCs and PFCs - (kt CO2 equivalent)	8,814.43	8,814.43	7,933.01	7,908.27	9,951.81	10,074.44	10,440.13	9,735.19	9,977.30
Emissions of HFCs - (kt CO2 equivalent)	50.32	50.32	45.92	287.56	2,492.33	2,680.68	2,597.46	3,389.34	4,135.47
HFC-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC-32	NA	NA	NA	NA	0.00	0.00	0.00	0.00	0.01
HFC-41	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-43-10mee	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
HFC-125	NA	NA	NA	NA	0.00	0.02	0.04	0.09	0.13
HFC-134	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-134a	C, NA, NO	C, NA, NO	0.00	0.18	1.71	1.80	1.58	1.91	2.21
HFC-143	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-143a	NA	NA	NA	NA	0.00	0.01	0.01	0.05	0.08
HFC-152	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-152a	C, NA, NO	C, NA, NO	C, NA, NO	C, NA, NO	C, NA, NO	C, NA, NO	0.73	0.76	0.79
HFC-161	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-227ea	C, NA, NO	C, NA, NO	C, NA, NO	C, NA, NO	0.00	0.00	0.00	0.00	0.00
HFC-236cb	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-236ea	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-236fa	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-245ca	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-245fa	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
HFC-365mfc	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Emissions of PFCs - (kt CO2 equivalent)	3,060.23	3,060.23	2,654.62	2,407.12	2,256.39	1,918.78	2,085.72	2,041.19	1,653.48
CF_4	0.34	0.34	0.30	0.27	0.25	0.21	0.22	0.21	0.16
C_2F_6	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
C_3F_8	C, NA	C, NA	C, NA	C, NA	0.00	0.00	0.00	0.00	0.01
C_4F_{10}	NA	NA	NA	NA	NA	NA	NA	NA	NA
c-C_4F_8	NA	NA	NA	NA	NA	NA	NA	0.00	0.00
C_5F_{12}	NA	NA	NA	NA	NA	NA	NA	NA	NA
C_6F_{14}	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA
C10F18	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
c-C3F6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Emissions of SF6 - (kt CO2 equivalent)	4,428.00	4,428.00	4,745.88	5,237.81	5,973.59	6,249.23	6,467.15	6,162.49	6,108.84
Emissions of NF3 - (kt CO2 equivalent)	6.88	6.88	6.88	6.88	6.88	6.88	5.29	7.22	7.85

Note: All footnotes for this table are given on sheet 3.

Table 1(d)

DEU_BR2_v0.2

Emission trends (HFCs, PFCs and SF_6)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
Emissions of HFCs and PFCs - (kt CO2 equivalent)	10,717.26	10,585.27	8,976.20	9,978.69	10,725.42	10,102.66	10,352.34	10,418.14	10,451.79	10,471.63
Emissions of HFCs - (kt CO2 equivalent)	4,848.36	5,176.20	5,966.01	7,338.69	7,932.65	8,091.85	8,519.09	8,697.92	9,057.97	9,340.47
HFC-23	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
HFC-32	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.08	0.09
HFC-41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-43-10mee	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
HFC-125	0.18	0.21	0.25	0.27	0.30	0.32	0.36	0.38	0.40	0.41
HFC-134	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-134a	2.49	2.50	2.77	3.50	3.80	3.80	3.84	3.96	4.12	4.23
HFC-143	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-143a	0.11	0.14	0.18	0.20	0.22	0.24	0.26	0.27	0.29	0.30
HFC-152	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-152a	0.75	0.80	0.74	1.84	1.58	1.44	1.24	0.76	0.68	0.62
HFC-161	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-227ea	0.00	0.01	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.04
HFC-236cb	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-236ea	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-236fa	NA, NO	NA, NO	NA, NO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC-245ca	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HFC-245fa	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	0.10	0.05	0.04	0.04
HFC-365mfc	C, NA	C, NA	C, NA	C, NA	0.02	0.02	0.07	0.05	0.04	0.07
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Emissions of PFCs - (kt CO2 equivalent)	1,781.79	1,484.77	956.32	869.60	945.65	1,015.56	977.42	836.79	667.93	586.45
CF_4	0.17	0.14	0.07	0.07	0.08	0.08	0.08	0.06	0.04	0.04
C_2F_6	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
C_3F_8	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
C_4F_{10}	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
c-C_4F_8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C_5F_{12}	NA	NA	NA	NA	NA	0.00	0.00	0.00	0.00	0.00
C_6F_{14}	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA
C10F18	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA
c-C3F6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Emissions of SF6 - (kt CO2 equivalent)	5,888.91	4,289.75	4,072.50	3,751.78	3,087.04	3,034.16	3,243.55	3,319.87	3,241.50	3,180.59
Emissions of NF3 - (kt CO2 equivalent)	7.58	6.69	8.92	7.82	12.22	19.38	22.81	34.49	27.84	12.02

Note: All footnotes for this table are given on sheet 3.

Table 1(d) DEU_BR2_v0.2

Emission trends (HFCs, PFCs and SF_6)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
Emissions of HFCs and PFCs - (kt CO2 equivalent)	10,645.70	11,064.21	10,586.48	10,761.87	10,950.70	10,998.76	24.78
Emissions of HFCs - (kt CO2 equivalent)	9,296.65	9,565.34	9,884.74	10,319.49	10,535.10	10,567.70	20,901.00
HFC-23	0.01	0.01	0.01	0.01	0.01	0.01	121.11
HFC-32	0.11	0.12	0.14	0.15	0.18	0.20	
HFC-41	NA	NA	NA	NA	NA	NA	
HFC-43-10mee	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	
HFC-125	0.43	0.45	0.50	0.54	0.58	0.59	
HFC-134	NA	NA	NA	NA	NA	NA	
HFC-134a	4.10	4.19	4.24	4.39	4.42	4.42	
HFC-143	NA	NA	NA	NA	NA	NA	
HFC-143a	0.32	0.34	0.36	0.37	0.38	0.38	
HFC-152	NA	NA	NA	NA	NA	NA	
HFC-152a	0.46	0.46	0.38	0.31	0.24	0.31	
HFC-161	NA	NA	NA	NA	NA	NA	
HFC-227ea	0.03	0.03	0.03	0.03	0.02	0.02	
HFC-236cb	NA	NA	NA	NA	NA	NA	
HFC-236ea	NA	NA	NA	NA	NA	NA	
HFC-236fa	0.00	0.00	0.00	0.00	0.00	0.00	
HFC-245ca	NA	NA	NA	NA	NA	NA	
HFC-245fa	0.04	0.04	0.05	0.05	0.05	0.04	
HFC-365mfc	0.06	0.06	0.07	0.07	0.06	0.05	
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	
Emissions of PFCs - (kt CO2 equivalent)	564.87	404.57	343.99	277.06	240.67	256.79	-91.61
CF_4	0.05	0.03	0.03	0.02	0.02	0.02	-93.70
C_2F_6	0.01	0.01	0.01	0.01	0.01	0.01	-86.60
C_3F_8	0.01	0.01	0.01	0.01	0.00	0.00	
C_4F_{10}	NA	NA	NA	NA	NA	NA	
c-C_4F_8	0.00	0.00	0.00	0.00	0.00	0.00	
C_5F_{12}	0.00	0.00	0.00	NA	NA	NA	
C_6F_{14}	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	C, NE, NA	
C10F18	C, NA	C, NA	C, NA	C, NA	C, NA	C, NA	
c-C3F6	NA	NA	NA	NA	NA	NA	
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NA	NA	NA	NA	NA	NA	
Emissions of SF6 - (kt CO2 equivalent)	2,971.21	2,923.98	3,047.04	3,163.07	3,154.89	3,261.13	-26.35
Emissions of NF3 - (kt CO2 equivalent)	29.60	29.08	61.43	61.21	35.21	16.72	143.00

Abbreviations: CRF = common reporting format, LULUCF = land use, land-use change and forestry.

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

[c]Enter actual emissions estimates. If only potential emissions estimates are available, these should be reported in this table and an indication for this be provided in the documentation box. Only in these rows are the emissions expressed as CO2 equivalent emissions.

[d]In accordance with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories", HFC and PFC emissions should be reported for each relevant chemical. However, if it is not possible to report values for each chemical (i.e. mixtures, confidential data, lack of disaggregation), this row could be used for reporting aggregate figures for HFCs and PFCs, respectively. Note that the unit used for this row is kt of CO2 equivalent and that appropriate notation keys should be entered in the cells for the individual chemicals.)

Table 2(a) DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: base year[a]

Party	*Germany*	
Base year /base period	1990	
Emission reduction target	% of base year/base period	% of 1990 [b]
	40.00	40.00
Period for reaching target	BY-2020	

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] Optional.

Table 2(b) DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: gases and sectors covered[a]

Gases covered		*Base year for each gas (year):*
CO_2		1990
CH_4		1990
N_2O		1990
HFCs		1995
PFCs		1995
SF_6		1995
NF_3		1995
Other Gases (specify)		
Sectors covered[b]	Energy	Yes
	Transport[f]	Yes
	Industrial processes[g]	Yes
	Agriculture	Yes
	LULUCF	No
	Waste	Yes
	Other Sectors (specify)	

Abbreviations: LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] More than one selection will be allowed. If Parties use sectors other than those indicated above, the explanation of how these sectors relate to the sectors defined by the IPCC should be provided.

[f] Transport is reported as a subsector of the energy sector.

[g] Industrial processes refer to the industrial processes and solvent and other product use sectors.

Table 2(c) DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: global warming potential values (GWP)[a]

Gases	*GWP values* [b]
CO_2	4th AR
CH_4	4th AR
N_2O	4th AR
HFCs	4th AR
PFCs	4th AR
SF_6	4th AR
NF_3	4th AR
Other Gases (specify)	

Abbreviations: GWP = global warming potential

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] Please specify the reference for the GWP: Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) or the Fourth Assessment Report of the IPCC.

Table 2(d) DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: approach to counting emissions and removals from the LULUCF sector[a]

Role of LULUCF	LULUCF in base year level and target	Excluded
	Contribution of LULUCF is calculated using	

Abbreviation : LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

Table 2(e)I DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: market-based mechanisms under the Convention[a]

Market-based mechanisms under the Convention	*Possible scale of contributions (estimated kt CO_2 eq)*
CERs	0.00
ERUs	0.00
AAUs[i]	0.00
Carry-over units[j]	0.00
Other mechanism units under the Convention (specify)[d]	

Abbreviations: AAU = assigned amount unit, CER = certified emission reduction, ERU = emission reduction unit.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[d] As indicated in paragraph 5(e) of the guidelines contained in annex I of decision 2/CP.17 .

[i] AAUs issued to or purchased by a Party.

[j] Units carried over from the first to the second commitment periods of the Kyoto Protocol, as described in decision 13/CMP.1 and consistent with decision 1/CMP.8.

Table 2(e)II DEU_BR2_v0.2

Description of quantified economy-wide emission reduction target: other market-based mechanisms[a]

Other market-based mechanisms	*Possible scale of contributions*
(Specify)	*(estimated kt CO_2 eq)*

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

Description of quantified economy-wide emission reduction target: any other information[a,b]

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] This information could include information on the domestic legal status of the target or the total assigned amount of emission units for the period for reaching a target. Some of this information is presented in the narrative part of the biennial report.

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
Introduction of EU Emissions Trading Scheme impacting the sector energy supply*	Energy, Industry/industrial processes	CO_2	Introduction of overall cap on CO2 emissions for certain industry sectors	Economic	Implemented	Introduction of overall cap on CO2 emissions for certain industry sectors	2005	Government	7,000.00	
Renewable Energy Act*	Energy	CO_2	Increase in renewable energy	Other (Regulatory)	Implemented	Feed-in tariff for electricity from renewable sources	2000	Government	142,000.00	
Electricity savings*	Energy, Industry/industrial processes	CO_2	Efficiency improvements of buildings; Efficiency improvement in services/ tertiary sector; Efficiency improvement of appliances; Efficiency improvement in industrial end-use sectors; Demand management/reduction; Installation of abatement technologies	Regulatory|Information|Fiscal|Economic	Implemented	Diverse measures for electricity savings in several end-use sectors	2008-2015	Government; Companies; Other	47,000.00	
EU F-gas regulation (517/2014, 842/2006)*	Industry/industrial processes	HFCs, PFCs, SF_6	Reduction of emissions of fluorinated gases; Demand management/reduction	Regulatory	Implemented	features measures comabatting F-gas leakage, a phase-down of HFCs to be placed on the market and a couple of bans	2006	Government	10,485.00	
Chemicals Climate Protection Ordinance (Chemikalien-Klimaschutzverordnung)*	Industry/industrial processes	HFCs, PFCs, SF_6	Reduction of emissions of fluorinated gases	Regulatory	Implemented	Requirements concerning F-gas leakage beyond the levels of the F-gas Regulation (517/2014), certification	2008	Government	i. e.	
Federal Support Scheme for air conditioning and refrigeration systems under the "National Climate Initiative"*	Energy, Industry/industrial processes	CO_2, HFCs, PFCs	Demand management/reduction; Reduction of emissions of fluorinated gases	Economic	Implemented	Investment subsidy for highly energy efficient air-conditioning & refrigeration systems, for new systems only with natural refrigerants	2008	Government	i. e.	

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
Revision of Road Traffic Licensing Regulation (Straßenverkehrszulassungsordnung)*	Industry/industrial processes	HFCs	Reduction of emissions of fluorinated gases	Regulatory	Implemented	Transpostion of MAC Directive (2006/40/EC) into National law	2012	Government	i. e.	
SF6 emission reduction from switchgear (voluntary agreement)*	Industry/industrial processes	SF_6	Reduction of emissions of fluorinated gases	Voluntary Agreement	Implemented	voluntary agreement of switchgear manufacturers targeted to emission reduction measures	2005	Companies	i. e.	
Inclusion of the production of nitric and adipic acid into the EU-ETS*	Industry/industrial processes	N_2O	Other industrial processes	Economic	Implemented	the production of nitric acid and adipic acid were included into the EU-ETS in 2013	2013	Government	7,316.00	
Regulation on CO2 from cars*	Transport	CO_2	Efficiency improvements of vehicles	Other (Regulatory)	Implemented	National implementation of EU-Regulation (2009/443/EC) to reduce CO2 from cars.	2008	Government	1,800.00	
Mandatory biofuel quotas*	Transport	CO_2	Low carbon fuels/electric cars	Regulatory	Implemented	Increasing biofuel quotas: By 2020, a 7% Reduction of GHG-intensity of fuels is required	2010	Government	13,100.00	
Redistribution of Highway toll for heavy duty vehicles*	Transport	CO_2	Other transport	Economic	Implemented	Road Pricing for HDV depending on size and emission of pollutants. Introduction of measure in (2005). Extension on federal roads with direct highway connection and at least 4 lanes (8/2012).	2005	Government	1,600.00	
Air passenger taxes /EU-ETS aviation*	Transport	CO_2	Efficiency improvements of vehicles; Demand management/reduction	Other (Fiscal)	Implemented	A departure tax is to apply for all departures from 1 January 2011. The amount depends on the destination country (2012: minimum 7,50 € for short flights; 23,48 for medium flights; 42,18 for long flights). Air passenger taxes depends on EU-ETS aviation payments of airlines and decrease every year.	2011	Government	500.00	
Minimum energy performance standards (MEPS) (only electricity savings)*	Energy	CO_2	Efficiency improvement of appliances	Regulatory	Implemented	Determines legal framework for the definition of minimum energy performance standards of energy-related-products in order to bann low-efficiency products from market.	2009	Government	i. e.	
Energy Consumption Labelling Ordinance*	Energy	CO_2	Efficient Appliances	Regulatory	Implemented	Provision of information on energy efficiency and other standard product information at the point of sale. Energy labels shall help consumers to choose energy-efficient products and also provide incentives for the industry to develop and invest in energy efficient products.	2010	Government	i. e.	

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
Ecological tax (only electricity tax)*	Cross-cutting	CO_2	Efficiency improvement in services/ tertiary sector	Fiscal	Implemented	Tax on electricity (several industrial processes are excluded from the tax or receive a tax privilege.	2008	Government	i. e.	
Renewable Energy Act (EEG) surcharge*	Energy	CO_2	Demand management/reduction	Fiscal	Implemented	Surcharge on electricity price in order to finance the the further development of of renewable energy sources. The measure also includes a tax privilege for many industrial companies which is bound to the implementation of an energy management system.	2008	Government	i. e.	
Energy Consulting Service for SMEs (only electricity savings)*	Energy	CO_2	Efficiency improvement in services/ tertiary sector	Information	Implemented	The program is a joint initiative of the Federal Ministry of Economy and Energy (BMWi) and the KfW for the exploitation of energy efficiency potential in small and medium-sized enterprises (SMEs). This initiative includes an advisory support (not repayable grant for energy advice) and investment support (low-interest credit for investment energy saving). Both components can be independently taken in the claim.	2008	Government	i. e.	
Promotion of industrial cross-cutting and process technologies (only electricity savings)*	Industry/industrial processes	CO_2	Efficiency improvement in industrial end-use sectors	Fiscal	Implemented	Financial support for investment in energy-efficient cross-cutting technologies (electric motors, waste heat utilization, pumps), energy-efficient production processes and energy efficiency measures and advice in the field of process cold and air-conditioning in industry and services/tertiary sector.	2014	Government	i. e.	
100 Energy Efficiency Networks (only electricity savings)*	Industry/industrial processes	CO_2	Efficiency improvement in industrial end-use sectors	Information	Implemented	Establishment of 40 additional energy efficiency networks in addition to the 60 networks already existing. Each networks consists of 10-15 medium sized firms which set common energy-efficiency targets and meet regularly to discuss measures implemented and progress made. The measure aims at providing know-how for medium sized firms with medium energy costs to identify and analyse potential energy-efficiency measures. This PAM only includes the electricity savings of the measure, CO2 reduction from fuel saving is included in PAM 26.	2012	Companies	i. e.	

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
Emissions Trading System (EU ETS) impacting the industry sector*	Industry/industrial processes	CO_2	Installation of abatement technologies	Economic	Implemented	Introduction of an overall cap for CO2 emissions for several energy-intensive industries and trade of CO2 certificates (Cap and Trade).	2010	Government	1,000.00	
Energy Consulting Service for SMEs*	Industry/industrial processes	CO_2	Efficiency improvement in services/ tertiary sector	Information	Implemented	The program is a joint initiative of the Federal Ministry of Economy and Energy (BMWi) and the KfW for the exploitation of energy efficiency potential in small and medium-sized enterprises (SMEs). This initiative includes an advisory support (not repayable grant for energy advice) and investment support (low-interest credit for investment energy saving). Both components can be independently taken in the claim.	2008	Other	1,300.00	
Promotion of industrial cross-cutting technologies*	Industry/industrial processes	CO_2	Efficiency improvement in industrial end-use sectors	Fiscal	Implemented	Financial support for investment in energy-efficient cross-cutting technologies (electric motors, waste heat utilization, pumps).	2014	Government	100.00	
Promotion of energy-efficient industrial process technologies*	Industry/industrial processes	CO_2	Efficiency improvement in industrial end-use sectors	Fiscal	Implemented	Financial support for investment in energy-efficient production processes.	2014	Government	100.00	
100 Energy Efficiency Networks*	Industry/industrial processes	CO_2	Efficiency improvement in industrial end-use sectors	Information	Implemented	Establishment of 40 additional energy efficiency networks in addition to the 60 networks already existing. Each networks consists of 10-15 medium sized firms which set common energy-efficiency targets and meet regularly to discuss measures implemented and progress made. The measure aims at providing know-how for medium sized firms with medium energy costs to identify and analyse potential energy-efficiency measures.	2012	Companies	800.00	
Energy Saving Order (EnEV) (only electricity savings)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Regulatory	Implemented	Tightening of minimum energy requirements for new buildings from 2016 and limited obligation for renovations of buildings. This PAM only includes the electricity savings of the measure, CO2 reduction from fuel saving is included in PAM 29.	2015	Government	i. e.	
KfW (the German government-owned promotional bank) programmes (only electricity savings)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Fiscal	Implemented	Soft loans and grants for ambitous energy standards for new buildings and renovations. This PAM only includes the electricity savings of the measure, CO2 reduction from fuel saving is included in PAM 30.	2015	Other	i. e.	

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
Energy Saving Order (EnEV)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Regulatory	Implemented	Tightening of minimum energy requirements for new buildings from 2016 and limited obligation for renovations of buildings.	2015	Government	830.00	
KfW (the German government-owned promotional bank) programmes*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Fiscal	Implemented	Soft loans and grants for ambitous energy standards for new buildings and renovations.	2015	Other	600.00	
Act on the Promotion of Renewable Thermal Energy (EEWärmeG)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Regulatory	Implemented	The Act on the Promotion of Renewable Thermal Energy (EEWärmeG) is intended to encourage the expansion of renewable energies in the heating and refrigeration sector in connection with the supply of energy to buildings. It imposes the use of renewable energies, including from solar heating systems or heat pumps, in the construction of new buildings (so-called obligation to use according to § 3 (1) of the EEWärmeG). Measures for the utilisation of waste heat, for example, or for the improvement of thermal insulation can also be implemented by way of compensation. An increase in energy efficiency is also achieved by this means.	2015	Government	580.00	
Market Incentive Programme for Renewable Energies (MAP)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Fiscal	Implemented	The target of the programme is to strengthen the sale of technologies for renewable energies through investment incentives and to improve their profitability. Funding takes the form of a grant provided by the Federal Office of Economics and Export Control (BAFA). Funding is available inter alia for efficient heat pumps and solar heating installations. The installation of a solar heating system and a heat pump at the same time is funded through a combination bonus.	2015	Government	110.00	
Minimum energy performance standards (MEPS)*	Other (Buildings)	CO_2	Efficiency improvements of buildings	Regulatory	Implemented	Determines legal framework for the definition of minimum energy performance standards of energy-related-products (here: fossil-fuelled heating installations) to bann low-efficiency products from market.	2015	Government	740.00	

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	
CHP Act*	Energy	CO_2	Efficiency improvement in the energy and transformation sector; Other energy supply	Economic	Implemented	Bonus for CHP electricity generation on top of the electricity price	2008	Government		1,000.00
Regulation on CO2 from vans*	Transport	CO_2	Efficiency improvements of vehicles	Regulatory	Implemented	National implementation of EU-Regulation (2011/510/EC) to reduce CO2 from vans.	2011	Government		300.00
Landfill aeration*	Waste management/waste	CH_4	Improved landfill management	Other (Information)	Implemented	funding through the national climate initiative (NKI) for the aeration of landfills to reduce methane emissions	2013	Government; Local		500.00
Regulation of biological waste treatment (30. BImSchV)*	Waste management/waste	CH_4	Improved treatment technologies	Regulatory	Implemented	The regulation applies to the construction, design and operation of facilities for biological and bio-chemical treatment of waste with the goal of treatment for deposition or thermal treatment.	2009	Regional		not calculated
Water Resources Act (Amendment, WHG)*	Waste management/waste	CH_4, N_2O	Other waste	Regulatory	Implemented	The aim is a sustainable water management to protect water as part of the ecosystem, as a habitat for animals and plants, as well as a usable asset.	2010	Government; Regional		not calculated
Amendment of the Regulation on the incineration and co-incineration of waste (17. BImSchV)*	Waste management/waste	CO_2, CH_4	Improved treatment technologies	Regulatory	Implemented	The amendment of the 17th BImSchV provided the implementation of requirements of the EU Directive 2000/76/EC on the incineration of waste into national law. In Germany high air quality levels already existed. The requirements for waste incineration plants has been applied to all facilities where waste is used.	2003	Regional		not calculated
Recycling and Waste Management Act (KrW-/AbfG)*	Waste management/waste	CH_4	Demand management / reduction; Reduced landfilling	Regulatory	Implemented	The objective of the recycling law was and is to reduce the generation of waste considerably, at least of the waste going to landfill.	1996	Government		not calculated
Landfill regulation (DepVereinfV, 2009)*	Waste management/waste	CH_4	Improved landfill management	Regulatory	Implemented	Summary and simplification of international and national regulations about landfills.	2009	Government		not calculated
MAC Directive (2006/40/EC)*	Industry/industrial processes	HFCs	Reduction of emissions of fluorinated gases	Regulatory	Implemented	Ban of placing on the market of vehicles which use high GWP refrigerants in air conditioning systems	2006	Government		i. e.

Note: The two final columns specify the year identified by the Party for estimating impacts (based on the status of the measure and whether an ex post or ex ante estimation is available).

Abbreviations: GHG = greenhouse gas; LULUCF = land use, land-use change and forestry.

Table 3 DEU_BR2_v0.2

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*	

[a] Parties should use an asterisk (*) to indicate that a mitigation action is included in the 'with measures' projection.

[b] To the extent possible, the following sectors should be used: energy, transport, industry/industrial processes, agriculture, forestry/LULUCF, waste management/waste, other sectors, cross-cutting, as appropriate.

[c] To the extent possible, the following types of instrument should be used: economic, fiscal, voluntary agreement, regulatory, information, education, research, other.

[d] To the extent possible, the following descriptive terms should be used to report on the status of implementation: implemented, adopted, planned.

[e] Additional information may be provided on the cost of the mitigation actions and the relevant timescale.

[f] Optional year or years deemed relevant by the Party.

Table 4 DEU_BR2_v0.2

Reporting on progress[a, b]

	Total emissions excluding LULUCF	*Contribution from LULUCF*[d]	*Quantity of units from market based mechanisms under the Convention*		*Quantity of units from other market based mechanisms*	
Year[c]	*(kt CO_2 eq)*	*(kt CO_2 eq)*	*(number of units)*	*(kt CO_2 eq)*	*(number of units)*	*(kt CO_2 eq)*
(1990)	1,247,867.98	-32,531.40				
2010	942,657.17	-17,662.09				
2011	922,713.87	-17,097.77				
2012	928,092.54	-15,745.45				
2013	950,672.77	-15,693.77				
2014						

Abbreviation : GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] For the base year, information reported on the emission reduction target shall include the following: (a) total GHG emissions, excluding emissions and removals from the LULUCF sector; (b) emissions and/or removals from the LULUCF sector based on the accounting approach applied taking into consideration any relevant decisions of the Conference of the Parties and the activities and/or land that will be accounted for; (c) total GHG emissions, including emissions and removals from the LULUCF sector. For each reported year, information reported on progress made towards the emission reduction targets shall include, in addition to the information noted in paragraphs 9(a–c) of the UNFCCC biennial reporting guidelines for developed country Parties, information on the use of units from market-based mechanisms.

[c] Parties may add additional rows for years other than those specified below.

[d] Information in this column should be consistent with the information reported in table 4(a)I or 4(a)II, as appropriate. The Parties for which all relevant information on the LULUCF contribution is reported in table 1 of this common tabular format can refer to table 1.

Table 4(a)I DEU_BR2_v0.2

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2013 [a,b]

	Net GHG emissions/removals from LULUCF categories [c]	*Base year/period or reference level value* [d]	*Contribution from LULUCF for reported year*	*Cumulative contribution from LULUCF* [e]	*Accounting approach* [f]
	(kt CO_2 eq)				
Total LULUCF					
A. Forest land					
1. Forest land remaining forest land					
2. Land converted to forest land					
3. Other [g]					
B. Cropland					
1. Cropland remaining cropland					
2. Land converted to cropland					
3. Other [g]					
C. Grassland					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other [g]					
D. Wetlands					
1. Wetland remaining wetland					
2. Land converted to wetland					
3. Other [g]					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other [g]					
F. Other land					
1. Other land remaining other land					
2. Land converted to other land					
3. Other [g]					
Harvested wood products					

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] Parties that use the LULUCF approach that is based on table 1 do not need to complete this table, but should indicate the approach in table 2. Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[c] For each category, enter the net emissions or removals reported in the most recent inventory submission for the corresponding inventory year. If a category differs from that used for the reporting under the Convention or its Kyoto Protocol, explain in the biennial report how the value was derived.

[d] Enter one reference level or base year/period value for each category. Explain in the biennial report how these values have been calculated.

[e] If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

[f] Label each accounting approach and indicate where additional information is provided within this biennial report explaining how it was implemented, including all relevant accounting parameters (i.e. natural disturbances, caps).

[g] Specify what was used for the category "other". Explain in this biennial report how each was defined and how it relates to the categories used for reporting under the Convention or its Kyoto Protocol.

Table 4(a)I DEU_BR2_v0.2

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2014 [a, b]

	Net GHG emissions/removals from LULUCF categories [c]	*Base year/period or reference level value* [d]	*Contribution from LULUCF for reported year*	*Cumulative contribution from LULUCF* [e]	*Accounting approach* [f]
	(kt CO_2 eq)				
Total LULUCF					
A. Forest land					
1. Forest land remaining forest land					
2. Land converted to forest land					
3. Other [g]					
B. Cropland					
1. Cropland remaining cropland					
2. Land converted to cropland					
3. Other [g]					
C. Grassland					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other [g]					
D. Wetlands					
1. Wetland remaining wetland					
2. Land converted to wetland					
3. Other [g]					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other [g]					
F. Other land					
1. Other land remaining other land					
2. Land converted to other land					
3. Other [g]					
Harvested wood products					

Abbreviations : GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] Parties that use the LULUCF approach that is based on table 1 do not need to complete this table, but should indicate the approach in table 2. Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[c] For each category, enter the net emissions or removals reported in the most recent inventory submission for the corresponding inventory year. If a category differs from that used for the reporting under the Convention or its Kyoto Protocol, explain in the biennial report how the value was derived.

[d] Enter one reference level or base year/period value for each category. Explain in the biennial report how these values have been calculated.

[e] If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

[f] Label each accounting approach and indicate where additional information is provided within this biennial report explaining how it was implemented, including all relevant accounting parameters (i.e. natural disturbances, caps).

[g] Specify what was used for the category "other". Explain in this biennial report how each was defined and how it relates to the categories used for reporting under the Convention or its Kyoto Protocol.

Table 4(a)II

DEU_BR2_v0.2
Source: Submission 2016 v5, GERMANY

Progress in achievement of the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the counting of emissions and removals from the land use, land-use change and forestry sector in relation to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol[a, b, c]

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	*Base year*[d]	*Net emissions/removals*[e]									<r xmlns="http://schemas.openxmlformats.org/spre	<r xmlns="http://schemas.openxmlformats.org/spre
		2013	2014	*2015*	*2016*	2017	2018	2019	2020	Total[g]		
	($kt CO_2 eq$)											
A. Article 3.3 activities												
A.1. Afforestation/reforestation		-8,650.01								-8,650.01		-8'650.01
Excluded emissions from natural disturbances(5)		NA								NA		NA
Excluded subsequent removals from land subject to natural disturbances(6)		NA								NA		NA
A.2. Deforestation		173.84								173.84		173.84
B. Article 3.4 activities												
B.1. Forest management										-54,143.40		-31'733.40
Net emissions/removals[e]		-54,143.40								-54,143.40		
Excluded emissions from natural disturbances(5)		NA								NA		NA
Excluded subsequent removals from land subject to natural disturbances(6)		NA								NA		NA
Any debits from newly established forest (CEF-ne)(7),(8)		NA								NA		NA
Forest management reference level (FMRL)(9)												
Technical corrections to FMRL(10)												
Forest management cap[l]											349'916.40	349'916.40
B.2. Cropland management (if elected)	15'341.80	13,941.53								13,941.53		-1'400.27
B.3. Grazing land management (if elected)	21'057.27	22,664.09								22,664.09		1'606.82
B.4. Revegetation (if elected)	NA	NA								NA		NA
B.5. Wetland drainage and rewetting (if elected)	NA	NA								NA		NA

Note: 1 kt CO_2 eq equals 1 Gg CO_2 eq.

Abbreviations: CRF = common reporting format, LULUCF = land use, land-use change and forestry.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] Developed country Parties with a quantified economy-wide emission reduction target as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1 or any update to that document, that are Parties to the Kyoto Protocol, may use table 4(a)II for reporting of accounting quantities if LULUCF is contributing to the attainment of that target.

[c] Parties can include references to the relevant parts of the national inventory report, where accounting methodologies regarding LULUCF are further described in the documentation box or in the biennial reports.

[d] Net emissions and removals in the Party's base year, as established by decision 9/CP.2.

[e] All values are reported in the information table on accounting for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, of the CRF for the relevant inventory year as reported in the current submission and are automatically entered in this table.

[f] Additional columns for relevant years should be added, if applicable.

[g] Cumulative net emissions and removals for all years of the commitment period reported in the current submission.

[h] The values in the cells "3.3 offset" and "Forest management cap" are absolute values.

[i] The accounting quantity is the total quantity of units to be added to or subtracted from a Party's assigned amount for a particular activity in accordance with the provisions of Article 7, paragraph 4, of the Kyoto Protocol.

[j] In accordance with paragraph 4 of the annex to decision 16/CMP.1, debits resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than the credits accounted for on that unit of land.

[k] In accordance with paragraph 10 of the annex to decision 16/CMP.1, for the first commitment period a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3 paragraph 3, may account for anthropogenic greenhouse gas emissions by sources and removals by sinks in areas under forest management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 megatonnes of carbon times five, if the total anthropogenic greenhouse gas emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.

[l] In accordance with paragraph 11 of the annex to decision 16/CMP.1, for the first commitment period of the Kyoto Protocol only, additions to and subtractions from the assigned amount of a Party resulting from Forest management under Article 3, paragraph 4, after the application of paragraph 10 of the annex to decision 16/CMP.1 and resulting from forest management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix of the annex to decision 16/CMP.1, times five.

Table 4(b) DEU_BR2_v0.2

Reporting on progress[a, b, c]

Units of market based mechanisms			*Year*	
			2013	*2014*
Kyoto Protocol units[d]	*Kyoto Protocol units*	*(number of units)*		
		(kt CO_2 eq)		
	AAUs	*(number of units)*		
		(kt CO2 eq)		
	ERUs	*(number of units)*		
		(kt CO2 eq)		
	CERs	*(number of units)*		
		(kt CO2 eq)		
	tCERs	*(number of units)*		
		(kt CO2 eq)		
	lCERs	*(number of units)*		
		(kt CO2 eq)		
Other units[d,e]	*Units from market-based mechanisms under the Convention*	*(number of units)*		
		(kt CO_2 eq)		
	Units from other market-based mechanisms	*(number of units)*		
		(kt CO_2 eq)		
Total		*(number of units)*		
		(kt CO_2 eq)		

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, lCERs = long-term certified emission reductions, tCERs = temporary certified emission reductions.
Note: 2011 is the latest reporting year.

[a] Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

[b] For each reported year, information reported on progress made towards the emission reduction target shall include, in addition to the information noted in paragraphs 9(a-c) of the reporting guidelines, on the use of units from market-based mechanisms.

[c] Parties may include this information, as appropriate and if relevant to their target.

[d] Units surrendered by that Party for that year that have not been previously surrendered by that or any other Party.

[e] Additional rows for each market-based mechanism should be added, if applicable.

Table 5 DEU_BR2_v0.2

Summary of key variables and assumptions used in the projections analysis[a]

Key underlying assumptions		*Historical*[b]							Projected		
Assumption	*Unit*	*1990*	*1995*	2000	2005	2010	2011	2015	2020	2025	2030
Population	*thousands*							80,852.00	80,407.00	79,833.00	78,988.00
International coal price	USD / boe							18.43	18.13	19.70	20.35
International oil price	USD / boe							92.58	92.02	103.86	113.40
International gas price	USD / boe							53.53	50.28	54.33	56.42
Population growth	%								-0.10	-0.10	-0.20
Number of households	thousands							40,120.00	40,760.00	40,960.00	40,970.00
GDP growth rate	*%*							1.32	1.03	1.00	0.99

[a] Parties should include key underlying assumptions as appropriate.

[b] Parties should include historical data used to develop the greenhouse gas projections reported.

Custom Footnotes

Please note: Original modelling based on energy prices in EURO. Exchange rates for international energy for the years 2015, 2020, 2025 and 2030 are: 1 Euro = 1.26 USD, 1.22 USD, 1.19 USD and 1.16 USD respectively. For converting values between boe to GJ, the factor 5.81652 was applied.

Table 6(a) DEU_BR2_v0.2

Information on updated greenhouse gas projections under a 'with measures' scenario[a]

	GHG emissions and removals[b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1990)	1990	1995	2000	2005	2010	2013	2020	2030
Sector[d,e]									
Energy	1,037,165.78	1,037,165.78	918,693.10	873,037.05	834,623.37	804,208.86	813,439.22	695,316.90	584,974.80
Transport	164,476.61	164,476.62	177,532.12	182,629.84	161,371.12	154,014.30	159,271.55	148,138.71	132,710.82
Industry/industrial processes	96,404.02	96,404.02	97,366.04	76,949.94	74,928.73	62,380.98	61,372.33	67,516.89	53,332.33
Agriculture	77,889.43	77,889.43	67,653.26	67,159.74	63,045.71	62,259.77	64,242.50	61,270.53	62,105.37
Forestry/LULUCF	1,833.84	1,833.84	1,796.56	1,766.64	1,692.68	1,747.86	1,786.79		
Waste management/waste	36,409.36	36,409.36	36,438.90	27,211.36	20,095.99	13,809.45	11,619.61	9,129.19	6,872.00
Other (specify)									
Gas									
CO_2 emissions including net CO_2 from LULUCF	1,016,519.77	1,016,519.77	902,059.53	858,303.66	852,039.81	813,701.65	823,124.68		
CO_2 emissions excluding net CO_2 from LULUCF	1,050,885.01	1,050,885.01	938,024.15	899,385.87	865,931.26	833,111.60	840,605.24	730,489.09	617,468.32
CH_4 emissions including CH_4 from LULUCF	119,742.12	119,742.12	105,288.35	89,952.06	70,681.76	60,352.05	59,475.09		
CH_4 emissions excluding CH_4 from LULUCF	118,887.31	118,887.31	104,436.82	89,099.60	69,833.17	59,503.09	58,628.84	48,505.32	45,405.46
N_2O emissions including N_2O from LULUCF	65,824.99	65,824.99	61,722.80	43,729.19	44,000.97	37,247.32	38,103.50		
N_2O emissions excluding N_2O from LULUCF	64,845.96	64,845.96	60,777.76	42,815.00	43,156.89	36,348.43	37,162.97	39,931.22	39,442.94
HFCs	8,354.40	5,754.20	8,354.40	8,019.88	9,581.35	10,242.48	10,741.97	9,907.47	3,733.28
PFCs	2,085.72	3,060.23	2,085.72	956.32	836.79	343.99	256.79	245.95	233.44
SF_6	6,467.15	4,428.00	6,467.15	4,072.50	3,319.87	3,047.04	3,261.13	4,154.47	1,001.06
Other (specify)									
Total with LULUCF[f]	1,218,994.15	1,215,329.31	1,085,977.95	1,005,033.61	980,460.55	924,934.53	934,963.16	14,307.89	4,967.78
Total without LULUCF	1,251,525.55	1,247,860.71	1,120,146.00	1,044,349.17	992,659.33	942,596.63	950,656.94	833,233.52	707,284.50

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

[a] In accordance with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", at a minimum Parties shall report a 'with measures' scenario, and may report 'without measures' and 'with additional measures' scenarios. If a Party chooses to report 'without measures' and/or 'with additional measures' scenarios they are to use tables 6(b) and/or 6(c), respectively. If a Party does not choose to report 'without measures' or 'with additional measures' scenarios then it should not include tables 6(b) or 6(c) in the biennial report.

[b] Emissions and removals reported in these columns should be as reported in the latest GHG inventory and consistent with the emissions and removals reported in the table on GHG emissions and trends provided in this biennial report. Where the sectoral breakdown differs from that reported in the GHG inventory Parties should explain in their biennial report how the inventory sectors relate to the sectors reported in this table.

[c] 20XX is the reporting due-date year (i.e. 2014 for the first biennial report).

[d] In accordance with paragraph 34 of the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", projections shall be presented on a sectoral basis, to the extent possible, using the same sectoral categories used in the policies and measures section. This table should follow, to the extent possible, the same sectoral categories as those listed in paragraph 17 of those guidelines, namely, to the extent appropriate, the following sectors should be considered: energy, transport, industry, agriculture, forestry and waste management.

[e] To the extent possible, the following sectors should be used: energy, transport, industry/industrial processes, agriculture, forestry/LULUCF, waste management/waste, other sectors (i.e. cross-cutting), as appropriate.

[f] Parties may choose to report total emissions with or without LULUCF, as appropriate.

Custom Footnotes

Note: Transport emissions are included in energy emissions

Table 7 DEU_BR2_v0.2

Provision of public financial support: summary information in 2013[a]

Allocation channels	*Year*									
	European euro - EUR					*USD[b]*				
	Core/ general[c]	*Climate-specific[d]*				*Core/ general[c]*	*Climate-specific[d]*			
		Mitigation	*Adaptation*	*Cross-cutting[e]*	*Other[f]*		*Mitigation*	*Adaptation*	*Cross-cutting[e]*	*Other[f]*
Total contributions through multilateral channels:	79,000,560.00	132,796,345.65	79,600,000.00	10,090,000.00	30,200,000.00					
Multilateral climate change funds[g]	79,000,560.00	7,796,345.65	79,600,000.00	6,655,000.00						
Other multilateral climate change funds[h]		7,796,345.65		5,870,000.00						
Multilateral financial institutions, including regional development banks		125,000,000.00			30,200,000.00					
Specialized United Nations bodies				3,435,000.00						
Total contributions through bilateral, regional and other channels		550,998,053.90	563,561,836.35	165,603,946.00	385,839,637.89					
Total	79,000,560.00	683,794,399.55	643,161,836.35	175,693,946.00	416,039,637.89					

Abbreviation: USD = United States dollars.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.

[c] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

[d] Parties should explain in their biennial reports how they define funds as being climate-specific.

[e] This refers to funding for activities which are cross-cutting across mitigation and adaptation.

[f] Please specify.

[g] Multilateral climate change funds listed in paragraph 17(a) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

[h] Other multilateral climate change funds as referred in paragraph 17(b) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

Custom Footnotes

Each Party shall provide an indication of what new and additional financial resources they have provided, and clarify how they have determined that such resources are new and additional. Please provide this information in relation to table 7(a) and table 7(b).

Documentation Box:

2013:

German climate finance reported in the tables above relates to finance from budgetary sources (e.g. solely the grant underlying a concessional KfW loan). It adds up to 1.950.290.043,79 EUR.

In addition to the information provided in the tables on finance from budgetary sources, for transparency reasons finance from DEG and KfW development bank which leverages capital market means is reported in this row: In 2013 KfW development bank provided climate relevant flows of this nature amounting to € 1.025 bn. These flows represent ODA eligible flows, in the form of concessional loans. DEG furthermore provided € 448 mio. of climate relevant funds. These flows provided by KfW and DEG are currently not reported in the tables provided to UNFCCC and in MMR. Adding a) German climate finance from budgetary sources reported in the tables together with b) climate relevant finance from DEG and KFW which leverages capital market means sums up to 3.423.290.043,79 EUR.

Table 7 DEU_BR2_v0.2

Provision of public financial support: summary information in 2014[a]

Allocation channels	*Year*									
	European euro - EUR					*USD [b]*				
	Core/ general [c]	*Climate-specific [d]*				*Core/ general [c]*	*Climate-specific [d]*			
		Mitigation	*Adaptation*	*Cross-cutting [e]*	*Other [f]*		*Mitigation*	*Adaptation*	*Cross-cutting [e]*	*Other [f]*
Total contributions through multilateral channels:	866,596,093.94	27,006,777.71	98,000,000.00	20,619,519.82	92,000,000.00					
Multilateral climate change funds[g]	80,607,261.24	8,006,777.71	98,000,000.00	7,392,791.82						
Other multilateral climate change funds[h]		8,006,777.71		6,392,791.82						
Multilateral financial institutions, including regional development banks	785,988,832.70	19,000,000.00			82,000,000.00					
Specialized United Nations bodies				13,226,728.00	10,000,000.00					
Total contributions through bilateral, regional and other channels		583,414,565.99	695,266,782.33	209,453,825.42	394,172,573.50					
Total	866,596,093.94	610,421,343.70	793,266,782.33	230,073,345.24	486,172,573.50					

Abbreviation: USD = United States dollars.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.

[c] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

[d] Parties should explain in their biennial reports how they define funds as being climate-specific.

[e] This refers to funding for activities which are cross-cutting across mitigation and adaptation.

[f] Please specify.

[g] Multilateral climate change funds listed in paragraph 17(a) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

[h] Other multilateral climate change funds as referred in paragraph 17(b) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

Custom Footnotes

Each Party shall provide an indication of what new and additional financial resources they have provided, and clarify how they have determined that such resources are new and additional. Please provide this information in relation to table 7(a) and table 7(b).

Documentation Box:

2013:

German climate finance reported in the tables above relates to finance from budgetary sources (e.g. solely the grant underlying a concessional KfW loan). It adds up to 1.950.290.043,79 EUR.

In addition to the information provided in the tables on finance from budgetary sources, for transparency reasons finance from DEG and KfW development bank which leverages capital market means is reported in this row: In 2013 KfW development bank provided climate relevant flows of this nature amounting to € 1.025 bn. These flows represent ODA eligible flows, in the form of concessional loans. DEG furthermore provided € 448 mio. of climate relevant funds. These flows provided by KfW and DEG are currently not reported in the tables provided to UNFCCC and in MMR. Adding a) German climate finance from budgetary sources reported in the tables together with b) climate relevant finance from DEG and KFW which leverages capital market means sums up to 3.423.290.043,79 EUR.

Table 7(a) DEU_BR2_v0.2

Provision of public financial support: contribution through multilateral channels in 2013[a]

Donor funding	*Total amount*				*Status[b]*	*Funding source[f]*	*Financial instrument[f]*	*Type of support[f, g]*	*Sector[c]*
	Core/general[d]		*Climate-specific[e]*						
	European euro - EUR	*USD*	*European euro - EUR*	*USD*					
Total contributions through multilateral channels	79,000,560.00		252,686,345.65						
Multilateral climate change funds[g]	79,000,560.00		94,051,345.65						
1. Global Environment Facility	79,000,560.00				Provided	ODA	Grant	Mitigation	Not applicable
2. Least Developed Countries Fund			30,000,000.00		Provided	ODA	Grant	Adaptation	Not applicable
3. Special Climate Change Fund			19,600,000.00		Provided	ODA	Grant	Adaptation	Not applicable
4. Adaptation Fund			30,000,000.00		Provided	ODA	Grant	Adaptation	Not applicable
5. Green Climate Fund			785,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
6. UNFCCC Trust Fund for Supplementary Activities									
7. Other multilateral climate change funds			13,666,345.65						
7.1 Montreal Protocol			7,796,345.65		Provided	ODA	Grant	Mitigation	Not applicable
7.2 IPCC			294,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
7.3 UNFCCC			5,576,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
Multilateral financial institutions, including regional development banks			155,200,000.00						
1. World Bank									
2. International Finance Corporation									
3. African Development Bank									
4. Asian Development Bank									
5. European Bank for Reconstruction and Development									
6. Inter-American Development Bank									
7. Other			155,200,000.00						
1.3 Forest Carbon Partnership Facility			30,200,000.00		Provided	ODA	Grant	Other (REDD+)	Not applicable
1.1 Clean Technology Fund			125,000,000.00		Provided	ODA	Concessional Loan	Mitigation	Not applicable
Specialized United Nations bodies			3,435,000.00						
1. United Nations Development Programme			350,000.00						
UN Development Programme			350,000.00		Committed	ODA	Grant	Cross-cutting	Not applicable
2. United Nations Environment Programme			1,050,000.00						
UNEP Collaborating Centre for Climate and Sustainable Energy Finance			750,000.00		Provided		Grant	Cross-cutting	Not applicable
UN Environment Programme			300,000.00		Committed	ODA	Grant	Cross-cutting	Not applicable
3. Other			2,035,000.00						
UNCCD, UNOPS, UNF, IFAD, UNODC, UNV			2,035,000.00		Committed	ODA	Grant	Cross-cutting	Not applicable

Abbreviations: ODA = official development assistance, OOF = other official flows.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

[c] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

[d] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

[e] Parties should explain in their biennial reports how they define funds as being climate-specific.

[f] Please specify.

[g] Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Table 7(a) DEU_BR2_v0.2

Provision of public financial support: contribution through multilateral channels in 2014[a]

Donor funding	*Total amount*				*Status*[b]	*Funding source*[f]	*Financial instrument*[f]	*Type of support*[f, g]	*Sector*[c]
	Core/general[d]		*Climate-specific*[e]						
	European euro - EUR	*USD*	*European euro - EUR*	*USD*					
Total contributions through multilateral channels	866,596,093.94		237,626,297.53						
Multilateral climate change funds[g]	80,607,261.24		113,399,569.53						
1. Global Environment Facility	80,607,261.24				Provided	ODA	Grant	Cross-cutting	Not applicable
2. Least Developed Countries Fund			30,000,000.00		Provided	ODA	Grant	Adaptation	Not applicable
3. Special Climate Change Fund			18,000,000.00		Provided	ODA	Grant	Adaptation	Not applicable
4. Adaptation Fund			50,000,000.00		Provided	ODA	Grant	Adaptation	Not applicable
5. Green Climate Fund			1,000,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
6. UNFCCC Trust Fund for Supplementary Activities									
7. Other multilateral climate change funds			14,399,569.53						
7.1 Montreal Protocol			8,006,777.71		Provided	ODA	Grant	Mitigation	Not applicable
7.2 IPCC			294,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
7.3 UNFCCC			6,098,791.82		Provided	ODA	Grant	Cross-cutting	Not applicable
Multilateral financial institutions, including regional development banks	785,988,832.70		101,000,000.00						
1. World Bank	526,688,832.70								
2. International Finance Corporation									
3. African Development Bank	181,200,000.00								
4. Asian Development Bank	78,100,000.00								
5. European Bank for Reconstruction and Development			4,000,000.00		Provided	ODA	Grant	Mitigation	Not applicable
6. Inter-American Development Bank									
7. Other			97,000,000.00						
1.1 Pilot Auction Facility for Methane and Climate Change Mitigation			15,000,000.00		Provided	ODA	Grant	Mitigation	Not applicable
1.2 BioCarbon Fund Initiative for Sustainable Forest Landscapes			35,000,000.00		Provided	ODA	Grant	Other (REDD+)	Not applicable
1.3 Forest Carbon Partnership Facility			47,000,000.00		Provided	ODA	Grant	Other (REDD+)	Not applicable
Specialized United Nations bodies			23,226,728.00						
1. United Nations Development Programme			10,000,000.00						
Biodiversity Finance Initiative			10,000,000.00		Provided	ODA	Grant	Other (REDD+)	Not applicable
2. United Nations Environment Programme			400,000.00						
UNEP Collaborating Centre for Climate and Sustainable Energy Finance			400,000.00		Provided	ODA	Grant	Cross-cutting	Not applicable
3. Other			12,826,728.00						
UNHCR, UN-Habitat, UNODC, Worldbank, WFP, WRI, UNF, GGI			12,826,728.00		Provided	ODA	Grant	Cross-cutting	Not applicable

Abbreviations: ODA = official development assistance, OOF = other official flows.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

[c] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

[d] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

[e] Parties should explain in their biennial reports how they define funds as being climate-specific.

[f] Please specify.

[g] Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Total contributions through bilateral, regional and other channels	1,666,003,474.14							
Africa / Support to the Pan-African University	20,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Education)	Implementing Organization: KfW
Africa / Support of the east african geothermal-Initiative	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	Implementing agency: KfW
Africa / 4E-Initiative SSA	18,500,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW
Africa / 4E-Initiative SSA	2,000,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW
Africa / Infrastructure Trust Fund for Afrika (ITF)	4,000,000.00		Committed	ODA	Grant	Cross-cutting	Energy	KfW
Africa / Employment Promotion through Renewable Energies	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Africa / Regional Cooperation in the Water Sector (OSS)	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Africa / Support of the transboundary water cooperation in the Nile Basin	1,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Africa / Promotion of the african rice-value-added chain	1,250,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Africa / Regional cooperation in water sector - BGR (Maghreb)	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Benin / Trust Fund West Africa National Parks	2,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (Biodiversity)	KfW
Benin / Strengthening of agricultural econonomy in Benin	6,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Benin / Peri-urban and rural water supply and sewage disposal Programme	7,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Benin / Strengthening of agricultural econonomy in Benin	6,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Benin / Water and Sanitation Programme	5,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Benin / Programme to support decentralisation and community development	6,500,000.00		Committed	ODA	Grant	Adaptation	Other (Government and Civil Society)	GIZ
Burkina Faso / Sustainable promotion of rural economy	5,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Burundi / Management and protection of the ground water	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Burundi / sectorprogram water,sewerage and sanitation	4,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Cameroon / REDD	10,000,000.00		Committed	ODA	Grant	Mitigation	Forestry	KfW
Cameroon / Program for Sustainable Management of natural Ressources - South West Region (PSMNR-SWR)	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Cameroon / Agriculture/rural development	2,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Cameroon / Support to implementation of national forest and environmental program	22,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	GIZ
Cameroon / Support in modernizing public financial management	5,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Government and Civil Society)	GIZ
Cameroon / Agriculture/rural development	2,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
CEPGL - Economic Community of the Great Lakes Countries / Improvement of the energy supply in the Great Lake Region, Transmission Line Kamanyola-Greater Bukavu	18,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
CICOS / Transboundary water management in Congo Basin	1,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
COMIFAC / Regional support for COMIFAC	9,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
COMIFAC / Regional support for COMIFAC	1,100,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
COMIFAC / Support of the transboundary national park BSB Yamoussa	6,900,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
COMIFAC / Implementation of ABS in the COMIFAC member countries	4,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
Côte d'Ivoire / Program advancement of agricultural economy	4,500,000.00		Provided	ODA	Grant	Adaptation	Agriculture	KfW
Côte d'Ivoire / Rehabilitation and preservation of the nationalpark Comoé	6,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
Fragile States of West Africa / Strengthening of ecological connectivity in the Tai-Grebo-Sapo region	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
IGAD / Regional Fund for strengthening drought resilience in the Horn of Africa	12,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
IGAD / Regional Fund for strengthening drought resilience in the Horn of Africa	5,300,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Kenya / Support to waste water management at Lake Victoria	9,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Kenya / Drought Resilience in Northern Kenya	8,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Kenya / Food security through Improved Agricultural Productivity in Western Kenya	8,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Kenya / Steam Field Development Bogoria-Silali Block	8,385,585.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Kenya / Small-holder Irrigation Mount Kenya IV	2,750,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Kenya / Support to water and sanitation in peri-urban areas	14,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Kenya / Food Security through Improved Agricultural Productivity in Western Kenya	6,400,000.00		Committed	ODA	Grant	Adaptation	Other (Business and other services)	GIZ
Kenya / Drought Resilience in Northern Kenya	3,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Democratic Republic of the Congo / Programme Sectoriel Eau (PROSECO) V	4,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Democratic Republic of the Congo / Conservation of Biodiversity and Forest Management	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Environmental protection)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Lesotho / Decentralized Rural Development Programme	1,500,000.00		Committed	ODA	Grant	Adaptation	Other (Government and Civil Society)	GIZ
Mali / Small-scale Irrigation	4,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Mali / Small-scale Irrigation	7,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Mali / Small-scale Irrigation	5,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Mali / Support of the national program for sustainable small-scale agricultural irrigation	1,195,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Mali / Support of the national program small-scale irrigation	4,305,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Mauritania / Biodiversity in Mauretania	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Environmental protection)	KfW
Morocco / Integrated Water Resource Management Tensift III	2,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Morocco / Solar Power Plant Ouarzazate II	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Morocco / Establishment of a national competence centre on climate protection and adaptation	2,000,000.00		Committed	ODA	Grant	Mitigation	Cross-cutting	GIZ
Namibia / Labour-based Road Construction VI	7,500,000.00		Committed	ODA	Grant	Adaptation	Transport	KfW
Namibia / Access and Benefit Sharing (ABS) Research and Development Centre	8,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Namibia / Programme for integrated National Park management II	12,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	KfW
Namibia / Biodiversity Management and Climate Change	200,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (Biodiversity)	GIZ
Namibia / Groundwater Research in the North of Namibia	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Nigeria / Clean Cooking On-Lending Company, CCOC	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW
SADC / Malawi-Zambia Transfrontier Conservation Area	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
SADC / Adaptation to Climate Change in Rural Areas	4,000,000.00		Committed	ODA	Grant	Adaptation	Other (Food aid/Food security programmes)	GIZ
South Africa / Climate Protection Programme in Support of the South African Department of Environmental Affairs	8,000,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	GIZ
South Sudan, Republic / Food Security and Agricultural Development	2,875,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Tunisia / Improvement of drinking water supply in Southern Tunisia (Phase II)	2,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Tunisia / Development of the rural area - Integrated water resource management II	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Tunisia / Development of the rural area - Integrated water resource management III	6,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Tunisia / IWRM – Rehabilitation fund for rural water systems	5,000,000.00		Committed	ODA	Grant	Adaptation	Other (Non-agricultural alternative development)	KfW
Tunisia / IWRM – Rehabilitation fund for rural water systems II	1,250,000.00		Committed	ODA	Grant	Adaptation	Other (Non-agricultural alternative development)	KfW
Tunisia / grid-connected photovoltaic systems	8,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Tunisia / grid-connected photovoltaic systems	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Tunisia / Drinking water supply (brackish water desalination) II"	1,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Tunisia / Rural development through integrated water and resources management (IWRM)".	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Tunisia / Promotion of sustainable agriculture and rural development"	2,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Tunisia / market development of decentralised solar energy in Tunisia	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Uganda / Pro-poor Water and Sanitation in Kampala	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Uganda / Global Energy Transfer Feed-in Tariff (GET FiT)	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Uganda / Integrated Programme to Improve Living Conditions (IPLC) in Gulu	6,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Uganda / Grid densification programme to enhance access to electriticy in rural areas	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Uganda / Support to the Water and Sanitation Development Facilities (WSDF) in North and East Uganda II	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Uganda / Hydroelectric Power Plant Muzizi	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Uganda / Rural and Agricultural Finance	4,400,000.00		Committed	ODA	Grant	Adaptation	Other (Banking and financial services)	GIZ
Uganda / Reform of the urban water and sanitation sector	4,650,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Uganda / Promotion of Renewable Energy and Energy Efficiency Programme	7,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Africa / Climate Finance via further technical cooperation contributions	506,771.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations
Africa / Climate Finance via further technical cooperation contributions	17,251,903.00		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations
Africa / Climate Finance via further technical cooperation contributions	3,011,570.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Africa / Climate Finance via further technical cooperation contributions	3,858,500.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Africa / Climate Finance via further technical cooperation contributions	1,135,946.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Africa / Water Infrastructure Solutions from Ecosystem Services to Underpin Climate Resilient Policies and Programmes ('WISE-UP to Climate')	5,313,275.38		Committed	ODA	Grant	Adaptation	Other (Adaptation strategies)	International Union for Conservation of Nature (IUCN)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,327,962.26		Committed	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	35,952.19		Committed	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	210,869.85		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Cross-cutting	Not applicable (BMUB)
Middle East (Arab Center for the Studies of Arid Zones and Dry Lands) / Support for ACSAD in implementing the Convention to Combat Desertification	125,000.00		Committed	ODA	Grant	Adaptation	Other (Environmental protection)	GIZ
Asia regional (ASEAN Centre for Biodiversity) / Biodiversity- based products as economic source for nature conservation and livelihood development	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Environmental protection)	GIZ
Asia regional (ASEAN Centre for Energy) / Renewable Energy Support Programme for ASEAN	3,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Afghanistan / Regional Power Transmission	16,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Afghanistan / Regional Infrastructure Development Fund (RIDF) III	9,000,000.00		Committed	ODA	Grant	Adaptation	Other (Rural Development)	KfW
Afghanistan / Promotion of Renewable Energies in Rural Areas	4,100,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Afghanistan / Diversification of Agriculture in the Province of Baghlan	1,400,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Afghanistan / Improvement of urban drinking water supply and sanitation	3,125,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Albania / Solid Waste Management Program (AM)	1,500,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Albania / Transboundary Biosphere Reserve Prespa	3,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Albania / Municipal Infrastructure V Program	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Albania / Municipal Infrastructure V, Albania (Accomp. Measure)	4,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Armenia / Municipal Infrastructure Programme III	1,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Armenia / Municipal Infrastructure Programme III	3,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Asia regional (ASEAN) / ASEAN Sustainable Agrifood Systems (ASEAN Biocontrol)	3,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Asia regional / Integrated Tiger Habitat Conservation Programme Asia	20,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Southeast Europe regional / European Fund for Southeast Europe (EFSE) II	4,250,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Southeast Europe regional / European Fund for Southeast Europe (EFSE) II	500,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW
Bangladesh / Sundarbans Mangrove Forest Management for Improving Biodiversity Conservation and Adaptation to Climate Change	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (Biodiversity)	GIZ
Bosnia and Herzegovina / Programme for the Enhancement of Hydro Power, Phase II	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bosnia and Herzegovina / Programme for the Enhancement of Hydro Power, Phase III	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bosnia and Herzegovina / Programme for the Enhancement of Hydro Power, Phase III	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bosnia and Herzegovina / Sector Programme Renewable Energy and Energie Efficiency	4,600,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bosnia and Herzegovina / energy efficency	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Cambodia / Regional Ecomomic Development III	2,350,000.00		Committed	ODA	Grant	Adaptation	Other (Rural Development)	GIZ
Caucasus / Caucasus Protected Areas Trust Fund (CPAF)	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (Biodiversity)	KfW
Caucasus / Sustainable resource management	1,500,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (Biodiversity)	GIZ
Caucasus / Integrated erosion protection in extremely endangered mountain areas	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (Biodiversity)	GIZ
Central and Eastern European Countries / Open Regional Fund Modernisation municipal services	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (Urban development)	GIZ
Central and Eastern European Countries / Offener Regionalfonds Energieeffizienz	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Central Asia regional / Study and Expert Fund Centralasia	3,500,000.00		Committed	ODA	Grant	Adaptation	Other (Sectors not specified)	GIZ
Central Asia reginal / Programme Professional Education and Training in Central Asia	4,000,000.00		Committed	ODA	Grant	Adaptation	Other (Education)	GIZ
China / Training of key stakeholders for climate protection in the housing sector	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Commonwealth of Independent States / Capacity Development for Climate Policies in the Western Balcans, CEE and Central Asia	6,450,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Georgia / rural water supply and sanitation Adjara	2,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Georgia / development of the power grid Georgia	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Georgia / Municipal Infrastructure Programm	3,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Georgia / Municipal Infrastructure Programme (Accomp. Measure)	1,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Georgia / Agricultural financing	2,500,000.00		Committed	ODA	Grant	Adaptation	Other (Banking and financial services)	KfW
India / Promotional Programme for Energy Efficient New Residential HousingII (NHB)/Förderung von energieeffizienten Gebäuden	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
India / Green Energy Corridors	20,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
India / Climate-Friendly Urban Mobility	21,000,000.00		Committed	ODA	Grant	Mitigation	Transport	KfW
India / Adaptation to Climate Change in Himachal Pradesh	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (Biodiversity)	KfW
India / Environmentally friendly Urban Development	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
India / Himalaya Hydropower Programme (HPPCL)/Wasserkraft im Himalaya (z.B. HPPCL)	19,500,000.00		Committed	ODA		Mitigation	Energy	KfW
India / Support to the National Urban Sanitation Policy, Phase II	4,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	GIZ
India / Sustainable Supply Chains for Perishables into Cities (Green Logistics)	1,500,000.00		Committed	ODA	Grant	Mitigation	Other (Environmental protection)	GIZ
India / Innovation in Small and Medium Enterprises	1,500,000.00		Committed	ODA	Grant	Mitigation	Other (Business and other services)	GIZ
India / Land Use Planning and Management	3,200,000.00		Committed	ODA	Grant	Cross-cutting	Other (Rural Development)	GIZ
India / Inclusive Cities Partnership (IGICP)	3,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (Urban development)	GIZ
India / Strenghtening Quality Infrastructure for the Solar Industry in India	1,800,000.00		Committed	ODA	Grant	Mitigation	Industry	GIZ
India / Green Energy Corridor	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
India / Financing Programme on Research Cooperation in Innovative Climate Technology	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Indonesia / Forestry Program III (Sulawesi)	7,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Indonesia / Good local Governance - Mitigation of Geo Risk	250,000.00		Committed	ODA	Grant	Adaptation	Other (Government and Civil Society)	GIZ
Indonesia / Urban Transport Improvement Project (SUTIP)	2,000,000.00		Committed	ODA	Grant	Mitigation	Transport	GIZ
Indonesia / Policy Advice on Environment and Climate Change (PAKLIM)	5,800,000.00		Committed	ODA	Grant	Cross-cutting		GIZ
Indonesia / Forest and climate change (FORCLIME)	7,300,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Forestry	GIZ
Indonesia / Sustainable Regional Economic Growth and Investment Program (SREGIP)	4,400,000.00		Committed	ODA	Grant	Cross-cutting	Industry	GIZ
Indonesia / Low Emissions Oil Palm Development in Berau District, East Kalimantan, Indonesia	125,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Indonesia / Support to the Indonesia Climate Change Trust Fund (ICCTF): Enhancing governance of climate finance in Indonesia	3,500,000.00		Committed	ODA	Grant	Mitigation	Other (Innovative finance instruments)	GIZ
Indonesia / Locally appropriate mitigation actions in Indonesia (LAMA-I): strengthening district-level capacity for reducing land-based emissions and greening of economy within RAD-GRK (NAMA) policy coordinated by National Planning and Development Agency	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (REDD+/Bio diversity)	GIZ
Jordan / Sanitation Programme: Nexus and Resource Protection	10,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Jordan / Water resources protection in land use planning	450,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Jordan / Support to Jordanian communities in response to the Syrian refugee crisis through Water Wise Plumbers	775,000.00		Committed	ODA	Grant	Adaptation	Other (Conflict prevention and resolution, peace and security)	GIZ
Cambodia / Economic Infrastructure Programme to Sustain Land Reform Implementation	4,500,000.00		Committed	ODA	Grant	Adaptation	Transport	KfW
Cambodia / Rural Infrastructure Programme (RIP IV)	1,000,000.00		Committed	ODA	Grant	Adaptation	Transport	KfW
Kosovo / Development of the Enery Sector VI - Improvement of Transmission Network	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Kosovo / Modernization of Municipal Services	1,000,000.00		Committed	ODA	Grant	Mitigation	Other (Government and Civil Society)	GIZ
Kyrgyzstan / Funds for projects in collaboration with civil society in rural regions	1,500,000.00		Committed	ODA	Grant	Adaptation	Other (Rural Development)	GIZ
Kyrgyzstan / Promotion of Sustainable Economic Development Programme	2,300,000.00		Committed	ODA	Grant	Mitigation	Other (Government and Civil Society)	GIZ
Mekong River Commission / Pro-poor sustainable hydropower development	400,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Mekong River Commission / Support to the MRC Initiative on Sustainable Hydropower, Phase II	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Middle East and south-western Asia / Adaptation to Climate Change in the Water Sector	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Middle East and south-western Asia / Human Capacity Development - Protect of Water Resources	600,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Moldava / Promotion of social infrastructure	2,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (OTHER SOCIAL INFRASTRUCTURE AND SERVICES)	KfW
Moldava / Rehabilitation of drinkable and waste water systems	5,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Moldava / Modernization of local public services	1,000,000.00		Committed	ODA	Grant	Mitigation	Other (Urban development)	GIZ
Pakistan / Medium - Sized Hydro Power Projects KPP	18,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

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	Climate-specific [f]							
	European euro - EUR	*USD*						
Pakistan / Infrastructurfonds Malakand	5,000,000.00		Committed	ODA	Grant	Adaptation	Other (Conflict prevention and resolution, peace and security)	KfW
Pakistan / Renewable Energy and Energy Effienciy Promotion	3,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Palestinian territories / Water Supply Jerusalem Water Undertaking II	4,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Palestinian territories / Wastewater Treatment Nablus Ost	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Palestinian territories / Water Programme for the Palestinian Territories	1,950,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Philippines / reconstruction aid after typhoon Haiyan	6,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Philippines / Prgram sustainable management of natural resources II	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Environmental protection)	GIZ
Philippines / Indigenous Practices for Conservation of Biodiversity	4,250,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
Asia Pacific (Secretariate of the Pacific Community (SPC)) / Managing the impact of climate change on land ressources in the Pacific	750,000.00		Committed	ODA	Grant	Cross-cutting	Other (Environmental policy and administrative management)	GIZ
Serbia / Development of the Financial sector in rural areas	250,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW
Serbia / Windpower Development Programme, Accompanying Measures	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Renewable Energy Project Kostolac	12,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Hydropower Development Programme	12,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Water Supply and Wastewater Treatment in Medium-Sized Municipalities in Serbia VI	1,250,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Serbia / Water Supply and Wastewater Programme in Medium-Sized Municipalities in Serbia VI	2,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Serbia / Energy Efficiency	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Thailand / Water management pilot project: improved management of extreme events through ecosystem-based adaptation in watersheds	2,800,000.00		Committed	ODA	Grant	Adaptation		GIZ
Thailand / Support to the Strategic Alignment and Implementation of Climate Change Policy in Thailand	2,800,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	GIZ
Turkey / Promotion of grid-connected renewables in Turkey	2,099,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Ukraine / EE-refinancing for Ukrainian SME via the financial sector GUF IV	2,000,000.00		Committed	ODA	Grant	Mitigation	Other (Banking and financial services)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

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	Climate-specific [f]							
	European euro - EUR	*USD*						
Ukraine / Support of Nature Protected Areas in Ukraine	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Ukraine / Municipal Climate Protection Program	3,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Ukraine / Municipal Development and Rehabilitation of Historic City of Lviv	750,000.00		Committed	ODA	Grant	Mitigation	Other (Urban development)	GIZ
Viet Nam / Program Urban Development / Sanitation	6,500,000.00		Committed	ODA	Concessional Loan	Adaptation	Water and sanitation	KfW
Viet Nam / Integrated Coastal and Mangrove Forest Protection in Mekong Provinces for Adaption to Climate Change	1,400,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (Urban development)	GIZ
Viet Nam / Program Sanitation/Urban Development	3,500,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	GIZ
Viet Nam / Program Biodiversity Advisory	4,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
Viet Nam / Renewable energy, energy efficiency	3,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Viet Nam / Improvement of Groundwater Protection	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Viet Nam / Program Macroeconomic Reforms/Green Growth	6,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (Government and Civil Society)	GIZ
Viet Nam / Integrative Protection and Management of Natural Resources in Phong Na-Ke Bang Region	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	GIZ
Viet Nam / Analysis of the potential for growing energy crops on contaminated sites and brownfields in Viet Nam	120,000.00		Committed	ODA	Grant	Mitigation	Energy	Unabhängiges Institut für Umweltfragen e.V. (UfU)
Yemen / Institutional Development of the Water Sector	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Yemen / Programm Institutionelle Entwicklung des Wassersektors	5,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	2,313,171.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	12,958,495.00		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	5,418,376.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	50,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	3,694,515.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	1,788,400.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	3,867,580.02		Committed	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	5,837,269.24		Committed	ODA	Grant	Other (Others: REDD+/Biodiversity (Cross-cutting))	Cross-cutting	Not applicable (BMUB)
America regional / Study and Expert Fund	3,738,500.00		Committed	ODA	Grant	Mitigation	Cross-cutting	GIZ
America regional / Biosphere reservations in Dom. REp. and Haiti	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (Biodiversity)	GIZ
America regional / regional cooperation for sustainable design of coal mining	1,250,000.00		Committed	ODA	Grant	Mitigation	Other (MINERAL RESOURCES AND MINING)	GIZ
Central America (BCIE) / Water supply and sanitation II	13,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Bolivia / Basic Sanitation in Suburban Areas	7,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Bolivia / Water and Sanitation	2,150,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Bolivia / Agricultural Development Program	5,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Brazil / Environmental Rural Land Register (CAR)	10,000,000.00		Committed	ODA	Grant	Other (Others: REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Brazil / Accompanying Measure for the Energy Efficiency Program CAIXA	4,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Brazil / Sustainable forest management in the Amazon Region	8,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Brazil / Municipal Environmental Protection Programme	8,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Brazil / Indigenous Areas (FUNAI)	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Government and Civil Society)	KfW
Brazil / Transition Fund ARPA for LIFE - 2	7,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Brazil / Study and Expert Funds	1,000,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	GIZ
Brazil / Renewable Energy and Energyefficiency	4,000,000.00		Provided	ODA	Grant	Mitigation	Energy	GIZ
Brazil / Protection and Management of Indigenous Lands	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Government and Civil Society)	GIZ
Brazil / Energy Efficiency and Urban Mobility	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Brazil / Energy Efficiency in Urban Water Supply	2,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Brazil / Innovations for Sustainable Development - New Partnerships	2,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Research/scientific institutions)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Brazil / Programme of trilateral cooperation	1,000,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	GIZ
Brazil / Strenghtening Quality Infrastructure for Renewable Energies and Energy Efficiency	500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Brazil / Environmental Rural Land Register in Amazonia - CAR	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Environmental protection)	GIZ
Brazil / Green Market for Socio-Biodiversity Products	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Environmental protection)	GIZ
Brazil / Land Tenure Regulation in Amazonia - Terra Legal	2,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (Rural Development)	GIZ
Brazil / Sustainable Economic Development in Amazonia focusing on Socio-Biodiversity	1,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Environmental protection)	GIZ
Brazil / Integrated Modeling of the Land Use, Water and Energy Nexus of Brazilian Biofuels Programs	1,048,577.49		Committed	ODA	Grant	Adaptation	Other (Ecosystem-based Adaptation)	Fundação Coordenação de Projetos, Pesquisas e Estudos Tecnológicos COPPETEC
Latin America (Development Bank of Latin America, CAF) / Climate Program CAF, Phase I	11,000,000.00		Committed	ODA	Grant	Mitigation	Cross-cutting	KfW
Latin America (Development Bank of Latin America, CAF) / Regional Programme Environment and Clima in the Water Sector	10,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
The Carribean (Carribean Community Secretariat, CARICOM) / Support of institutional structures for developing renewable energies and energy efficiency in Caribbean	520,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Latin America / The Carribean (ECLAC/ CEPAL) / Structural change for sustainable development and inclusion in Latin America and the Carribean	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Ecuador / Biodiversity, climate change and sustainable development	1,715,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Biodiversity)	GIZ
El Salvador / Urban climate adaptation in Central America	11,000,000.00		Committed	ODA	Grant	Adaptation	Other (Environmental protection)	KfW
Fondo Indígena (FI) / Indigenous environmental management in Central America	7,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Guatemala / Study and Expert Funds	30,000.00		Committed	ODA	Grant	Adaptation	Cross-cutting	GIZ
Haiti / Rehabilitation of the hydropower station Péligre	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Mexico / Forest investment project	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Mexico / Support of energy efficiency of small and medium-sized enterprises (SME)	8,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Mexico / New markets for renewable energies	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Mexico / Sustainable Energy Program	1,460,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Mexico / Preservation of biodiversity in speciose regions outside of protected areas	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Biodiversity)	GIZ
Mexico / Biogas	5,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Mexico / Urban-industrial environmental management	3,500,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Latin America /The Carribean (Organization of American States) / Regional fund quality infrastructure for biodiversity and climate protection in Latin America and the Caribbean	2,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Environmental protection)	GIZ
Peru / Complementary Measure to the Water Treatment Program in Provincial Cities	1,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Peru / Sustainable Financing of the Protected Area System in Peru	20,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (Biodiversity)	KfW
Peru / Integrated Waste Management Program	8,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Peru / Sustainable use and conservation of natural ressources (ProAmbiete)	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Biodiversity)	GIZ
Peru / Integrated Climate Change Management in Communal Reserves in the Amazon Rainforest	6,000,000.00		Committed	ODA	Grant	Adaptation	Other (Adaptation strategies)	UNDP
Central America (Central American Integration System, SICA) / Agrobiodiversity in Central America	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (Biodiversity)	KfW
Central America (Central American Integration System, SICA) / Regional planning and sustainable development in Central America	122,500.00		Committed	ODA	Grant	Adaptation	Other (Government and Civil Society)	GIZ
Central America (Central American Integration System, SICA) / Renewable energy and energy efficiency II	7,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Central America (Central American Integration System, SICA) / Reducing emissions from deforestation and forest degradation in Cnetral America and Dominican Republic II	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (Biodiversity)	GIZ
Latin America / Unlocking Forest Finance - Mobilisation of private sector capital to reduce deforestation through Public/Private Partnerships for forests and rural livelihoods.	3,722,247.57		Committed	ODA	Grant	Other (Others: REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	Global Canopy Programm
Latin America / Compensation payments for resource and landscape management conducive to carbon storage	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	GIZ
Latin America / Ambition leaders: Support for AILAC countries in the UNFCCC negotiations	2,488,534.78		Committed	ODA	Grant	Adaptation	Cross-cutting	Consorcio de Investigación Económica y Social - CIES
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	4,897,075.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	10,997,242.00		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	2,554,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	5,348,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	2,143,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	3,415,583.40		Committed	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,873,669.00		Committed	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	12,728,155.95		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Cross-cutting	Not applicable (BMUB)
Global / KMU Fonds for nature protection relevant private investment	15,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Biodiversity)	KfW
Global / Agriculture trade	60,000.00		Committed	ODA	Grant	Adaptation	Other (Trade policy and regulations)	GIZ
Global / Ozone Fund (German Ozone Protection Advisory and Investmentfund)	2,400,000.00		Committed	ODA	Grant	Mitigation	Other (Biodiversity)	GIZ
Global / Education for Sustainable Development: India, Mexico, South Africa and Gemany	125,000.00		Committed	ODA	Grant	Mitigation	Other (Education policy and administrative management)	GIZ
Global / Federal government - federal state - program	120,000.00		Committed	ODA	Grant	Cross-cutting	Other (Education policy and administrative management)	GIZ
Global / HERA	300,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Renewables and International Energy Policy	5,800,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / AGORA - Acting Together Now for Pro-poor Strategies Against Soil and Land Degradation	9,400,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / AGORA - Acting Together Now for Pro-poor Strategies Against Soil and Land Degradation	1,200,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / promotion of the quality infrastructure - sectoral, national, regional	2,050,000.00		Committed	ODA	Grant	Adaptation	Other (Trade policy and regulations)	GIZ
Global / Promotion of sustainable fisheries und aquaculture	100,000.00		Committed	ODA	Grant	Adaptation	Other (Fishing policy and administrative management)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Global Initiative for disaster risk management	2,000,000.00		Committed	ODA	Grant	Adaptation	Other (Disaster prevention and preparedness)	GIZ
Global / Energizing Development (EnDev)	1,800,000.00		Committed	ODA	Grant	Cross-cutting	Energy	GIZ
Global / Innovative Approaches for Private Sector Development	2,575,000.00		Committed	ODA	Grant	Cross-cutting	Other (Business and other services)	GIZ
Global / International Waterpolicy and Infrastructure	700,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Global / Climate Protection Programme for Developing Countries	300,000.00		Committed	ODA	Grant	Cross-cutting	Other (Environmental protection)	GIZ
Global / Recycling Partnership	150,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Global / Migration for Development	5,000,000.00		Committed	ODA	Grant	Adaptation	Cross-cutting	GIZ
Global / Powering Agriculture	4,400,000.00		Committed	ODA	Grant	Mitigation	Other (Sectors not specified)	GIZ
Global / Tourism and sustainable development	925,000.00		Committed	ODA	Grant	Mitigation	Other (TOURISM)	GIZ
Global / Metropol areas	250,000.00		Committed	ODA	Grant	Cross-cutting	Other (Urban development)	GIZ
Global / standards of sustainability	3,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (Business and other services)	GIZ
Global / policy advice for sustainable hydro power	185,000.00		Committed	ODA	Grant	Cross-cutting	Energy	GIZ
Global / Urban development policy advice	3,210,000.00		Committed	ODA	Grant	Cross-cutting	Other (Urban development)	GIZ
Global / program for agricultural policy and food security	2,550,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Programme for Sustainability and Standards in Global Supply Chains	1,725,000.00		Committed	ODA	Grant	Mitigation	Other (Trade policy and regulations)	GIZ
Global / Sustainable Resource Use in Agriculture	2,422,500.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / PROKLIMA - Substitution of ozone depleting substances	1,930,000.00		Committed	ODA	Grant	Mitigation	Other (Biodiversity)	GIZ
Global / Transport Policy Advisory Services	1,000,000.00		Committed	ODA	Grant	Mitigation	Transport	GIZ
Global / Sustainable Economic Development	1,400,000.00		Committed	ODA	Grant	Cross-cutting	Other (Business and other services)	GIZ
Global / Urban Development	1,300,000.00		Committed	ODA	Grant	Adaptation	Other (Urban development)	GIZ
Global / Strengthening of capacities of agricultural research by sending Integrated Experts	1,800,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Convention Project to Combat Desertification	380,000.00		Committed	ODA	Grant	Cross-cutting	Agriculture	GIZ
Global / International Forest Policy (IWP)	2,150,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Forestry	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Implementation oft he Convention on Biological Diversity	1,400,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (Biodiversity)	GIZ
Global / Environmental Politics and Sustainable Devolpment	250,000.00		Committed	ODA	Grant	Adaptation	Other (Environmental protection)	GIZ
Global / innovative appraoches in financial systems development	550,000.00		Committed	ODA	Grant	Cross-cutting	Other (Banking and financial services)	GIZ
Global / sector project "technology cooperation in the energy sector"	5,745,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Climate Finance via further technical cooperation contributions	2,737,550.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Global / Climate Finance via further technical cooperation contributions	348,959.00		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Global / Climate Finance via further technical cooperation contributions	1,900,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations
Global / Climate Finance via further technical cooperation contributions	300,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations
Global / National Forest Monitoring and Information Systems for a transparent and truthful REDD+	3,999,996.60		Committed	ODA	Grant	Other (REDD+/Biodiversity (cross-cutting))	Other (REDD+/Biodiversity)	FAO
Global / Empowering LDCs and SIDS Leadership for High Level Negotiations on Climate Change	2,040,516.16		Committed	ODA	Grant	Adaptation	Cross-cutting	Climate Analytics
Global / Global Climate Protection Fund	10,000,000.00		Committed	ODA	Grant	Mitigation	Other (Innovative finance instruments)	KfW
Global / Facility for Environmentally-Friendly Transport Technology and Measures (TRANSfer)	5,500,001.04		Committed	ODA	Grant	Mitigation	Transport	GIZ
Global / Mitigation Action Implementation Network (MAIN): Implementing Ambitious NAMAs in Latin America and Asia - Phase II	1,900,002.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Center for Clean Air Policy (CCAP)
Global / International Climate Policy Dialogue	150,055.17		Committed	ODA	Grant	Mitigation	Cross-cutting	Center for Climate and Energy Solutions
Global / Information Matters: Capacity Building for Ambitious Reporting and Facilitation of International Mutual Learning through Peer-to-Peer Exchange	3,200,000.00		Committed	ODA	Grant	Mitigation	Other (MRV (Measurement, Reporting and Verification))	GIZ
/ Global Emissions Report	918,125.50		Committed	ODA	Grant	Mitigation	Cross-cutting	UNEP
Global / Promotion of sustainable supply and utilisation of bioenergy in agriculture and forestry in the Russian Federation and Ukraine	799,997.00		Committed	ODA	Grant	Mitigation	Energy	Fachagentur Nachwachsende Rohstoffe e.V.
Global / Support project "long term climate finance"	1,120,963.73		Committed	ODA	Grant	Mitigation	Cross-cutting	GIZ
Global / Support project "long term climate finance"	273,964.44		Committed	ODA	Grant	Adaptation	Cross-cutting	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Support project "long term climate finance"	605,071.84		Committed	ODA	Grant	Other (REDD+/Bio diversity (cross-cutting))	Cross-cutting	GIZ
Global / Support project CoP 20	156,934.92		Committed	ODA	Grant	Mitigation	Cross-cutting	GIZ
Global / Support project CoP 21	38,355.02		Committed	ODA	Grant	Adaptation	Cross-cutting	GIZ
Global / Support project CoP 22	84,710.06		Committed	ODA	Grant	Other (REDD+/Bio diversity (cross-cutting))	Cross-cutting	GIZ
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,000,000.00		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	8,644,074.83		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	129,393,715.45		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	20,228,961.14		Provided	ODA	Grant	Other (REDD+/Bio diversity (cross-cutting))	Cross-cutting	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,462,288.78		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	357,384.55		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	789,311.67		Provided	ODA	Grant	Other (REDD+/Bio diversity (cross-cutting))	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	39,156,833.25		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,256,292.89		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund' / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	20,274,682.97		Provided	ODA	Grant	Other (REDD+/Bio diversity (cross-cutting))	Cross-cutting	Not applicable (BMUB)

Abbreviations: ODA = official development assistance, OOF = other official flows; USD = United States dollars.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should report, to the extent possible, on details contained in this table.

[c] Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

[d] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

[e] Parties should report, as appropriate, on project details and the implementing agency.

[f] Parties should explain in their biennial reports how they define funds as being climate-specific.

[g] Please specify.

[h] Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Total contributions through bilateral, regional and other channels	1,882,307,747.24							
Algeria / Environmental governance and biodiversity	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Algeria / Waste and circular-flow economy	1,500,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Benin / Rehabilitation of the hydroelectric station Nangbeto in context of the West African Power Pool (WAPP)	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Benin / Trust fund Parc Nat. Pendjari	4,450,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	KfW
Burkina Faso / Promotion of the professional Warrantage	4,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Burkina Faso / Small-scale irrigation in the area West	4,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Burkina Faso / Programme agricultural development	3,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Burkina Faso / Programme of drinking water and sanitary in Boucle du Mouhoun, Hauts Bassin and South-West	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
COMIFAC / Programme for sustainable forest management in the Congo-Basin, support of the cross border Nationalparc BSB Yamoussa	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Comisión Trinacional del Plan Trifinio (CTPT) / Tropical forest protection and administration of catchment area in the region Trifinio	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Côte d'Ivoire / Preservation of the Comoe-Nationalparc	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Côte d'Ivoire / WAPP - Transmission lines Ghana- Ivory Coast	30,000,000.00		Committed	ODA	Grant	Cross-cutting	Energy	KfW
Côte d'Ivoire / Development of the nature areas and economic areas Tai and Comoe	8,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Egypt / Joint Integrated Sector Approach for Irrigation and Drainage (JISA) TA	1,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Egypt / Joint Integrated Sector Approach for Irrigation and Drainage (JISA) Inv.	9,250,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Egypt / National Solid Waste Management Programme (NSWMP) / Accompanying Measures Phase 2	1,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Egypt / National Solid Waste Management Programme (NSWMP) Phase II	6,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Egypt / Promotion of Small and Medium Enterprises	2,000,000.00		Committed	ODA	Grant	Mitigation	Industry	GIZ
Egypt / Water Management Reform Programme	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Egypt / Water and Wastewater Management Programme (WWMP)	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Egypt / Egyptian-German High Level Joint Committee on Renewable Energy, Energy Efficiency and Environmental Protection (JCEE)	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Egypt / Wind Energy Training Center	7,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Ethiopia / Conservation and sustainable managment of biodiversity	22,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Agriculture	KfW
Ethiopia / Sustainable Land Management	9,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Ethiopia / Sustainable Land Management - SLM	8,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Ethiopia / Biodiversity - Protection of the natural ressources	5,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Ethiopia / Strengthening Drought Resilience of Pastoral and Agro-Pastoral Livelihoods in Ethiopian ASAL.	5,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
IGAD / Strengthening of capacities of IGAD for increase of drought resilience	700,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Kenya / Development of the Health Sector	250,000.00		Committed	ODA	Grant	Adaptation	Other (Health)	GIZ
Kenya / Water Sector Reform Programme	250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Kongo, Democratic Republic / Programme Sectoriel Eau (PROSECO) V	7,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Kongo, Democratic Republic / Conservation of Biodiversity and Forest Management	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Lake Chad Basin Commission (LCBC) / Organizational consulting Lake Chad Basin Commission (GIZ)	1,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Lake Chad Basin Commission (LCBC) / Organizational consulting Lake Chad Basin Commission (BGR)	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	BGR
Liberia / Westafrican energy network WAPP - transmission line Ivory Coast - Liberia - Sierro Leone - Guinea (CLSG) II	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Liberia / Mount Coffee Hydro Powerplant – Rehabilitation in the context of the West African Power Pool (WAPP) II	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Liberia / Capacity Development in the Transport Sector	1,500,000.00		Committed	ODA	Grant	Adaptation	Transport	GIZ
Madagascar / Investment in the foundation for nature reserve II Madagaskar (FAPBM)	10,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	KfW
Madagascar / Programme erosion protection IV (PLAE IV)	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Agriculture	KfW
Madagascar / Investment Fund National Parc Madagaskar III (MNP III)	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Madagascar / Investment Fund National Parc Madagaskar IV (MNP IV)	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Madagascar / Programme protection and sustainable use natural ressources	12,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Madagascar / Promotion of rural electrification by renewable energy	3,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Malawi / More employment and income in rural areas	2,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Mali / Support of the national programme for sustainable agriculture of small-scale irrigation	11,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Mali / National programme for development of the water sector (incl. Consulting of the management Nationale de l'Hydraulique)	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Mauritania / Environmental policy, resource protection, fisheries monitoring policy V	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (FISHING)	KfW
Mauritania / Natural Resources Management Programme	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Morocco / Programme Energy Efficiency II	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Morocco / Programme Energy Efficiency (AM)	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Morocco / Integrated Water resource management Tensift V	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Morocco / Integrated Water resource management Tensift I (AM)	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Morocco / PMH III	500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Morocco / Programme Noor-Atlas	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Morocco / Solar system Noor Midelt	25,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Morocco / Integrated management of water resources	700,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	GIZ
Morocco / Renewable Energy and Energy Efficiency Promotion in Morocco	150,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Morocco / Adaptation to climate change	250,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Morocco / Environmental Program	4,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Morocco / Industrial development and technology transfer in the solar sector	6,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Morocco / Employment Promotion by energy efficincy and renewable energy in mosques	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Mozambique / accompanying measure in support of municipalities	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL)	KfW
Mozambique / Contribution to the Foundation for Conservation and Biodiversity (BIOFUND)	6,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Mozambique / EDM Power Network Modernisation Programme	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Mozambique / Decentralised Infrastructure (PRODIA II)	5,500,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL)	KfW
Mozambique / Limpopo National Park as Integral Component of the Transfrontier Conservation Area Great Limpopo Park Mozambique	14,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Mozambique / Adaptation to Climate Change	2,500,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	GIZ
Niger / Programme rural development and productive agriculture - food-safetey and small-scale irrigation (PISA)	13,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Niger / Programme for rural development and productive agriculture	6,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
SADC / Transnational nature reserve Great Limpopo Parc VI	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
/ Cross-Border use and protection of natural resources in the SADC region	8,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Sierra Leone / Employment promotion of youth by rural development	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (OTHER SOCIAL INFRASTRUCTURE AND SERVICES)	GIZ
Somalia / Sustainable Road Management in Somalia	1,500,000.00		Committed	ODA	Grant	Adaptation	Transport	GIZ
South Africa / Energy efficient housing - fiduciary holding: International Housing Solutions	15,000,000.00		Committed	ODA	Grant	Mitigation	Other (OTHER SOCIAL INFRASTRUCTURE AND SERVICES)	KfW
South Africa / Renewable Energies Programme - Small IPP Support Programme	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
South Africa / Preparation of the Inga 3 Low Head Transmission Project	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
South Africa / Skills Development for Climate and Environment Business	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (EDUCATION)	GIZ
South Africa / South African-German Energy Programme - SAGEN	12,200,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Tanzania / Sustainable Management of the wild nature reserve Selous	10,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Tanzania / Programme Sustainable Management of Natural Ressources	1,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Togo / Rural development and agriculture	6,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Togo / Rehabilitation of the hydroelectric station Nangbeto in context of the West African Power Pool (WAPP)	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Togo / Development rural and agriculture II	2,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Tunisia / Renovation of sewage plants I and II	10,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Tunisia / Programme rural development (IWRM II) - AM	22,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Tunisia / Programme rural development III (IWRM)	3,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Tunisia / Development of rural regions - integrated water resource management	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Tunisia / Promotion of sustainable agriculture and rural development in Tunisia	1,250,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Tunisia / Support of quality assurance of photovoltaics	500,000.00		Committed	ODA	Grant	Mitigation	Industry	GIZ
Tunisia / Initiative of agricultural value chain	1,000,000.00		Committed	ODA	Grant	Mitigation	Agriculture	GIZ
Zambia / Sustainable Access to Electricity in Southern Division	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Zambia / Rehabilitation and Extension of the Hydropower Station Chishimba Falls	11,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Zambia / Strengthening Local Governance in Zambia III	12,000,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL)	KfW
Zambia / Support of Zambian TFCA	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Zambia / Water Sector Reform (WSRP)	250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Zambia / Groundwater Information System and Management Program	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Zambia / Water Sector Reform (WSRP)	2,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Zimbabwe / Promotion of food security and agriculture	750,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Zimbabwe / Municipal watersupply and sanitation	2,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Africa / Climate Finance via further technical cooperation contributions	1,257,667.50		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations (BMZ)
Africa / Climate Finance via further technical cooperation contributions	29,207,849.50		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations (BMZ)
Africa / Climate Finance via further technical cooperation contributions	2,206,978.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Africa / Climate Finance via further technical cooperation contributions	1,230,909.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Africa / Climate Finance via further technical cooperation contributions	346,763.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,768,554.78		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	20,380,024.84		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMZ)

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	394,999.87		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	826,711.30		Provided	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (REDD+/Biodiversity)	Not applicable (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	780,463.22		Provided	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Not applicable (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,099,565.71		Provided	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	Not applicable (BMZ)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	23,983,399.73		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	32,809.65		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Africa / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,873,266.45		Provided	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Cross-cutting	Not applicable (BMUB)
Africa / Disbursements for 'Regional Science Service Center for climate adaptation and land use'	13,500,000.00		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMBF)
Africa regional / Support to the Platform for Agricultural Risk Management (PARM)	2,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Africa regional / Support of AU-Watermanagement (AWCOW)	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Africa regional / Pan-african University (PAU)	5,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (EDUCATION)	GIZ
Africa regional / Competitive African Value Chains for Pro-Poor Growth	2,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Africa regional / Promotion of the cotton economy in Sub-Saharan Africa	1,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Africa regional / MENA - Regional Cooperation in the water sector, Phase II (OSS II)	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
/ Cooperation Regionale pour une Gestion Durable des Ressourcen en Eau au Maghreb (CREM)	750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Africa regional / Promotion of the african value chain for rice	1,200,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Africa regional / Strengthening of Municipal Structures, Maghreb	2,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Africa regional / Catalyzing Forest and Landscape Rehabilitation for Climate Resilience and Biodiversity Conservation in East Africa	1,517,263.18		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	Clinton Foundation - Clinton Climate Initiative
Africa regional / Development of integrated monitoring systems for REDD+ in the SADC Region	392,712.01		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	GIZ
ACB - ASEAN Center for Biodiversity / Institutional Strengthening of the Biodiversity Sector in ASEAN	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Afghanistan / Regional Power Transmission	8,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Afghanistan / Promotion of Renewable Energies in Rural Areas	3,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Afghanistan / Private Sector Development and Employment Promotion in Afghanistan	8,000,000.00		Committed	ODA	Grant	Adaptation	Other (BUSINESS AND OTHER SERVICES)	GIZ
Afghanistan / Improvement of urban drinking water supply and sanitation	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Albania / Solid Waste Management Programme (AM)	1,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Albania / Municipal infrastructure V programme	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Albania / Sector Programme Water (Rural Areas) IV (accompanying measures)	1,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Albania / Sector Programme Water (Rural Areas) IV (accompanying measures)	1,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Albania / 110kV Circuit Line South Albania (AM)	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Albania / Protection of biodiversity in rural areas of Albania	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Albania / Integrated sustainable development of coastal area	500,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Armenia / Integrated Water Resources Management Akhouryan River	10,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Armenia / Integrated Water Resources Management Akhouryan River Ph.2	2,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Armenia / Caucasus- Energy System III	13,500,000.00		Committed	ODA	Grant	Cross-cutting	Energy	KfW
Armenia / Rehabilitation municipal Infrastructure II, Ph. 3 (AM)	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Armenia / House financing IV	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Armenia / House financing IV (AM)	500,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
ASEAN / Forestry and Climate Change (FOR-CC)	4,800,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
ASEAN / Energy Efficiency and Climate Change Mitigation in the Land Transport Sector of the ASEAN Region	3,500,000.00		Committed	ODA	Grant	Mitigation	Transport	GIZ
Asia regional / Conservation of Biodiversity in the Kailash-Region (PN 2011.2228.2)	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Asia regional / Improving of Landmanagement in the Mekong Region	1,750,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Asia regional / Support to ASEAN Supreme Audit Institutions (ASEANSAI)	2,000,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Asia regional / Political dialogue and knowledge management on low emission strategies in the MENA region	3,900,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Asia regional / Enabling ecosystem based (EBA) adaptation in Melanesia and Micronesia	3,921,560.67		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	The Nature Conservancy (TNC) - Federated States of Micronesia
Asia regional / Natural Solutions to Climate Change in the Pacific Islands Region: Implementing Ecosystem-based adaptation	4,945,625.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	Secretariat of the Pacific Regional Environment Programme (SPREP) - Samoa
Bangladesh / Efficiency Improvement in the grid-based Power Supply System (BM)	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bangladesh / Efficiency Improvement in the grid-based Power Supply System	13,750,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Bangladesh / Climate Change Adapted Urban Development Programme in Bangladesh	20,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	KfW
Bangladesh / Promotion of Social and Environmental Standards in the Industry	200,000.00		Committed	ODA	Grant	Mitigation	Other (BUSINESS AND OTHER SERVICES)	GIZ
Bangladesh / Renewable Energy and Energy Efficiency Programme	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Bangladesh / Climate Adaptation in Cities	5,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Bangladesh / Renewable Energy and Energy Efficiency Programme	6,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Bangladesh / Promotion of Social and Environmental Standards in the Industry	3,000,000.00		Committed	ODA	Grant	Mitigation	Other (BUSINESS AND OTHER SERVICES)	GIZ
Bosnia and Herzegovina / Removal of the consequences of the flood disaster	2,500,000.00		Committed	ODA	Grant	Adaptation	Other (OTHER SOCIAL INFRASTRUCTURE AND SERVICES)	KfW
Bosnia and Herzegovina / Programme for developing the hydro power V	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Caucasus / Caucasus Nature Fund (CNF) - Endowment Fund III	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Caucasus / Transboundary Joint Secretariat (TJS III)	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Caucasus / study and expert fund	650,000.00		Committed	ODA	Grant	Adaptation	Other (study and expert fund)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Caucasus / Study and Expert Fund - Human Capacity Consolidation for the countries Armenia, Azerbaijan, Georgia	1,455,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Caucasus / Integrated erosion protection in extremely endangered mountain areas	1,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Caucasus / Private Sector Development in South Caucasus	1,145,000.00		Committed	ODA	Grant	Adaptation	Other (BUSINESS AND OTHER SERVICES)	GIZ
Central and Eastern European Countries / European Fund for South East Europe (EFSE) - Extension Ukraine	7,500,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Central and Eastern European Countries / Open Regional Fund Modernisation municipal services	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Central and Eastern European Countries / GVO-free quality soya from the Danube Region	1,250,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Central and Eastern European Countries / Protection and sustainable , fair use of biodiversity in the catchment area of the Great Lakes Prespa, Ohrid and Shkodar	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Central and Eastern European Countries / Open Regional Fund Biodiversity	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Central and Eastern European Countries / Rural development trough integrated Forest - and Water - resource -Management	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Central Asia regional / Regional Programme for Sustainable Use of Natural Resources in Central Asia	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
China / Sino-German Climate Partnership and Cooperation on Renewable Energies	4,500,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Georgia / Modernization of the municipial infrastructure	4,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
India / Sustainable Urban Infrastructure Development	15,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
India / Organic Farming Programme	6,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Agriculture	KfW
India / Organic Farming Programme - Grant component	14,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Agriculture	KfW
India / Green Energy Corridors	36,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
India / Adaptation to Climate Change in Rural Areas, India	100,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
India / Natural ressoucre management and climate change adaptation in northeast India	150,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
India / Indo-German Energy Porgramme	3,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
India / Indo-German Environmental Partnership Programme	5,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
India / German-Indian Programme environmental policy in rural areas	9,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
India / Green energy corridors- grid integration of renewable energy and demand-side energy efficiency	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
India / Integration of Renewable Energies into the Indian Electricity System (I-RE)	1,997,467.00		Committed	ODA	Grant	Cross-cutting	Energy	GIZ
India / Fostering Resource Efficiency and Sustainable Management of Secondary Raw Materials	2,995,132.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
India / Commercialization of Solar Energy in Urban and Industrial Areas in India (ComSolar)	4,098,821.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
India / Solar Mapping and Monitoring (SolMap)	336,602.54		Committed	ODA	Grant	Mitigation	Energy	GIZ
Indonesia / NAMA Green Chillers and Industrial Energy Efficiency Programme	4,091,690.24		Committed	ODA	Grant	Mitigation	Energy	GIZ
Jordan / Energie Efficiency for Buildings	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Jordan / Solid Waste Management	5,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Jordan / Solid Waste Management Accompanying Measure	2,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Jordan / Water supply and sewage disposal for syrian refugees and host commune IV	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Jordan / Water Supply and Sanitation for Syrian Refugees and Host Communities (Aqip Pipeline)	5,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Jordan / Renewable Energy and Energy Efficiency	9,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Jordan / Water Resources Management Programme IV	11,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Jordan / Water Resources Management Programme IV (AM)	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Jordan / Water Resources Management Programme III - Tranche 2	30,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Jordan / Management of Water Resources	4,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Jordan / Strengthening the Resilience of water Services Providers	2,800,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	GIZ
Jordan / Improved Groundwater Resources Management in Response to the Syrian Refugee Crisis	1,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	BGR
Jordan / Decentralized Integrated Sludge Management	4,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Jordan / Decentralized Waste Water Management in Schools in Host Communities	2,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Jordan / Supporting participatory Resource Management to stabilize the Situation in Host Communities	1,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Jordan / Waste to Energy	1,750,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Jordan / Improving Energy Efficiency in the Water Sector	38,229.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Kosovo / Sewage Disposal Southwest IV (Inv.)	4,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Kosovo / Sewage Disposal Southwest IV (BM)	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Kosovo / Energy Sector Programme VII, Component Improvement of the Transmission Network	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Kosovo / Development of sustainable local public services (waste management)	145,000.00		Committed	ODA	Grant	Mitigation	Other (multisector)	GIZ
Laos / Rural Infrastructure Programme VI	8,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	KfW
Laos / Protection of the Hin Nam No national park II	6,330,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Laos / Environmental education II	4,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Laos / Landmanagement und economic development in rural areas II	3,500,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Mekong River Commission / Support for Climate Adaption Measures in the Mekong Region	3,000,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Middle East and south-western Asia / Initiative Rural Rehabilitation Syria	2,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Mongolia / Energy Efficiency in the Central Transmission and Distribution Network	10,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Mongolia / Energy efficiency within the grid-connected energy supply	3,900,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Mongolia / Biodiversity and adaptation to climate change of central forest eco systems II	3,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Mongolia / REDD+ National Forest Inventory	2,550,000.00		Committed	ODA	Grant	Cross-cutting	Forestry	GIZ
Mongolia / Promotion of Quality Infrastructure with emphasis on the energy sector	300,000.00		Committed	ODA	Grant	Mitigation	Industry	GIZ
Nepal / Renewable Energy	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Palestinian territories / Accompanying Measure for Water and Wastewater Gaza	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Palestinian territories / Severage Project Nablus West/Zaimar	3,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Palestinian territories / Salfeet Severage	3,750,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Palestinian territories / Reconstruction Assistance for the Water and Wastewater Gaza	4,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	KfW
Serbia / Energy Efficiency in Public Buildings II	3,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Energy Efficiency in Public Buildings II (Accompanying Measures)	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Rural Financial Sector Development (Accompanying Measure)	750,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Saint Vincent and the Grenadines / Renewable Energy Project Kostolac	4,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Serbia / Green Economy Facility	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Serbia / Water and Sewerage Programme in Medium-Sized Municipalities in Serbia VI Accompanying Measure	2,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Serbia / Water and Sewerage Programme in Medium-Sized Municipalities in Serbia VI	5,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Serbia / IMPACT-Municipal Waste and Wastewater Management	1,500,000.00		Committed	ODA	Grant	Mitigation	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Serbia / Energy Efficiency in public buildings	3,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Tajikistan / Regional Development Pamir	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Tunisia / Committed	196,716.81		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Ukraine / Social Infrastructure Programme - Ukrainian Social Investment Fund (USIF V)	4,500,000.00		Committed	ODA	Grant	Mitigation	Other (GOVERNMENT AND CIVIL)	KfW
Ukraine / Municipial Infrastructure Chernivtsi Ph. II	6,000,000.00		Committed	ODA	Concessional Loan	Mitigation	Water and sanitation	KfW
Ukraine / Energy Efficiency in Communities	16,100,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Ukraine / Modernisation partnership for economic upturn	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Ukraine / Modernisation partnership for energy efficincy	3,000,000.00		Committed	ODA	Grant	Mitigation	Other (TRADE POLICY AND REGULATIONS AND TRADE-RELATED ADJUSTMENT)	GIZ
Ukraine / Energy Efficiency Consulting for companies	5,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	1,557,962.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	17,036,707.69		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	3,512,000.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	50,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	853,615.50		Committed	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (REDD+/Bio diversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Asia / Middle East / South East Europe / Climate Finance via further technical cooperation contributions	273,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (REDD+/Bio diversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,244,441.60		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMZ)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	11,239,529.66		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMZ)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	313,770.50		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMZ)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,316,195.89		Provided	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (REDD+/Bio diversity)	Not applicable (BMZ)
Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,851,582.53		Provided	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (REDD+/Bio diversity)	Not applicable (BMZ)
Region Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	6,915,958.84		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Region Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	543,780.71		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Region Asia / Middle East / South East Europe / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	7,837,195.87		Provided	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Cross-cutting	Not applicable (BMUB)
Serbia / Green Economy Facility Serbia (TA)	500,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Jordan / Management of Groundwater Resources (BGR)	1,250,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
BCIE / Geothermal Project Central America (risk funds)	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
BCIE / Regenerative Engery- and Energy Efficiency Programme III	8,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Brazil / Monitoring of climate-relevant biodiversity in protected areas in consideration of reduction and adaptation measures	500,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (General environmental protection)	GIZ
Brazil / Programme for Renewable Energy and Energy Efficiency (Eletrobras) II	8,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Brazil / Solarprogram for Electricity Generation	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Brazil / Transition Fund ARPA for LIFE - 2	15,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Brazil / Environmental land registration in Amazonia (CAR II)	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Brazil / Promotion of nature reserves and sustainable Use, Fundo Amazonia	200,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	GIZ
Brazil / Prevention, control and monitoring of fires in the Brazilian Cerrado	3,494,784.38		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	GIZ
Brazil / Biodiversity and climate protection in the Mata Atlântica (TC module)	1,935,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Caribbean regional / Bio passage Caribic	400,000.00		Committed	ODA	Grant	Cross-cutting	Other (multisector)	GIZ
CARICOM / Caribbean Renewable Energy Development Programme (CREDP/GTZ)	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Chile / Smart Energy Concepts Chile	1,062,014.28		Committed	ODA	Grant	Mitigation	Energy	German-Chilean Chamber of Commerce and Industry, Deutsch-Chilenische Industrie- und Handelskammer (AHK) (Cámara Chileno-Alemana de Comercio e Industria) - Chile
Chile / Expansion Strategy for Grid-Connected Renewables (with Grid Study)	167,805.86		Committed	ODA	Grant	Mitigation	Energy	GIZ
Chile / Municipal Environment Protection Programme	3,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (multisector)	KfW
Colombia / Sector Reform Programme Sustainable Development, Phase I	6,250,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Colombia / Sector Reform Programme Sustainable Development, Phase II	6,250,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Colombia / Rural economic sustainable development	1,650,000.00		Committed	ODA	Grant	Mitigation	Industry	GIZ
Colombia / Forest and climate protection/REDD+	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	GIZ
Ecuador / National Protected Areas Programme Phase II	8,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
Ecuador / Sustainable watershed management Tungurahua Phase II	6,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	KfW
Ecuador / Building the resilience to climate change through conservation and sustainable use of fragile ecosystems	9,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

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	Climate-specific [f]							
	European euro - EUR	*USD*						
Ecuador / Strengthening of institutional capacities at national and local level for sustainable urban development	3,000,000.00		Committed	ODA	Grant	Mitigation	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Ecuador / Cooperation between Ecuador and Germany in application oriented scientific research on biodiversity and climate change	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
El Salvador / Urban adaptation to cliamte change in Central America - El Salvador	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (Disaster prevention and preparedness)	KfW
Guatemala / Study and Expert Funds	500,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Guatemala / Rural development and adaptation to climate change	6,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Honduras / Urban adaptation to climate change	8,000,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	KfW
Honduras / Sustainable management of natural resources with a strategic focus on climate change	8,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (General environmental protection)	GIZ
Honduras / Food safety by adaption to cliamte change	1,900,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	GIZ
Latin America and the Caribbean / Transforming Evidence into Change: a Holistic Approach to Governance for EbA - GO4EbA	5,685,799.93		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	International Union for Conservation of Nature (IUCN) - Switzerland
Latin America and the Caribbean / Sustainable development options and land-use based alternatives t: enhance climate change mitigation and adaptation capacities in the Colombian and Peruvian Amazon, while enhancing ecosystem services and local livelihoods	4,874,961.14		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Forestry	International Center for Tropical Agriculture (CIAT)
Latin America and the Caribbean / Incorporating the 'Amazon indigenous REDD+ proposal' into climate change strategies	2,680,018.20		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	World Wide Fund for Nature (WWF) - Germany
Latin America and the Caribbean / Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN)	500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	The Nature Conservancy (TNC)
Mexico / Energy efficiency and rewenable energy	7,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Mexico / Mexican-German Climate Change Alliance	4,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Nicaragua / Water and Sanitation Program in Nicaragua - cooperation with rural local structures	215,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Organization of American States (OAS) / Investment in Multi-Donor Trust Fund	7,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Peru / Acommpanying measure for the Integrated Waste Management Program	1,000,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	KfW
Peru / Sustainable Forest Management Program II	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Forestry	KfW
Peru / Sustainable Forest Management Program II	4,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Forestry	KfW
Peru / Water and Sanitation in Lima II (SEDEPAL II)	9,000,000.00		Committed	ODA	Grant	Cross-cutting	Water and sanitation	KfW
Peru / Contribution to the environmental goals of Peru (ProAmbiente)	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Peru / Program for the Modernization and Strenghtening of the Settlement Water Management - PROAGUA II	5,500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Peru / Support of Nationally Intended Determined Contributions (INDCs) in Peru	800,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Peru / Examples to Follow! Expeditions in Aesthetics and Sustainability	204,413.22		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	Goethe-Institut e.V.
Peru / Adapting Public Investment to Climate Change	230,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	GIZ
SG-SICA / Programme for agrobiodiversity Central America	7,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	KfW
SG-SICA / Regional planning and sustainable development in Central America	1,000,000.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
SG-SICA / Reduction of emission by deforestation and forest degradation in Central America and Dominican Republic	2,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	GIZ
SG-SICA / Protection and sustainable use of Selva Maya II	3,000,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
SG-SICA / Geothermal Programme in Central America	6,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
SG-SICA / Identification of deposits of geothermal power	1,500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	336,108.00		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	15,448,211.50		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	3,961,725.00		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	112,500.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Mitigation))	Other (REDD+/Bio diversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	1,931,500.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (REDD+/Bio diversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Latin America and the Caribbean / Climate Finance via further technical cooperation contributions	3,191,942.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (REDD+/Bio diversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	6,026,396.77		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	3,745,105.14		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	120,000.00		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,543,416.77		Provided	ODA	Grant	Other (REDD+/Bio diversity (Mitigation))	Other (REDD+/Bio diversity)	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	429,179.22		Provided	ODA	Grant	Other (REDD+/Bio diversity (Adaptation))	Other (REDD+/Bio diversity)	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	2,366,542.42		Provided	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (REDD+/Bio diversity)	Not applicable (BMZ)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	4,847,113.32		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	4,299,518.20		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Latin America and the Caribbean / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	12,258,114.60		Provided	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Cross-cutting	Not applicable (BMUB)
Global / Geothermal development operations Latin America	15,000,000.00		Committed	ODA	Grant	Mitigation	Energy	KfW
Global / Transboundary Biosphere Reserve Prespa (Prespa Ohrid Nature Trust-PONT)	6,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (General environment al protection)	KfW
Global / KMU Fond for nature conservation relevant private investments	5,000,000.00		Committed	ODA	Grant	Other (REDD+/Bio diversity (Cross-cutting))	Other (General environment al protection)	KfW
Global / Municipal Infrastructure Development Fond (MIDF)	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (multisector)	KfW

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Regional Fund for energy efficiency western Balkans (GGF IV) AM	9,000,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Global / Regional Fund for energy efficiency western Balkans (GGF IV)	1,000,000.00		Committed	ODA	Grant	Mitigation	Other (BANKING AND FINANCIAL SERVICES)	KfW
Global / Municipal Infrastructure Development Fond (MIDF)	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (multisector)	KfW
Global / Energizing Development	1,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Energy Policy in Development Cooperation	500,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Ozone Fund	270,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Global / Environmental Politics and Sustainable Devolpment	500,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	GIZ
Global / Innovative appraoches in financial systems development	200,000.00		Committed	ODA	Grant	Cross-cutting	Other (BANKING AND FINANCIAL SERVICES)	GIZ
Global / Agricultural Trade and Private Sector Cooperations in Rural Areas	160,000.00		Committed	ODA	Grant	Adaptation	Other (TRADE POLICY AND REGULATIONS AND TRADE-RELATED ADJUSTMENT)	GIZ
Global / Implementing the Biodiversity Convention	1,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Global / Innovative approacheches of the privat esector	1,300,000.00		Committed	ODA	Grant	Cross-cutting	Other (BUSINESS AND OTHER SERVICES)	GIZ
Global / Urban policy advice	1,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (multisector)	GIZ
Global / Tourism and sustainable development	700,000.00		Committed	ODA	Grant	Mitigation	Other (TOURISM)	GIZ
Global / International Forest Policy (IWP)	1,800,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	GIZ
Global / Strengthening of capacities of International agricultural research center by integrated experts	3,600,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Climate Programme	5,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / Policy Advice Groundwater - Resources and Management	500,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Global / Promotion of sustainable fisheries und aquaculture	600,000.00		Committed	ODA	Grant	Adaptation	Other (FISHING)	GIZ
Global / Sustainable Economic Development	3,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Global / Access to Insurance Initiative	1,500,000.00		Committed	ODA	Grant	Adaptation	Other (BANKING AND FINANCIAL SERVICES)	GIZ
Global / HERA	3,300,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Recycling Partnership	500,000.00		Committed	ODA	Grant	Mitigation	Water and sanitation	GIZ
Global / Convention Project to Combat Desertification	4,500,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / International Waterpolicy	2,850,000.00		Committed	ODA	Grant	Adaptation	Water and sanitation	GIZ
Global / Environmental Policy and Sustainable Development	3,200,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / Urban management of climate-related migration	5,000,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Global / Climate Leadership Plus	200,000.00		Committed	ODA	Grant	Cross-cutting	Other (multisector)	GIZ
Global / Global Initiative Disaster Risk Management	3,250,000.00		Committed	ODA	Grant	Adaptation	Other (Disaster prevention and preparedness)	GIZ
Global / International Community of Practice for Sustainable Urban Development	200,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
Global / Powering Agriculture - Sustainable Energy for Food	600,000.00		Committed	ODA	Grant	Mitigation	Agriculture	GIZ
Global / Emerging Market Dialogues for Sustainability (EMDS)	7,900,000.00		Committed	ODA	Grant	Cross-cutting	Other (GOVERNMENT AND CIVIL SOCIETY)	GIZ
Global / General environmental protection	2,000,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / Migration for Development	7,250,000.00		Committed	ODA	Grant	Adaptation	Other (multisector)	GIZ
/ Innovation Center in the agri-food-sector	40,500,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Ground protection and ground rehabilitation for food security	20,000,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Promotion of agricultural Gene Banks	2,750,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Promotion of international agricultural reasearch	1,200,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Promotion of international agricultural reasearch	9,400,000.00		Committed	ODA	Grant	Adaptation	Agriculture	GIZ
Global / Renewable Energies on Islands	2,000,000.00		Committed	ODA	Grant	Mitigation	Energy	GIZ
Global / Seed Capital Assistance Facility (SCAF),	3,000,000.00		Committed	ODA	Grant	Mitigation	Energy	United Nations Environment Programme (UNEP) - Kenya
Global / Mitigation Momentum II	2,499,986.50		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	Ecofys Germany GmbH
Global / Wedging the gap: Identification of options for increasing the impact of private sector GHG emission reduction initiatives	350,053.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	Ecofys Germany GmbH
Global / Scholarship programme for young management professionals from developing and emerging countries in the field of climate and resource protection	3,600,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	Alexander von Humboldt-Stiftung - Deutschland
Global / Political economy of climate-friendly, low-carbon development paths. Country studies on driving forces and impediments.	499,917.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	Deutsches Institut für Entwicklungspolitik (DIE)
Global / Enhancing low-carbon development by greening the economy in cooperation with the Partnership for Action on Green Economy (PAGE)	3,564,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Global / Technical dialogue on Intended Nationally Determined Contributions towards a 2015 agreement under UNFCCC	149,994.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	United Nations Development Programme (UNDP)
Global / Support to selected partner countries in developing their Intended Nationally Determined Contributions (INDCs)	2,500,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Global / Global PPP Programme	4,165,402.00		Committed	ODA	Grant	Mitigation	Energy	Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG)
Global / Strengthening Transparency, Accountability, and Integrity in Climate Finance Governance	299,575.00		Committed	ODA	Grant	Cross-cutting	Other (GOVERNMENT AND CIVIL SOCIETY)	Transparency International
Global / Supporting developing countries to integrate the agricultural sectors into National adaptation Plans (NAPs)	10,000,000.00		Committed	ODA	Grant	Adaptation	Other (General environmental protection)	United Nations Development Programme (UNDP)
Global / Development of business models to address drivers of deforestation	1,908,655.00		Committed	ODA	Grant	Other ()	Other (General environmental protection)	UNIQUE forestry and land use GmbH
Global / Global Forest Survey (GFS)	3,500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Forestry	Food and Agriculture Organization of the United Nations (FAO)
Global / Creation of a network to support the Adaptation Fund under the Kyoto Protocol through capacity-building in civil society	1,082,795.00		Committed	ODA	Grant	Adaptation	Other (GOVERNMENT AND CIVIL SOCIETY)	Germanwatch e.V.

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Measurement and Performance Tracking (MAPT) of Climate Change Mitigation Activities	26,431.47		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	World Resources Institute (WRI)
Global / Supporting International Mitigation and MRV Activities	2,000,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	GIZ
Global / Elaboration of an expert study on „Long-term financing of REDD+ - analysis and concept development of alternative investment options for private actors in REDD+ projects"	44,092.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (General environmental protection)	Germanwatch e.V.
Global / ValuES: Methods for integrating ecosystem services into policy, planning and practice	500,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (General environmental protection)	GIZ
Global / Mitigation Action Implementation Network (MAIN): Implementing Ambitious NAMAs in Latin America and Asia	255,000.00		Committed	ODA	Grant	Mitigation	Other (General environmental protection)	Center for Clean Air Policy (CCAP)
Global / Support the German Federal Ministry for the Environment (BMU) in the International Climate Initiative	15,507,524.09		Committed	ODA	Grant	Cross-cutting	Other (Administrative costs (non-sector allocable))	GIZ
Global / Green Climate Fund - 3rd Meeting of Interested Contributors to the Initial Resource Mobilization Process	276,400.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / Support project G7 presidency and Paris climate agreement	2,050,000.00		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	GIZ
Global / Analytical and Administrative Support for the Global Innovation Lab for Climate Finance	277,645.74		Committed	ODA	Grant	Cross-cutting	Other (General environmental protection)	Climate Policy Initiative
Global / Climate Finance via further technical cooperation contributions	1,048,812.50		Committed	ODA	Grant	Mitigation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Global / Climate Finance via further technical cooperation contributions	2,752,401.50		Committed	ODA	Grant	Adaptation	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Global / Climate Finance via further technical cooperation contributions	1,611,682.50		Committed	ODA	Grant	Cross-cutting	Cross-cutting	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Global / Climate Finance via further technical cooperation contributions	1,203,000.00		Committed	ODA	Grant	Other (REDD+/Biodiversity (Adaptation))	Other (REDD+/Biodiversity)	Financial Contributions to non governmental and religious organisations and political foundations (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	990,000.00		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	54,087,534.34		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	16,276,999.97		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMZ)

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	European euro - EUR	*USD*						
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	1,622,002.99		Provided	ODA	Grant	Other (REDD+/Biodiversity (Mitigation))	Other (REDD+/Biodiversity)	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	4,217,571.31		Provided	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Other (REDD+/Biodiversity)	Not applicable (BMZ)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	4,689,555.32		Provided	ODA	Grant	Mitigation	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	583,915.71		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral and regional programs financed by the German 'Energy and Climate Fund'	4,280,049.81		Provided	ODA	Grant	Other (REDD+/Biodiversity (Cross-cutting))	Cross-cutting	Not applicable (BMUB)
Global / Support the German Federal Ministry for the Environment (BMU) in the International Climate Initiative	4,511,423.34		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMUB)
Global / Support the German Federal Ministry for the Environment (BMU) in the International Climate Initiative	1,215,634.41		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (BMUB)
Global / Disbursements for bilateral science projects on 'sustainable landmanagement'	14,000,000.00		Provided	ODA	Grant	Adaptation	Cross-cutting	Not applicable (BMBF)
Global / Disbursements for climate change projects of German embassies and consulats	2,100,000.00		Provided	Other (ODA/OOF)	Grant	Cross-cutting	Cross-cutting	Not applicable (AA)
Global / Disbursements for projects on security risks of climate change	920,000.00		Provided	Other (ODA/OOF)	Grant	Cross-cutting	Cross-cutting	Not applicable (AA)
Global / Disbursements for German NGOs and other organisations for climate change related activities in international context	650,000.00		Provided	ODA	Grant	Cross-cutting	Cross-cutting	Not applicable (AA)

Abbreviations: ODA = official development assistance, OOF = other official flows; USD = United States dollars.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should report, to the extent possible, on details contained in this table.

[c] Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

[d] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under “Other”.

[e] Parties should report, as appropriate, on project details and the implementing agency.

[f] Parties should explain in their biennial reports how they define funds as being climate-specific.

[g] Please specify.

[h] Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
Bangladesh	Mitigation	Productive Use of Renewable Energy	Energy	Public	Private and Public	Planned	Under the programme, decentralised systems to generate electricity from renewable energy sources shall be financed to provide energy services that serve the demand for income generation activites, primarily in remote areas of Bangladesh. The development objective of the programme is to contribute to economic and social development in Bangladesh and to reduce environmental stress and green house gas emissions. The target groups of the programme are project sponsors who invest in productive uses of renewable energy, such as photovoltaic (PV) irrigation pumps, PV/diesel hybrid mini-grids or biogas plants in poultry farms. This will also benefit the final users of the energy service, such as farmers, small enterprises, and households, thus consequently reducing poverty in the region. The project constitutes a novel approach to expand a range of technologies linked to the scaling up of renewable energy. // KfW grant funded by BMZ

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
Bolivia	Adaptation	Drinking Water Supply and Wastewater Disposal in Suburban Areas	Water and sanitation	Public	Public	Implemented	The measure aims to provide access to hygienically safe drinking water as well as ecologically acceptable waste water disposal for the poorer population at the suburbs of the urban agglomerations La Paz/El Alto, Santa Cruz und Cochabamba as well as cities with more than 10.000 inhabitants. This project makes a contribution to the improvement of the living and health conditions of the population as well as the environmental situation in the region. The project contributes to establishing efficient, safe and reliable "best practice" water utilisation in a country with severe and increasing water stress. The measure is designed as an open programme and is integrated into the programme-based approach „drinking water and waste water in suburban areas“ by the Ministry of Environment and Water (MMAyA). The project measures include individual investments in drinking water and waste water infrastructure, such as rehabilitation and new construction of drinking water supply systems, waste water disposal systems as well as wastewater treatment capacities including consulting. By means of a supporting measure technical and operational performance of the involved water suppliers are strengthened. Especially in the first phase, the measure will have a big impact on the waste water systems in Santa Cruz. One of the first measures will be the construction of a waste water treatment plant. Due to the favourable subtropical climate in Santa Cruz, the waste water treatment plant is based on UASB technology. One of the main advantages is that UASB waste water treatment plants require less building space. The technology is therefore very appropriated for fast growing cities like Santa Cruz. Furthermore, compared to common treatment technologies, UASB plants have a significant potential for energy production, thus promoting the application of climate friendly technologies, which are currently hardly applied in

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
China	Mitigation	Traffic Control System Huainan	Transport	Public	Public	Implemented	The measure aims to make a sustainable improvement of the traffic situation and to reduce specific fuel consumption and air pollution in the city as well as to increase the quality of life of its citizens. The project addresses the following five objectives: (1) Improvement of operation efficiency of urban road traffic. (2) Enforcement of traffic rules and reduction of accidents. (3) Improved intelligence of traffic demand and information services to road traffic users. (4) Improved attractivity of public transport and more efficient bus and taxi operation management. (5) Reduction of road traffic and related air pollution and road traffic energy consumption. The technology of the Intelligent Transport System (ITS) is based on traffic flow data collected by video cameras, traffic flow detection loops and in-car GPS detectors being transferred to an urban traffic management centre. Data are then processed according to specific managmeent functions and feedback is given to the transport systems users. Overall urban traffic management is thus more efficient and automated, the capacities of the traffic junctions will be increased, cars are kept in motion and local bottlenecks will be reduced. In the further progress of the project, bus lanes and a parking guidance system ought to be incorporated. With the completion of the project the introduced system should cover almost all areas of the urban traffic. The innovative approach of the project can be seen as a best practice in the region and can serve as model and be transmitted to other cities in China. // KfW concessional loan supported by BMZ

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
Democratic Republic of the Congo	Adaptation	Urban Water Supply for Secondary Towns	Water and sanitation	Public	Public	Implemented	The inadequate supply with safe drinking water and sanitary facilities for the population hinders the social and economic development of the Democratic Republic of Congo heavily. Within the Programm "Urban Water Supply in Secondary Towns" the reconstruction and extension of drinking water supply infrastructure are currently financed in up to 15 secondary towns in three regions; similar measures are prepared in six more secondary towns in the regions of Kasaï und Bandundu. The project comprises immediate measures in order to ensure the supply of the population in secondary towns with an infrastructure often partly or completely on hold, followed by heavier investments (energy efficient water pumping/ booster stations, water treatment plants, reservoirs, distribution networks, water kiosks) for a regular supply of drinking water, hygiene awareness campaigns, technical training for the water utilities' staff and support of an internal reform process of the water utility. Furthermore a reform plan was developed, which promotes important innovations, e.g. regarding decentralization and financial and organizational autonomy of the regional utilities. This project has the objective to provide clean drinking water to about 80% of inhabitants, targeting especially the poorest segments of the population and increase its resilience against climate change. The main objective of the restructuring is to achieve a significant cost coverage and thus, to sustainably provide clean drinking water and minimize the health risk for the population. The project can be referred to as best practice because of its approach to initiate immediate measure (allowing to sustain a minimum supply) followed by long-term measures aiming at a sustainable rehabilitation and extension of the infrastructure. This approach is particularly suited for the very precarious water supply situation in the secondary towns of DRC. Furthermore the simple but robust

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
India	Mitigation	Financing Programme on Research Cooperation in Innovative Climate Technology	Energy	Public	Private and Public	Implemented	The project aims to deepen German-Indian research cooperation and disseminate knowledge about solar thermal electricity generation and concentrated photovoltaics (CPV). To this end, testing and measurement equipment, calculation tools, a 64 kilowatt CPV system and a thermal energy storage facility are being installed for research purposes together with NTPC Ltd., India’s largest power company. Employees of the NTPC Energy Technology Research Alliance (NETRA) are being trained in the new technologies and methods in cooperation with two German research institutions. The findings obtained in the research partnership will be published. Overall the project will strengthen applied research and technology transfer activities, and enhance the practical application of research findings in specific measures. It thus supports the Indian energy sector's low emissions development strategy and fosters global climate change mitigation. It will also help create highly skilled jobs in the area of climate technology research in India. // KfW grant funded by BMUB

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
India	Mitigation	Green Energy Corridors I	Energy	Public	Public	Implemented	In the context of the measure "Green Energy Corridors" the extension of the Indian electricity grid infrastructure is funded in particular to incorporate the energy generating capacities planned by the Indian Government to the national electricity grid, thus contributing to a safer as well as climate- and environment-friendly energy supply. The project promotes a technical, economic and efficient as well as socially and economically sustainable energy supply. It aims to connect major renewable energy pockets with the national grid and to strengthen the transmission network for evacuating green energy. The network will be extended exclusively for the upcoming renewable energy capacities using state-of-the-art technology. Therefore it is a best practice approach to enhance green energy supply. The target groups are the newly-connected investors in renewable energy technologies as well as private and commercial electricity consumers, who benefit from a climate- and environment-friendly energy supply. Parallel Technical Cooperation support through GIZ will improve grid management and power market designs. A separate working group under the Indo-German Energy Forum serves as a platform for discussion of concepts and policies on ministerial level. Loanees and project management organisations are: 1. The Indian network operator Power Grid Corporation of India Limited (PGCIL) as Loanee and project management organisation for inter-state lines. 2. The Indian Ministry of Finance as loanee for domestic services: intra-state lines. The ministry forwards the financial means to up to seven federal transmission companies (project management organisations). // KfW concessional loan with funding from BMZ

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
Morocco	Mitigation	Solar Power Complex Ouarzazate (580 MW of installed capacity, of which 510 MW, NOORoI-III, using CSP technology)	Energy	Public	Private and Public	Implemented	German development cooperation comprises the financing of the three CSP Solar Power Plants NOORoI-III at the site of Ouarzazate with a total installed capacity of 510 MW and a significant storage capacity. The aim of the project is to generate electricity in an efficient and ecological sound manner. The project contributes to global climate protection and supports Morocco to introduce a development model that is in line with a sustainable energy policy of Morocco and climate protection. The project promoting organisation is the public Agency for Solar Energy MASEN (Moroccan Agengy for Solar Energy). It is MASEN's task to implement the Moroccan Solar Plan, which aims to install 2000 MW of solar power generation capacity until 2020. The projects are planned, built and operated in context of a PPP approach. Installing these CSP projects contributes to the learning curve, which results in a continuous cost reduction of this technology. NOORo II: The activity comprises the financing of a CSP solar power plant at the site of Ouarzazate with an installed capacity of 200 MW using the technology of parabolic trough and a storage capacity of 7 hours. NOORo III: The activity comprises the financing of a CSP solar power plant at the site of Ouarzazate with an installed capacity of 150 MW using tower technology and a storage capacity of 7 hours. The promotion of these large-scale projects facilitates the introduction of two promising technologies in the MENA region (CSP-parabolic trough and CSP-solar tower). Furthermore, the PPP-structure can be seen as an innovative approach to produce renewable energy in the region efficiently. The tariffs which have been offered by the private bidders for the operation of the power plants are amongst the lowest CSP-tariffs globally. // KfW concessional loan with funding from BMZ (NOORO II) // KfW concessional loan with funding from BMUB (NOORO III)

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
Nepal	Mitigation	Promotion of Solar Energy (NRREP) (Programme Component)	Energy	Public	Public	Planned	The German Development Cooperation Programme „Promotion of Renewable Energies and Energy Efficiency in Nepal" contains two components: component 1 "Efficient Power Transmission Trishuli", and component 2 "Promotion of Solar Energy (NRREP)". Regarding development policies, the overarching goal of the programme is to make a contribution to a sustainable economic and social development of Nepal and to improve the living conditions with the provision of reliable, sustainable and climate-friendly energy supply as well as to reduce poverty. The programme helps combating climate change. Component 2 "Promotion of Solar Energy (NRREP)" aims at the sustainable use of power from solar energy by the population of selected communities in the rural regions of Nepal. It therefore promotes the distribution of climate-friendly Institutional Solar Photovoltaic Systems (ISPS) built for schools and health stations etc. as well as solar photovoltaic pumping systems for drinking water in the rural areas of Nepal. Besides supporting the solar component of NRREP by financing the construction of Institutional Solar PV Systems, the programme aims at establishing a sustainable battery management system in Nepal through the financing of the necessary studies in this regards. A regional practitioner's platform for solar photovoltaic power systems is being organized with participation of the relevant institutions of Nepal. This practitioner's platform intends to arrange meetings of persons directly involved with the dissemination and support of off-grid solar photovoltaic power systems. This approach is to make know-how already available in the region accessible to countries that are not yet as advanced in this topic as other countries are. // KfW concessional loan with funding from BMZ

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]
South Africa	Mitigation	Solar Energy Programm ESKOM	Energy	Public	Private and Public	Implemented	The project supports the construction of the first solar tower power plant with base-load capability in South Africa located in Upington in the Northern Cape Province. With a net output of 100 MWe it is one of the biggest of its kind. Project implementation partner is the South-African state-owned utility company ESKOM. The heliostat field consists of some 9,500 to 75,000 heliostats with a total mirror area of some 1.5 mio. m2 occupys an overall area of 6.65 km2. The solar radiation is bundled by the heliostats on to the central receiver located at the tip of the 250 m tall in the center of the solar field. In the central receiver molten salt consisting of a mixture of sodium nitrate and potassium nitrate is heated to some 570°C and from where it is lead into a hot storage tank. From the hot storage tank the hot salt flows through a steam generator into the cold storage tank, from where it is pumped back to the central receiver. The generated steam moves a steam turbine, which is connected to an electrical generator which, in turn, generates electrical energy. The molten salt tanks have a gross thermal storage capaciy of a minimum 12 hours under the most adverse weather conditions, warranting base load operation throughout the year. With a guaranteed capacity factor of 60%, an annual net energy generation of 525 GWh will be achieved. The objective of the project is the implementation of a demonstration solar tower power plant with base-load capability, which is able to replace coal-fired power plants in the long term. The measure is also ideal as a beacon project to demonstrate the ability of innovation of South Africa and Africa in general and at the same time fits perfectly as a support of the objectives of the South African government in the area of renewable energies, energy efficiency, climate protection and climate change adaption as well as transfer of technology. For South Africa the project is a gateway for the large-scale use of solar power
Tunisia	Mitigation	Tunesian Solar Plan: PV Project Tozeur	Energy	Public	Private and Public	Implemented	The project contributes to the construction of a 10 MW PV power plant in Tozeur (“Tozeur I”). Furthermore, the project aims at contributing to the realisation of the Tunisian solar plan. It intends to build capacities within the project management in Tunisia, which shall result in further GHG-mitigation measures in the future. // KfW concessional loan with funding from BMUB

Table 8 DEU_BR2_v0.2

Provision of technology development and transfer support[a,b]

Recipient country and/or region	*Targeted area*	*Measures and activities related to technology transfer*	*Sector* [c]	*Source of the funding for technology transfer*	*Activities undertaken by*	*Status*	*Additional information* [d]

[a] To be reported to the extent possible.

[b] The tables should include measures and activities since the last national communication or biennial report.

[c] Parties may report sectoral disaggregation, as appropriate.

[d] Additional information may include, for example, funding for technology development and transfer provided, a short description of the measure or activity and co-financing arrangements.

Custom Footnotes

Some of the examples provided in this table are based on commitments of previous reporting periods and are therefore not included in table 7b 2013 or 2014. This is due to the fact that Germany wants to present "best practices" that are not only in the planning but are at least under implementation and have proven to be realistic.

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Africa	Multiple Areas	Regional Science Service Centres for Climate Change and Adaptive Land Management in Africa (RSSC)	The "Regional Science Service Centres in West and Southern Africa" initiative, funded by the German Federal Ministry of Education and Research (BMBF), aims to assist the regions hardest hit by climate change in establishing relevant scientific structures so that the countries in these regions can take their own valid decisions with regard to land use and water supply. In July 2010, following a one-year preparatory phase, the BMBF started to establish one Regional Science Service Centre (RSSC) each in West and in Southern Africa together with partners from ten West African and five Southern African countries. WASCAL (West African Science Service Centre on Climate Change and Adapted Land Use) includeds Benin, Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Mali, Niger, Nigeria, Senegal and Togo. SASSCAL (Southern African Science Service Centre for Climate Change and Adaptive Land Management) includes Angola, Botswana, Namibia, Zambia and South Africa. The aim of the centres is to - Establish lasting infrastructures which strengthen Africa's own research, scientific training and capacity development - Strengthen and pool existing research capacities, build close links with existing local structures and, where necessary, develop new research capacities - Provide knowledge-based counselling for local, national and regional land users, planners and policy-makers - Make available German scientific expertise regarding partnerships to the research community in West and Southern Africa Findings from research will be used to develop robust and adaptive land use systems which can help people and the environment cope with the negative effects of climate change. These systems are expected to promote the
Africa, transnational	Adaptation	Support to transboundary water cooperation in the Nile Basin (NBI)	Demand for water in the Nile basin is constantly increasing. However, water resources are already intensively utilized and climate change and land use changes are also having a negative impact on water availability. The region is therefore very prone to conflict and up until now there has been no agreement on water allocation between the riparian states. With the aim of promoting dialogue and initiating joint investment projects, the Nile basin states founded the Nile Basin Initiative (NBI) in 1999.This programme aims at enhancing NBI’s objectives by providing technical and process advice. It promotes dialogue between key national stakeholders from policy making, administration, science, civil society and the mass media that have a significant role to play in ensuring cooperation on issues relating to the Nile. In addition, Nile basin states are supported to make sound decisions on cooperative water resources management, for example through the implementation of a strategy for protecting regionally significant wetlands and their biodiversity. The programme will also help to create favorable conditions for sustainable investments and conduct training courses for key actors to enhance the technical and personal skills needed for a successful water cooperation among member states. The project is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Bolivia	Adaptation	Agricultural Development Programme (PROAGRO)	In Bolivia, the generally difficult conditions in the rural drylands are exacerbated by the impacts of climate change. A reduction in water availability, shorter growing seasons, an increase in extreme weather events and production risks are effects already being felt today. Therefore, the Sustainable Agricultural Development Programme (PROAGRO) supports smallholder farmers in rural drylands in establishing and managing climate resilient irrigation systems for agricultural production. To this end, the project implements various capacity development measures. Concrete examples include the introduction of technologies and innovations in the areas of water production and supply or (micro-) irrigation systems. Moreover, the project aims at improving services for a better diversification, as well as storage, processing and marketing of agricultural products. Through the establishment of an adequate training and education system, it also supports the training of professionals in the field of (micro-) irrigation farming. Increasing compliance with quality standards of public projects and improving the coordination between the water and the agricultural sectors represent further areas of work.
Global	Multiple Areas	Dialogue Forum Climate Investments	The "Dialogue Forum Climate Investments" seeks to facilitate a better understanding of policy instruments and transformative processes that shape enabling framework conditions for private climate investments. The global "Practitioners Dialogue on Climate Investments (PDCI)" connects decision-makers from the public sector in developing countries and emerging economies with representatives from industry, the financial sector and academia. PDCI facilitates an in-depth exchange of experiences and expertise between global practitioners through a continuous dialogue and capacity building process on enabling framework conditions for private climate investments. So far, the PDCI has identified key questions, challenges and specific topics in the field of renewable energies, energy efficiency and adaptation to climate change. The prioritized topics shall now be further discussed in expert dialogue events and trainings with a core group of partners. Based on the results of the dialogue series, a selected group of governments and private sector representatives will be supported in the design and implementation of “transfer projects” including regulatory measures, investment initiatives and cooperation models to mobilize private climate investments in developing countries and emerging economies. The project is funded by the Federal Ministry for Economic Cooperation and Development.

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Global	Multiple Areas	Sustainable Land Management	The Sustainable Land Management funding measure, funded by the German Federal Ministry of Education and Research (BMBF), aims to contribute to the development and implementation of practical solutions for global and regional challenges of land management. It seeks to develop new perspectives on the responsible use of the scarce land resources. The focus of research in the international Module A is on the interactions between land management, climate change and ecosystem services. Twelve regional projects located in various parts of the world are analyzing complex correlations between land use, globalization, climate change, loss of biodiversity, population growth and urbanization. Researchers develop action recommendations and implement them as specific measures in these regions together with local partners with the aim of preserving the vital ecosystem services and their functions (ESS/ESF). Ecosystem functions and services must be protected for both societal and economic reasons. In the long run, ecosystem functions and services are essential if land is to function as a natural resource for human societies: They can support the resilience of ecosystems under climate change.
Global	Mitigation	Support to selected partner countries in developing their Intended Nationally Determined Contributions (INDCs)	With the aim of encouraging as many countries as possible to contribute to a new global climate agreement, the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) commissions the support of selected partner countries in the elaboration of their INDCs through a project, which is implemented by the GIZ in cooperation with Climate Analytics and the United Nations Development Programme. Up to that point, individual work programmes have been developed for the partner countries to support their INDC development. A Global Workshop on INDCs with more than 50 countries was held in April this year in Berlin to enable peer-to-peer exchange among the partner countries. In the framework of a global knowledge-management component, products supporting INDC-development in the partner countries have been elaborated.

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Global	Mitigation	Information Matters – Capacity Building for Ambitious Reporting and Facilitation of International Mutual Learning through Peer-to-Peer Exchange	In the context of the Information Matters project, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has provided technical support to the four partner countries to strengthen their in-country capacities for enhanced reporting on climate change, including preparation for the Biennial Update Report (BUR). In consultation with the partner countries, specific needs and priorities for measurement, reporting and verification (MRV) systems and greenhouse gas (GHG) emissions inventories are identified, which are then addressed through tailored in-country capacity building workshops and trainings. These activities aim to enable the partner countries to analyze and define procedures, methodologies and responsibilities to institutionalize their reporting system, with special focus to the requirements for national level GHG emissions - reporting to the UNFCCC. Peer-to-peer exchange, as well as the generated lessons learned, is crucial for supporting the strengthening of capacities at the institutional level. Towards the end of the project, the partner countries will have acquired an enhanced level of expertise on climate monitoring and reporting that they can share at international meetings (e.g. under the International Partnership on Mitigation and MRV). Additionally, the German Federal Environment Agency (UBA) is involved in the project to share Germany`s technical expertise and facilitate peer exchange between Germany and the partner countries on MRV issues. Backstopping support is provided to address any remaining issues to meet international and UNFCCC requirements. Tools and knowledge products are developed to incorporate the elements of GHG inventory, data collection and the institutionalization of monitoring and reporting procedures
Global	Adaptation	Global Programme on Risk Assessment and Management for Adaptation to Climate Change	Weather and climate-related loss and damage have increased dramatically over the past few decades. The most recent projections in climate research all anticipate a significant increase in the frequency and/or intensity of extreme weather events as well as slow-onset climate-related changes, which pose a growing risk to the sustainable development of all countries in general, and to least developed countries (LDCs) in particular. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the programme aims to generate tried-and-tested action guidelines on climate risk assessment and management for application by German Development Cooperation and its international partners in the UNFCCC process in regions that are severely affected by climate change. Aside from the UNFCCC, the programme aims to link closely to the processes of the United Nations International Strategy for Disaster Reduction (UNISDR), thus capitalising on existing tools and experience. The programme develops innovative concepts and practical instruments in the field of climate risk assessment and management which will support at-risk countries in their efforts to adapt to climate change. (Funded by the German 'Energy and Climate Fund' 2013.)

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Global	Mitigation	National Forest Monitoring and Information System for a transparent and truthful REDD-plus	This South-South cooperation project supports 18 partner countries in their international reporting requirements on activity data (land use area and area changes) with particular reference to the REDD+ process under the UNFCCC. To this end, it is promoting knowledge transfer, capacity building and the exchange of experience and ideas in the context of implementing a software tool for forest monitoring that has been newly developed and deployed by the Brazilian Government. The software uses remote sensing technology and geoinformation systems to extend the target countries' monitoring systems. This allows them to better monitor REDD+ activities, as well as improving the reporting of greenhouse gas emissions and their reduction. The purpose of the monitoring system is also to lay the foundations for achieving all REDD+ provisions (such as the development of reference levels) and ensuring stakeholder participation and transparency in the implementation of REDD+ measures.
Global (Indonesia, Mexico, Philippines, Tunisia)	Adaptation	Inventory of methods for climate adaptation	The project provided decision-makers in the partner countries with a tried and tested inventory of methods for identifying, analysing and prioritising adaptation needs and measures. It supported the effective management of climate-relevant data and promoted the establishment of a network to facilitate South-South exchange among adaptation stakeholders. In this way, the project enabled local stakeholders to make decisions on adaptation to climate change that are strategically appropriate and effective in the long term. This in turn increased the partner countries' ability to adapt and lowered the long-term costs associated with climate change. The project also supported the development of methods for verifying the effectiveness of adaptation measures. (Comitment of 2012)
India	Adaptation	Risk reduction through rural insurances in India	In India, there are 168 million families that live in rural areas. Most of these people are smallholders, with average landholdings of 0.4 hectares per family – less than half a soccer field. These poorer households in particular are unable to cope with financial losses – caused, for example, by crop failure or accidents. Insurance systems, however, can cushion the financial impact of such tragedies, helping small farmers to make more money in the medium term. That is why, since January 2014, GIZ has been working closely with insurance companies and insurance clients in India in order to improve the insurance coverage of rural households and farms in that country. In that context, GIZ will be carrying out a variety of measures until December 2016. These activities are part of the programs under the bilateral priority area of Sustainable Economic Development. Measures include support for insurance companies as they improve their crop failure insurance products, for example by using satellite-based remote sensing and better weather stations. It is hoped that this will result in better and cheaper insurance for poor smallholders. Measures also include advice for rural households on how to best insure themselves against various risks and what factors to pay attention to when buying insurance. GIZ is also providing advice to farmers on how to deal with the impact of climate change, as increased frequency of droughts and floods and other consequences of climate change are among the biggest risks that the agricultural sector is facing. Finally, GIZ is also working with the supervisory authorities that are responsible for insurance companies, so as to facilitate exchange on products, sales models, consumer education and consumer protection. (Commitment of 2012)

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Indonesia	Mitigation	Forest and Climate Change (FORCLIME)	The overall objective of the Forest and Climate Change Programme (FORCLIME) is to reduce greenhouse gas emissions from the forest sector while improving the livelihoods of Indonesia's poor rural communities. To achieve this goal, the programme assists the Indonesian government in designing and implementing legal, policy and institutional reforms for the conservation and sustainable management of forests at local, provincial and national level. Support to reduction of emissions from deforestation and forest degradation (REDD+) demonstration activities is a key feature of the programme. Different capacity building measures aim at providing decision-makers from the public and private sector with experience of how REDD+ can be implemented "on the ground". Moreover, through the establishment of forest management units, local communities are being directly engaged in the sustainable management of forests. The project also promotes cooperation with the private sector, for example by supporting companies in gaining Forest Stewardship Council certification. To enhance the capacities of forest authorities, FORCLIME furthermore develops demand-oriented trainings courses in cooperation with local training centers.
Mali	Adaptation	Supporting the national programme for sustainable small-scale irrigation	Half of Mali’s rural population lives below the poverty line and is malnourished. Due to climate change and rapid population growth, the traditional methods of rain-fed farming are unable to guarantee sufficient income and food for the population. However, Mali possesses large water reserves, and these can be used in small-scale irrigation schemes to develop and diversify agricultural production as well as improve nutrition. Thus, in early 2012, the Government of the Republic of Mali adopted its National Programme for Small-scale Irrigation. This project aims at supporting state actors and public and private service providers in implementing this programme, making sure that small family farms enjoyed the benefits of improved irrigation systems. In an initial phase, the German Government has financed the irrigation infrastructure and supported cultivation in these areas. Based on this groundwork, the project cooperates with the responsible ministries to generate the appropriate framework conditions and trains technical staff in how to implement and monitor it. It also develops curricula and teacher training courses in cooperation with local training institutions to improve the level of training of eployees working for small-scale irrigation service providers. Moreover, project and agricultural extension staff organise training sessions to disseminate knowledge among the rural population on how to cultivate their land sustainably, how to store, process and market their agricultural products properly, and how to improve their diet. Thereby people are gradually enabled to use the economic potential of small-scale irrigation for making their farms more profitable and improving their diet. The project is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]
Asia regional (Marshall Islands, Micronesia, Palau, Papua-New Guinea)	Adaptation	Enabling ecosystem based (EBA) adaptation in Melanesia and Micronesia	The project is helping inhabitants on the island states of Micronesia and Melanesia, which are significantly affected by climate change, to understand climate risks and improve their ability to adapt to climate change. Decision-makers are being supported as they identify and prioritise options for ecosystem-based adaptation (EbA), and incorporate them into development plans. EbA approaches are being tested in 10 pilot communities to measure their effectiveness and build up capacities. The experiences gained from the pilot projects are being disseminated via networks so as to feed them into local and national adaptation strategies as well as global policies. The project focuses on ecosystem services as the basis for creating communities that are resilient to climate change. The aim is to manage ecosystems more effectively and sustainably in order to generate a wide range of benefits from the islands' natural resources, in particular the coastal regions.
Morocco	Mitigation	Establishment of a national competence centre on climate protection and adaptation	The project aims at the establishment of a climate competence centre to strengthen capacities for the implementation of the national climate strategy in Morocco and to enable an active participation in international dialogues on climate change adaptation and greenhouse gas mitigation. Implementing partner will be the environmental office SEEE which accommodates the national environmental observatory ONEM. ONEM, as well as 13 regional observatories, will be strengthened in their capacities and developed into a climate competence centre at the national and regional level. This includes the development of a reliable climate database and of a MRV system, and the sensitisation of important actors as a prerequisite for the conception and implementation of effective measures on climate mitigation and adaptation and the supranational climate dialogue, including Germany.
Uganda	Mitigation	Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP)	Uganda is one of the world's lowest energy consumers, with the low consumption being attributed mainly to the largely underdeveloped state of the energy sector. Despite this low rate of electrification, the electricity generated is often used wastefully, hence aggravating the already insufficient supply. The Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP) supports the Ugandan Ministry of Energy and Mineral Development (MEMD) in promoting the sustainable use of energy for social and economic empowerment, while increasing access to renewable energy and promoting energy efficiency. Mitigation is therefore a principle goal of the programme. PREEEP carries out capacity building measures for the MEMD as a contribution to improved policies, budget planning, monitoring and evaluation. The private sector is another field of intervention. Here, capacity building measures aim at promoting the dissemination and use of renewable and efficient energy products and services in the long term. The project supports businesses in building up technical expertise and improving their institutional set-up and performance.

[a] To be reported to the extent possible.

[b] Each Party included in Annex II to the Convention shall provide information, to the extent possible, on how it has provided capacity-building support that responds to the existing and emerging capacity-building needs identified by Parties not included in Annex I to the Convention in the areas of mitigation, adaptation and technology development and transfer.

[c] Additional information may be provided on, for example, the measure or activity and co-financing arrangements.

Custom Footnotes

Table 9 DEU_BR2_v0.2

Provision of capacity-building support[a]

Recipient country/region	*Targeted area*	*Programme or project title*	*Description of programme or project* [b,c]

Some of the examples provided in this table are based on commitments of previous reporting periods and are therefore not included in table 7b 2013 or 2014. This is due to the fact that Germany wants to present "best practices" that are not only in the planning but are at least under implementation and have proven to be realistic.