



Germany is taking action!

Climate and energy policy and the cabinet decision of 5 Dec 2007

Climate protection is one of the focal points of Germany's policies. We consider sustainable energy policy to be key to economic prosperity and effective climate protection. Against this background, the German government has adopted an integrated energy and climate programme. This will pave Germany's way to a climate-friendly future. In doing this we are guided by a clear vision: security of supply, economic efficiency and environmental compatibility.

What do we have to achieve?

The worst impacts of climate change can only be prevented by limiting the rise in the global temperature to 2 degrees Celsius - compared with pre-industrial times. To achieve this, greenhouse gas emissions have to be cut worldwide, by at least 50 percent below 1990 levels by 2050. In order to reach this target the European Council of heads of state and government, under Germany's presidency, laid important foundations in spring 2007. The European Union will aim for a 30 percent reduction in its greenhouse gas emissions by 2020, compared with 1990, provided that other industrialised countries commit to comparable reductions. Developing countries should also make a greater contribution to climate protection in future. Even before the start of negotiations on a Kyoto follow-up agreement, the EU has decided to implement measures to reduce its greenhouse gas emissions by 20 percent by 2020.

Germany is pursuing even more ambitious reduction targets domestically. We have committed ourselves to the following reductions - in each case in comparison with 1990 levels: we are aiming to reduce our greenhouse gas emissions by 21 percent by 2012, 40 percent by 2020 and even 80 percent by 2050. To achieve this we have to double our energy productivity by 2020. We also need a massive expansion in renewable energies.

Further information: <http://www.bmu.de/3821>

What have we achieved so far?

According to preliminary estimates, greenhouse gas emissions in Germany in 2006 totalled around 1007 million tonnes CO₂ equivalent, around 18 percent below levels in the base year 1990. This clearly shows that Germany is well on the way to reaching its 2012 target of around 21 percent fewer greenhouse gas emissions.

What is also clear is that on the basis of 2006 levels, our greenhouse gas emissions have to be reduced by 2020 by a further 270 million tonnes. Only then will we be able to reach our 40 percent reduction target. To this end, the German government elaborated 'Key Elements of an Integrated Energy and Climate Programme' in August 2007. We are now implementing this programme step by step.

Further information: <http://www.bmu.de/39945>

What are we doing now?

The German government adopted a comprehensive package of legislative measures on 5 December 2007 for the implementation of the integrated energy and climate programme. A second package will follow in May 2008 to complement this important step. The measures contained in this first set include:

1. Increasing energy efficiency

More combined heat and power: By 2020 we will double the share of these highly efficient plants in electricity production. Their share will therefore rise to around 25 percent. The amendment to the Combined Heat and Power Act, which promotes the construction of new CHP plants, will serve this purpose.

Increased energy saving in buildings: We will tighten the provisions in our Energy Saving Ordinance. As a first step, new buildings should consume 30 percent less energy from 2009. As a second step, a further 30 percent reduction will be aimed for in 2012. Buildings will then consume only 3 litres of heating oil per square metre and year. We will support the modernisation of energy systems in existing buildings with more than 1.4 billion euro per year.

Smart metering: We will facilitate load-related, time-variable electricity tariffs and promote innovative metering. This will help consumers reduce energy costs. At the same time it will enable better use to be made of our power plants' capacities. This will increase their efficiency.

Clean power plants: We will lay down ambitious standards for nitrogen oxide emissions from new power plants. This not only makes new power plants more efficient, they will also be cleaner than existing plants.

Energy-efficient products and services: Public procurement is an important market for promoting energy-efficient products and services. The German government has therefore adopted guidelines for

environmentally friendly and energy-efficient procurement. This sets a good example for others to follow. At the same time we are saving money for electricity and fuels.

2. Expansion of renewable energies

Renewable Energy Sources Act: We will increase the share of renewable energies in the electricity sector from the current level of around 13 percent to 25-30 percent by 2020. We will launch a massive expansion of offshore wind energy use.

Renewable Energies Heat Act: We will increase the share of renewable energies in the heat sector from the current 6 percent to 14 percent in 2020. Homeowners will be obliged to use renewables in new buildings. Furthermore, we will make available 350 million euro in 2008, and 500 million euro from 2009, to support renewable energies in existing buildings.

Biogas: We will ensure that biogas is fed into the natural gas grid to a greater extent. A share of 10 percent is possible by 2030.

Electricity grids: We will improve the legal preconditions for the expansion of electricity grids. By doing this we will secure stable grid operation and the smooth expansion of renewable energies.

3. Greater resource and climate protection in the transport sector

Vehicle tax: In Germany, the vehicle tax will be calculated on the basis of CO₂ emissions in the future rather than on engine capacity.

Energy consumption of passenger cars: Consumers should be able to immediately identify a vehicle's energy consumption. This enables them to find out about fuels costs when purchasing a car. It also makes it easier to compare the efficiency of different models. The ordinance on the energy consumption labelling of passenger cars will be amended to this end.

Toll for heavy goods vehicles: The toll for clean vehicles will be reduced. In contrast, the toll for vehicles with higher emissions will increase.

Biofuels: We will increase the share of biofuels to 20 percent by volume (i.e. 17 percent by energy content) by 2020. This will be achieved by the amendment to the Biofuel Quota Act. The Biofuels Sustainability Ordinance will ensure that the biomass required is produced in a sustainable way.

Further information:

www.erneuerbare-energien.de/inhalt/36356/;

<http://www.bmu.de/38275>

What else are we doing?

Emissions trading began in January 2005. Energy producers and energy-intensive industries now need to surrender an allowance for every tonne of CO₂ they emit. If they emit more than their initial allocation, they must purchase additional allowances. On the other hand, if they do not exhaust their allowances they can sell the surplus ones and make a profit. This means that a price is attached to greenhouse gases and companies have an incentive to reduce their emissions. For the period 2008 to 2012 we have made the emission cap significantly more stringent. For example, from 2008 old power plants in Germany will be allocated 30 percent fewer emission allowances than their current emissions level. Additionally, 10 percent of allowances will be auctioned. This further increases the incentive to invest in innovative power plant technologies. At the same time we will thus ensure that only highly efficient plants will be connected to the grid. There are also further steps: with the ecological tax reform we gradually increased energy taxes between 1999 and 2003. The successful

outcome: CO₂ emissions and energy consumption fell by 2.4 percent. We will continue to support local public transport with a total of 1.7 billion euro per year. In total, the German government will invest around 11 billion euro in climate protection per year, including for the promotion of renewables, combined heat and power and increased energy efficiency.

Further information: <http://www.bmu.de/6943/>;

<http://www.bmu.de/40417>

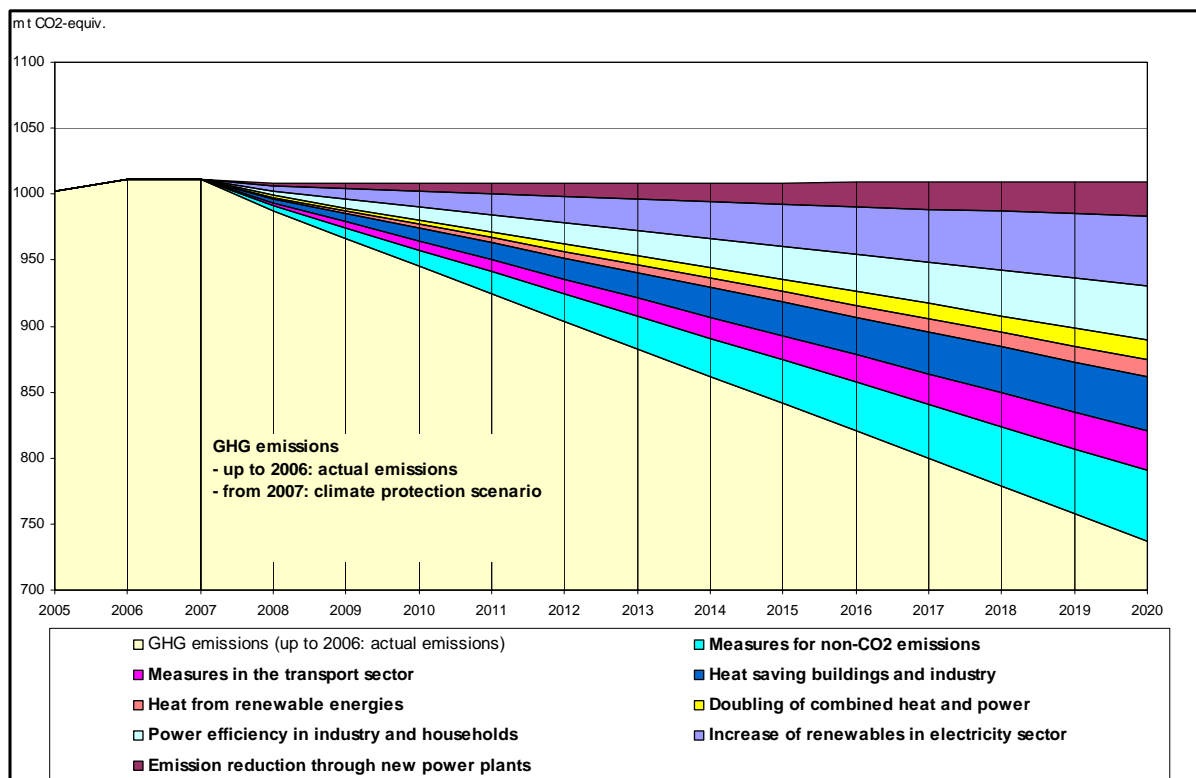
How do these measures contribute to climate protection?

Accountability is a key prerequisite of good policy. All relevant ministries will therefore elaborate a progress report every two years starting in 2010. In this report they will describe the impacts of the individual programme measures and the overall success of the energy and climate package. Data from independent experts will provide the basis for these reports. In this way we can ensure that Germany reaches its declared climate targets. The Federal Environmental Agency (UBA) has already calculated in advance the impacts of the German government's integrated energy and climate programme. The outcome: if all measures are resolutely implemented, we will reduce our greenhouse gas emissions by almost 220 million tonnes CO₂ by 2020. Compared with 1990 this is a decrease of more than 36 percent. This means we are well on the way to reaching our 40 percent reduction target.

Further information:

<http://www.bmu.de/40537>

On the road to minus 40 % in greenhouse gas emissions by 2020



What do these measures cost? How high are the economic benefits?

On behalf of the Federal Environmental Agency (UBA), a team of experts calculated the economic costs and benefits of the energy and climate programme. This team analysed the key measures with regard to programme and investment costs and the energy costs saved. The interim result is that the majority of the analysed measures save costs. In 2020 the annually calculated investment costs will total 31 billion euro. In contrast, energy savings of 36 billion were calculated. On balance, this means economic gains of around 5 billion euro in 2020. This could increase even further. The reason: the study is based on moderate oil and gas prices of 65 dollars per barrel. In fact, higher prices are already a reality today.

Further information: <http://www.bmu.de/40412>

Conclusion

Germany is on the road to an energy-saving future. We remain at the forefront of climate protection. With our energy and climate programme we are taking effective measures to reach our ambitious reduction targets. In doing this we are living up to our global responsibility. Yet we also strongly believe that climate protection is a driving force for progress and innovation. It goes hand in hand with growth and prosperity. We are determined to prove this.

Contact:

German Ministry for the Environment, Nature
Conservation and Nuclear Safety
Division KI I 1
D-11055 Berlin
Germany
KII1@bmu.bund.de
www.bmu.de/english/climate-change