

The National Climate Protection Programme 2005

Summary

The purpose of the present **National Climate Protection Programme** is to make sure that Germany will be able to comply with the commitments made at the European and international level to reduce its greenhouse gas emissions in the period 2008 - 2012 by 21 percent as against 1990 levels and thus provide a basis for further ambitious environmental policies after 2012.

The update of the National Climate Protection Programme of 18 October 2000 **takes stock of the Federal Government's climate protection policies** of the past 5 years. It outlines the measures taken and their reduction effect with respect to greenhouse gas emissions and assesses whether the targets in different sectors have been met. Based on this analysis the need for measures was identified and a set of concrete measures was produced.

The sectors energy and industry are covered by the new instrument "emissions trading". Therefore the Climate Protection Programme 2005 focuses on **action deemed necessary in the transport and private household sectors** from the present perspective.

Development of CO₂ emissions in the different sectors in Germany since 1990

Table 1: Development of Total CO₂ emissions for different sectors in Germany (in Mio. tonnes CO₂)

CO ₂ - Emissions (in Germany)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Energy	441.6	402.9	402.9	390.5	387.5	379.2	382.4	364.2	366.8	351.6	364.0	368.9	378.1	385.1
Industry	195.5	169.8	160.0	150.7	153.5	152.9	148.3	149.0	143.1	141.3	141.8	137.3	134.0	130.9
Transport	158.1	161.5	167.8	172.5	168.9	172.5	172.6	173.1	176.4	181.9	178.3	174.6	172.5	166.5
Priv. Househ.	129.3	131.5	123.5	134.0	128.4	129.2	142.5	138.4	132.0	119.9	116.8	131.2	120.1	122.4
Small Trade/ Business/ Services	90.6	86.3	75.4	72.4	67.4	68.5	79.2	68.8	66.8	62.6	59.2	61.8	59.1	60.3
Total Emissions	1015.0	976.9	929.5	920.0	905.6	902.2	924.9	893.5	885.2	857.4	860.0	873.8	863.8	865.3

* Differences in sums are due to rounded figures.

Source: National Inventory Report 2005, DIW Weekly Report No. 9/2005

All in all greenhouse gas emissions were brought down by as much as **18.5 per cent by the year 2003** as against 1990 levels. However, reduction rates have drastically slowed down since the mid 90s. Worth noting is in particular the turnabout which took place in the traffic sector. Here emissions were brought down by 15 million tonnes between 1999 and 2003 in Germany, which contradicts the development within the European Union. The instruments by which this was achieved are amongst others the ecological tax reform and the strengthening of the public transport system (e. g. Law on the Regionalisation of Public Transport).

Baseline Situation for Compliance with Kyoto Targets

Table 2: Development of greenhouse gas emissions and required action

GHG sector (in million tonnes)	1990	2003	target 2008/12	calculated gap 2003- 2008/2012	forecast gap to 2008/2012 targets (required action)
CO ₂ equivalents	1248	1017	986	- 31	16 to 18
Other GHG	233	152	142	- 10	0
CO ₂	1015	865	844	- 21	16 to 18
Private Households	129	122	120		8
Transport	158	167	171		8 to 10
Private Househ. + Transport	287	289	291	+ 2	16 to 18
Trade/Busin/Service	91	60	58	- 2	0
Industry	195	131			
Energy	442	385			
Energy + Industry	637	516	495	- 21	0 (covered by emissions trading)

The **targets for the 2008-2012** period are laid down in the Emissions Trading Allocations Act (ZuG 2007) and are thus legally binding.

The new instrument emissions trading guarantees that the targets in the **energy and industry sectors** will be met.

For the **sectors private households and transport** a joint reduction objective was set at **291 million tonnes per year**. The Federal Ministry of Transport, Building and Housing was entrusted with dividing this figure between the two sectors and placed the rates at **120 million tonnes reduction per year for private households** and **171 million tonnes per year for the transport sector**.

As for the **other greenhouse gas emissions** and the **trade/business/service** sector it is assumed that the 2008-2012 targets will basically be met without further intervention. Based on present forecasts it can also be assumed on the other hand that CO₂ emissions are likely to rise again in the sectors private households and transport if no additional measures are taken.

The **Federal Ministry of Transport, Building and Housing (BMVBW)** developed sets of **measures** for the sectors private households and transport and expects that they are **sufficient** to reach the joint reduction target of 291 million tonnes CO₂ per year for the 2008-2012 period as set out in the Emissions Trading Allocations Act. The following is a summary of the measures planned for these two priority areas.

Table 3: Measures in the sector private households to meet the emissions reduction target of 120 million tonnes CO₂ in the 2008 - 2012 period (in million tonnes CO₂)

	CO₂ Reduction Potential
Public Relations Campaigns, Counselling, Innovation	0.7
<ul style="list-style-type: none"> • upgrading of dena (Deutsche Energie-Agentur, German Energy Agency) as centre of expertise for energy efficiency • large scale public relations campaigns • training courses and quality improvement initiatives (investors, trade, planners, constructors) • increased research under the auspices of the Building and Transport Ministry for innovations to increase energy efficiency; improved building materials • further development of the energy savings contracting system on the heating market 	
Financial Support Measures	2.8
<ul style="list-style-type: none"> • KfW bank loans for the building sector • Programmes to set market incentives in the biomass sector • Programmes to set market incentives in the solar energy sector • on-the-spot counselling • Upgrading of cities and towns in Eastern Germany, council housing 	1.6 0.8 0.2 0.1 0.1
Regulatory Measures	0.4
<ul style="list-style-type: none"> • implementation of the Energy Savings Ordinance (EnEV) 2006 and introduction of energy passes • amendment of the Home Ownership Act (Wohneigentumsgesetz) 	
Autonomous Reduction Effects*	1.3-1.5
Total of Quantifiable Measures	5.3

* The estimate of the autonomous reduction effects is based on energy prices of 29\$ per barrel crude oil for the reference year 2000. The further development was calculated on the basis of a long-term mean real increase of 1.5% per year which amounts to a price of 45\$ per barrel for the year 2030. The expected effects would change in relation to changes in energy prices.
Source: Forschungszentrum Jülich (Hrsg.) (2005): *Evaluierung der Minderungsmaßnahmen im Gebäudebereich* (Research Centre Jülich; Evaluation of CO₂ in the building sector).

Table 4: Measures in the transport sector to meet the emissions reduction target of 171 million tonnes CO₂ in the 2008 to 2012 period (in million tonnes CO₂)

	CO₂ Reduction Potential
Incentives to Reduce Transport Intensities and Increase Energy Efficiency in the Transport Sector	1.5
revenue -neutral tax reductions for low fuel consumption passenger cars taking into account activities of the EU Commission serving the same purpose	1
introduction of emissions-related landing fees at German airports	0.5
Technical Improvements in Vehicles and Fuels and Support for Alternative Fuels und Innovative Engines	8.5
Fuel Strategy of the Federal Government: substitution of traditional fuels by bio fuels	5
Substitution of F-gases in mobile air conditioning systems in accordance with the planned EU Directive on Air Conditioning in Vehicles	0.5 - 1
Public Information Campaigns on Low Emission Driving Habits	
stepping up the campaign "New Ways of Driving" (e. g. dena-campaign "efficient and on the move")	3
Total of Quantifiable Measures	10

In addition to the measures accounted for by quantifiable effects, decisions were taken on a whole range of **additional measures** in the transport sector which undoubtedly will bring about a tangible reduction in greenhouse gas emissions but the reduction effect of which **cannot be reliably calculated at the moment**:

- Upgrading of the toll system to set up a real “road pricing system “ on the basis of different local and time-related toll rates
- Support given to international measures to promote energy efficiency in aviation
- Measures to eliminate distortions of competitive positions between different means of transport
- Refinement of the promise made by the car industry to reduce specific CO₂ emissions in new vehicles
- Introduction of new engine types and measures to increase engine efficiency
- Stepped-up fitting of fuel consumption indicators in new vehicles

Even on the basis of conservative estimates it can be assumed that the **sum of these measures will be sufficient to meet the climate protection targets in the period 2008-2012** .

Monitoring

To permit an ongoing evaluation as to whether the measures laid down in the National Climate Protection Programme 2005 produce the projected emissions reductions, the programme provides for a **regular monitoring**. Under the monitoring provisions the Inter-Ministerial Working Group on CO₂ - Reductions (Interministerielle Arbeitsgruppe (IMA) “CO₂-Reduktion”) will - based on already existing reporting obligations - submit an **annual assessment report** to the cabinet on the national greenhouse gas emission status with special emphasis placed on meeting climate protection targets.

The **next update** of the **National Climate Protection Programme** will be published in **2008**.

Medium- and Long-term Perspectives

The Climate Protection Programme 2005 is not limited to fulfilling the German obligations under the Kyoto Protocol. It is also geared to meeting the medium-term target of a **40 per cent reduction by 2020 as against 1990 levels**, provided the rest of the EU Member States achieve a 30 per cent reduction in the same period.

Furthermore, the Programme is committed to the decision made by the European Council (Environment) according to which industrialised countries are to bring down their greenhouse gas emission **by 15 to 30 per cent by the year 2020 and by 60 to 80 per cent by 2050 as against the baseline levels of 1990**. It professes the commitment not to let global warming rise by more than 2 degrees Celsius compared to pre-industrial times.

The Climate Protection Programme 2005 reiterates the commitment made by the Federal Government to take the necessary measures that will allow Germany to meet its Kyoto targets. It states ambitious **medium- and long-term climate protection goals** and thus lays the basis for challenging climate protection policies after 2012.