

The *Klima sucht Schutz* (Climate Seeks Protection) campaign sponsored by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety helps consumers estimate energy efficiency and provides them with online recommendations for action. The main features of the online campaign include a heat loss check (for heat insulation in buildings), a best-practice database for electrical appliances, recommendations for the best choice of heating system (new or replacement), a pump check (for central heating pumps), a modernisation adviser and a grants guide.

CO₂ Building Rehabilitation Programme

The number of applications for energy consultations increased from 1 000 in 1998 to nearly 7 000 in 2004; in 2005, 8 500 applications had been received by mid-October alone. The rapid growth in the number of applications is likely to reflect the increased funding of energy-saving measures under various KfW programmes (KfW's Housing Modernisation, Ecological Construction and CO₂ Building Rehabilitation programmes), in addition to higher energy costs. The *CO₂ Building Rehabilitation Programme* relaunched at the beginning of 2006 is particularly important when it comes to the rehabilitation of existing buildings.

The German government has increased annual funding for the KfW *CO₂ Building Rehabilitation Programme* from approximately EUR 360 million to EUR 1 billion for 2006 to 2009. This is sufficient to support loan applications totalling EUR 17 billion. In future, the programme will encompass low-interest loans as it has done since its last relaunch in 2001. When the most recent federal budget comes into effect, the programme will be extended to include investment grants.

The stepping-up of the *CO₂ Building Rehabilitation Programme* has so far met with a very positive response. In energy-related programmes for the building sector, over EUR 5 billion in loans had been approved by the end of May 2006 – more than two-and-a-half times the full-year 2005 figure of approximately EUR 2 billion. The re-gearing of the programme to include investment grants is currently under consultation.

Appliance standards and labelling

Implementation of the European Union's directive on appliance labelling has proved a large success in Germany, and the government is currently taking advantage of its EU presidency to revise and update the labelling directive for so-called "white goods" (mostly kitchen and laundry appliances for households).

TRANSPORT SECTOR

Energy consumption in the transport sector accounts for 26% of total final consumption (TFC), and after many years on an upward trend, has been in decline since the beginning of the decade.

To structure the transport sector in a way that is compatible with the environment and conserves resources, the federal government is pursuing a broad-based package of measures comprised of technical, regulatory policy, price policy and investment measures, along with publicity and information measures. Action is focused on incentive mechanisms to reduce transport intensity and increase transport energy efficiency, technical optimisation of means of transport and promotion of alternative fuels and innovative power-trains (vehicle components, including the engine and transmission).

Most of the scope for efficiency gains in road transport lies in exploiting technical means of reducing fuel consumption in cars and heavy trucks. Findings from an international transport study forecast major efficiency gains in motor vehicles for the period 2002 to 2020.⁹ The efficiency of diesel engines can be improved by between 16% and 34%. Potential efficiency gains of 13% to 26% are assumed for spark-ignition engines.

Since 2000, technical efficiency gains in motor vehicles have exceeded the rate of increase in vehicle performance, resulting in a trend reversal in fuel consumption together with a corresponding reduction in greenhouse gas emissions. However, the effects of past technical efficiency gains have largely been cancelled out by growth in traffic volumes. Therefore, further action now targets personal circumstances affecting transport use (mobility patterns), organisational aspects (traffic management) and measures spanning all modes of transport to improve efficiency across the entire transport sector.

Germany is unique among IEA countries in not having mandatory passenger vehicle speed limits for most major motorways, particularly the *Autobahn*. A large part of the highway system has speed limits and transport control systems in place. Though the government has in the past considered imposing speed limits, both as a means of improving safety and lowering energy consumption and carbon dioxide emissions, this proposed change in policy is very unpopular though several options are being discussed internally.

Fuel economy standards and labelling

The fuel economy of Germany's vehicle fleet is governed primarily by the EU's voluntary agreement with industry, the target of which is to reduce the

⁹ Well-to-wheels report, CONCAWE/EUCAR/JRC, March 2007 (Version 2c) available from ies.jrc.ec.eu.int/wtw.html.