Report by the German Government on the Oil and Gas Market Strategy

- Summary -

We are faced with the challenge of keeping our supply and use of energy affordable, secure and environmentally friendly in the future. Despite certain risks, the energy supply is not yet threatened. Nor is there any danger to energy security in the medium term. However, the world-wide developments show that, in view of rising demand, energy is going to remain an expensive good in the long term. At present, the situation is characterised by an increase in the consumption of fossil fuels, especially in the emerging economies. This trend will continue even if the rate of growth is diminished in the short term as a result of the financial crisis. Inevitably, Germany's influence on the development of the world's energy markets is limited. However, we can use specific demand-side policies (e.g. on energy efficiency, renewables in the Integrated Energy and Climate Programme) to limit the risks of a high level of dependency on imports, and thus to reduce the medium- and long-term burden on the consumer. Furthermore, as part of the short-term measures to stabilise growth, the German Government is increasing its investment in making buildings more energy-efficient. People on low incomes have access to our welfare policy instruments. On the supply side, it is important for more investment to be undertaken in order to increase the capacities of the supplier countries. Here, high prices for oil and gas are strong signals for continued investment in the development of these forms of energy. A broad energy mix is also an important means of preventing risks. Alongside climate protection and affordability, safeguarding our energy security is at the heart of the energy policy agenda in Germany and the EU. Energy security embraces both internal and external aspects. With its report on the oil and gas market strategy, the German Government is presenting a concept for the long-term securing of our energy supply, embracing short-, medium- and long-term measures.

In order to continue the development of the precautions in place to safeguard energy security and to cope with oil and gas crises, the German Government will proactively feed its proposals into the EU debate.

Situation:

• The **oil price** is a key factor for the world economy. Many long-term gas delivery contracts are linked to the oil price. Notwithstanding the recent falls in price, the days of cheap energy are over. Back at the beginning of the decade, we had prices below USD 30 a barrel of oil, but this price more than doubled in 2007 and 2008. At its recent level of below USD 70 a barrel, the oil price remains high. The rise in the price of oil represents a substantial burden on the German economy, since it is an importer of oil. The higher bill for oil imports causes a drop in domestic purchasing power and a transfer of real incomes to the oil-exporting countries.

• It is true that some of the higher oil revenues in the producing countries do come back to Germany in the form of increase demand for imports. But this **flow-back effect** cannot offset the negative impact of the higher oil prices. Overall, therefore, the effect on economic development is negative.

• In the medium term, the higher oil price will set comprehensive **adjustment processes** in motion in Germany: demand for less energy-intensive goods will increase, and energy productivity in the production process will improve. The more flexible the goods and factor markets, the quicker these adjustment processes can be.

Demand-side elements:

• The German Government's **Integrated Energy and Climate Programme (IEKP)** has put important policies in place for a state-of-the-art, secure and climate-compatible supply of energy in Germany. Germany can restrict its level of dependency on imported oil and gas if it uses a broad range of energy sources (including domestically available lignite), increases energy efficiency, promotes energy conservation and strongly expands renewables. The expansion of renewable forms of energy can substitute fossil fuels. The aim of the revision of the statutory provisions regarding the use of renewables in the power sector is to raise the proportion of power generated from renewables to at least 30 percent by 2020 and to keep increasing it thereafter. At the

same time, the IEKP contains significant measures to enhance energy efficiency, e.g. in the building sector.

• The measures taken under the IEKP are being supported by other energy efficiency initiatives, e.g. initiatives to cut fuel consumption in the transport sector. Manufacturers already provide advice and, in some cases, training courses, on how to **cut fuel consumption** when driving. In its fuel saving campaign, the German Energy Agency is providing information about ways to cut fuel consumption.

• The German Government is aware of the situation facing consumers due to the rising energy costs. In the short term, **people on low incomes** are being helped by targeted welfare policy measures, such as the adjustment in the housing allowance by the Federal Government, backdated to 1 October 2008. The revision of the housing allowance rules means that the allowance will in future be based on the cost of renting the apartment including heating; in the past, heating costs were excluded. As a result, housing allowance is to be increased by an average of approx. 60 percent for the existing recipients. So the state is alleviating the impact of rising energy costs on low-earners. Recipients of Unemployment Benefit II will be reimbursed with their rental and heating costs as well as incidental costs.

• The German Government has launched a package of measures to **intensify competition** on the electricity and gas markets; in particular, this should help to restrict the increases in electricity and gas prices in the medium term. Also, the Federal Government is working at EU level for a more effective unbundling of energy utilities and for better regulation on the internal market. In this way, competition is to be intensified, since only competition can serve as a guarantor for fair and favourable prices.

Germany is the international market leader and top innovator in **energy efficiency technologies**. The efforts by other industrial countries and by emerging and developing countries to boost energy efficiency are creating a substantial market potential for German firms, and thus make sense both in commercial terms and from the point of view of energy security. Via its Energy Efficiency Export Initiative and via bilateral co-operation, the German Government aims to make an additional contribution towards

boosting energy efficiency in other major consumer countries through German technology.

• The German Government supports the creation of the **International Partnership for Energy Efficiency Cooperation (IPEEC)**. This initiative should be broadened to include other major emerging and consumer countries like Brazil, Mexico or South Africa.

• At EU level, too, measures to save energy and enhance energy efficiency are of great importance within the framework of an overall energy security strategy. In order to boost this potential, rapidly co-ordinated **measures at EU level** are required (especially the presentation of proposals to update the directives on energy consumption labelling and the energy efficiency of buildings, and the rapid and continued presentation of implementation measures under the eco-design directive).

Supply-side elements:

• The prime objective must be to realise **necessary investment** in output, transport and processing world-wide. To this end, Germany and the EU need to foster and further enhance economic and political relations with the producer and transit countries. This includes comprehensive support for the supplier countries as they build up their own modern economic structure. Also, producer countries should be encouraged to invest in Germany. Shared interests foster trust, solidarity and stable relations. The aim is lasting energy partnerships with a mutual benefit.

Russia is Germany's largest energy supplier, and Germany is Russia's largest energy market. The high proportion of **German imports** from Russia has a history going back many decades. With gas delivery contracts lasting up to 2030 and beyond, German firms have a secure foundation for deliveries in this field. In previous years, Russia has always proved to be a reliable supplier. This partnership must be expanded further.

• The continuing **diversification of sources of supply and transit routes** remains a central task. In the case of gas, the Nordstream pipeline through the Baltic is a major

contribution towards this; it forms part of the efforts to expand the Trans-European Networks. And the NABUCCO pipeline project should also be welcomed in this respect.

• Hermes export-credit guarantees and **investment guarantees** are available for German oil and gas companies. Also, the German Government supports projects of German industry in the field of raw materials abroad via its untied loans guarantee instrument. To receive support, the projects should promote economic development in emerging and developing countries and should be in the special interest of the Federal Republic of Germany. This includes projects supporting Germany's energy security via long-term oil and gas contracts for German clients.

• Transparency on the energy markets offers producers and suppliers important certainty about planning necessary investment. The **Joint Oil Data Initiative (JODI)** database is at the heart of international efforts to increase transparency in the oil sector. It aims to spot developments in demand, production and processing capacities more effectively at an early stage. In future, JODI is also to include annual data on production and processing capacities and on plans for expansion.

Due to favourable geological conditions, Germany has sufficient possibilities to create **gas storage facilities**. Germany currently has more than 40 underground gas storage facilities (maximum working gas capacity of approx. 20 bn cbm); these are the world's largest storage capacities after the USA, Russia and Ukraine. The German Government stresses the point that storage facilities are a – but not the only – significant instrument with which to ensure a secure and economic supply of gas and to prevent crises. Here, it is important that the member states of the EU pay even more attention to energy security, especially in crisis situations. Mutual solidarity will only become possible on the basis of efforts undertaken by the member states.

• In the long term, we need to use new technologies to reduce our dependency on imports of oil and gas. Innovative technologies which can be used to provide energy securely and more efficiently will ease the transition to a sustainable energy supply. For this reason, the Federal Government has clearly increased the **support available for research and development relating to modern energy technologies** in order to create the conditions in the medium term for a commercially well-founded reduction in

specific primary energy consumption. € 2.1 bn is available for this between 2008 and 2011.

• In **road traffic**, the emphasis is on the optimisation of traditional engines and the development of efficient, low-consumption, innovative engines. Enhancements in the efficiency of internal combustion and diesel engines, the use of biofuels, e.g. of the 2nd generation, and the development of hybrid engines are feasible in the short to medium term.

• In the long term, the **expansion of electromobility** could play an important role in an energy-efficient transport sector. Via its assistance for technology, the German Government is supporting the assessment of potential in fields like battery development, materials and safety research. The Economics, Research, Environment and Transport Ministries are bringing the activities of the IEKP within the electromobility co-ordination platform together in a “National Electromobility Development Plan”. The German Government will present the main features of this plan at a conference on 25/26 November and will debate them with commerce, research and business associations.

• The proportion of **biofuels** is to be further expanded and directed more than hitherto to reducing greenhouse gas emissions. A Sustainability Ordinance is to be enacted to ensure that when biomass is generated, certain minimum requirements are met regarding the sustainable cultivation of agricultural areas and the protection of the environment.

(Report adopted by the Federal Government on 5 November 2008)