

Joint press release by the Federal Environment Ministry and the Federal Environment Agency (UBA)

Climate protection: Greenhouse gas emissions in 2008 at their lowest since 1990

Germany reaches its Kyoto target

Compared to the previous year, total greenhouse gas emissions in Germany in 2008 were reduced by almost 12 million tonnes, which constitutes a decrease of around 1.2 percent. Total emissions amount to 945 million tonnes of CO₂-equivalent and are therefore within the target corridor of the Kyoto Protocol, according to which Germany has to reduce its annual greenhouse gas emissions by an average 21 percent for the period 2008 - 2012 (compared to base year 1990). According to the figures published by the Federal Environment Agency, Germany already fulfilled its obligations in the first year of this period by achieving a 23.3 percent reduction.

Federal Environment Minister Sigmar Gabriel said: "Even if we assume that the economic crisis accounts for around one or two percent of this decrease, these new figures are proof that our climate protection policy is working. Germany is at the forefront of international climate protection and has reached its Kyoto targets three years before the deadline. In order to achieve the necessary reductions up to 2020, we have to continue and consolidate our successful policy of expanding the use of renewable energies and increasing energy efficiency.

The greatest reductions were achieved with regard to carbon dioxide emissions: they were cut by 9.4 million tonnes (minus 1.1 percent). CO₂ accounted for approximately 88 percent of Germany's greenhouse gases in 2008. "The main reason for lower CO₂ emissions was decreasing demand for hard coal and lignite. At the same time, there was a rise in the use of lower-emission energy sources such as natural gas and, increasingly, renewable energies," said Prof Dr Andreas Troge, President of the Federal Environment Agency (UBA). He also stressed the importance of climate protection efforts in the face of the global financial and economic crisis. "Despite these achievements we should not relent in our efforts. Now is the time to prepare for the future and to focus on technology which will further reduce the emission of climate-damaging gases." said Troge.

It is remarkable that despite an increase in Germany's primary energy consumption by around 1 percent in 2008, CO₂ emissions were reduced by 1.1 percent. The reason for this is that consumption and emissions are more and more decoupled. While the use of liquid fuels and in particular light heating oil became more frequent, sales clearly declined for other fuels which cause higher emissions such as hard coal and lignite, especially towards the end of the year. Companies and private households use natural gas to generate electricity and heat. In addition, the importance of coal for power plants and the iron and steel industries has diminished: compared to 2007, the use of hard coal fell by around 7 percent, that of lignite by about 3.5 percent.

CO₂ emissions followed this trend: increase from mineral oil 12.7 million tonnes, reduction from natural gas (minus 1.8 million tonnes), hard coal (minus 11.9 million tonnes) and lignite (minus 6.5 million tonnes of CO₂).

Climate protection efforts also benefited from the expanded use of renewable energy sources. They are increasingly replacing climate-damaging fossil fuels. Currently, renewable energies cover 7.4 percent of total primary energy consumption. This constitutes an increase of 7.3 percent compared to 2007.

There was no change in total emissions from methane in 2008. Emissions from waste treatment were reduced by 5 percent. Methane emissions from livestock farming, however, continued to rise.

Nitrous oxide emissions, which are mainly produced in agriculture and the chemicals industry, fell by 5 percent compared to 2007. This is due to reduction efforts of the chemicals industry.

There were different developments concerning emissions of climate-damaging fluorinated gases, i.e. perfluorocarbons (PFCs), hexafluorocarbons (HFCs) and sulphur hexafluoride. In particular the aluminium and semiconductor industries reduced their PFC emissions by an additional 5.3 percent. In contrast, HFC emissions rose by 4.5 percent owing to their increased use for cooling. Emissions of sulphur hexafluoride, which is used for insulation, increased by 2.8 percent - albeit from a very low level. This rise is mainly due to the increased disposal of old soundproofed windows. If these windows are not disposed of properly, the glass can break causing an uncontrolled release of insulation gas.

UBA based its calculations on publications on energy consumption in Germany in 2008 by the Arbeitsgemeinschaft Energiebilanzen, figures on the gross domestic product for Germany in 2008 by the Federal Statistical Office, information from associations and on expert estimates. UBA used simplified methods to calculate emissions. Statements on the CO₂ emissions from different groups of emitters will probably not be available until detailed information on energy consumption is published in mid-2009. Detailed results on greenhouse gas emissions will not be published before early 2010.