

Statement

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Energy and security: Strategies for Europe

Ladies and gentlemen

At first sight, the security of energy supply, in particular electricity supply, seems to be regarded as a matter of course in Europe. A secure electricity system is, at the same time, an essential basis for all well-developed economies, especially in Europe. What it means to have to do without electricity had to be learned just a few weeks ago by the people in Scandinavia, especially Sweden. Even three weeks after a devastating storm, nearly 20,000 households in South Sweden still had to cope without electricity supplies. The communication society, by the way, also breaks down if deprived of electricity.

Many of us still vividly recall the empty motorways we witnessed on the car-free weekends of the nineteen-seventies. During the so-called oil price crises, dependence on crude oil became only too evident.

Here is the first intermediate conclusion: Globalisation and internationalisation undisputedly have their advantages. On the other hand, we are well-advised to put the energy business, and especially the

supply of electricity, on a broad, well-balanced basis, also if seen from the perspective of sustainability. In my view, the use of both domestically available and renewable energies must play a greater role. Security means: Dependable availability of the necessary energies, and efficient, conservation-minded management of resources.

Let me briefly introduce six theses on this subject to you.

Firstly. The past years have changed the discussion about security of energy supply. After being dominated for years by the aspect of ecology, economic and security-related aspects have increasingly found their way into the debate:

- The situation prevailing in summer 2003 demonstrated that the security of energy supply is not a gift of god. In a situation without any wind, and with nuclear generation throttled down, our security of supply hinged for weeks on reliably operating coal-fired base-load power plants. A broad-based energy mix is therefore also a mix of risks which supports the reliability of energy supply.
- Last year, the debate about electricity prices - even though it was often characterised by a lack of objectiveness - made it plain that the energy business is back to being increasingly perceived as an important factor for the national economy. It has become more evident that energy has something to do with the quality of a business location, and with competitiveness. And: The wider general public has learned that the government's share of the electricity price is over forty percent. In addition, it has become

clear, ladies and gentlemen, that the energy mix is also a cost mix.

- September 11, 2001 has cruelly highlighted how vulnerable our so-called western culture is. The ensuing war against Iraq had, besides its geo-strategic dimension, also a connotation in the field of energy policy, all the more because one issue additional to politics was oil, and hence access to energy reserves.

Secondly. National and European-level political debates on prices, service security and competitiveness reflect the need for a return to a better weighted balance of ecological, but also economic and social aspects of sustainability in the political arena. Energy policy is definitely also industrial policy.

In essence, this trend is to be welcomed. And yet: The energy industry appears, more than any other industry, to be the target of political and administrative regulation - which makes it not always easier for companies to operate, and make decisions, on the basis of business management criteria.

Thirdly. As the debate about service security and a rising import dependency progresses, the importance of locally available energies, especially lignite, is increasing significantly. The question might be asked at this point how this tallies with the efforts undertaken to protect the climate. After all, the Kyoto Protocol has only been in force for less than two weeks. It tallies indeed very well, as you may see from the following points:

- The only way to enter into new investment cycles is to advance innovative, new technologies. This has been borne out by our own experience: Since 1990, we have invested around 10 billion euros in some modernised, but mainly new lignite-fired power plants in the former East German states. Year after year, this saves us 50 million tons of carbon dioxide. Year after year, this gives us the benefits of high efficiency increases and optimised fuel utilisation, which means that natural resources are being conserved. Economy and ecology here walk hand in hand.
- That we in Germany have come close to achieving our Kyoto targets is first of all – though it may at first sound paradoxical – an effect of our new, internationally top rank lignite-fired power plant pool in the so-called new German states. This is the ecological benefit.
- At the same time, we have fuel available in the form of domestic eastern German lignite which, besides being distinguished by high economic efficiency, availability and hence service security, is different from imported fuels like gas in that it makes an important contribution to national value creation as this lignite is mined and refined here in Germany. Where gas is used as a fuel in combined-cycle power generation, the share of domestic and intra-European value creation amounts to approximately 30 per cent, while it is 100 per cent for lignite.
- Other power generators in Germany have yet to go through this wave of investment and innovation: Over 20,000 megawatts of new power plant capacity will be needed in Germany alone after 2010.

Let's, also in this context, exploit the enormous sustainability potential offered by optimised classical electricity generation. Let's also make use of the immense economic thrust which these investments worth twenty billion euros can bring about!

Fourth. These investments can, in combination with meaningful use of renewable energies, continue to be a key component of service security. We have to take the decision now: Without domestic energies, we will be left without a safe and affordable energy supply in Germany within a period of ten to fifteen years. The exit from nuclear energy has already proven to be hard to structure from both price and climate protection angles. Without lignite and hard coal, relying only on renewable energies plus electricity and gas imports, we in Germany will without doubt be unable to keep in place the economic basis for high value-creating industrial activities.

- We need to invest in this now.
- In the absence of investment, the existing less efficient and less sustainable plants would continue operation for years. This is equal to a lower level of investment and less innovation in exchange for higher risks for a secure electricity supply, and higher emissions - year after year.

Fifth. We therefore expect, also with a view to service security, the German and European politicians to take the fastest possible steps towards a well-balanced, realistic sustainability strategy with long-term transparency (beyond 2020), and which attaches equal importance to economic, social and ecological aspects.

- In recent years, global energy and commodity markets have undergone radical changes. In China alone, the volume of hard coal used for electricity generation is increasing by 60 to 80 million tons each year. This is more than the whole absolute amount of hard coal used each year for electricity generation in Germany. The next fifteen years will see new coal-fired power plants mushrooming in China, with a capacity of 700,000 megawatts (FAZ, September 08, 2004). This is approximately six times the capacity of Germany's generation pool today. And: This big leap in development in China which is accompanied by an enormous energy demand may well be repeated soon in India. In the face of these projections, the question whether the traditional European and global climate protection strategies still make sense will arise by 2012.
- In September, the World Energy Council identified economically viable access to oil, gas and coal as the core mission of energy policies for the next twenty years. There is a need for action here. And our answer can certainly not consist of backing out of the use of coal. In this case, Germany and Europe would ultimately give up as locations for high-level industrial value creation, and also as dynamic players in the global economy.

Sixth. We need a new era of energy research, in fields like classical generation and future projects like the CO₂-free coal-fired power plant.

- Never in the post-war period have we as a society afforded as little research in this future-oriented area as today. Relative to gross national product, Japan spends approximately 85% more, and the

United States about 50% more, on energy research than Germany does (source: International Energy Agency).

- It is a result of the work of engineers and scientists that, since 1950, we have raised the efficiencies of coal-fired generation from only 20 per cent to the current level of 43 per cent for lignite.
- Although the CO₂-free power plant is no longer only utopia, a lot remains to be done. Vattenfall Europe is ready to do it. We will continue to step up our commitment to a rollout of low-emission and highly efficient energy generation in the next few years. We have a long tradition and broad experience in developing and applying state-of-the-art power plant technologies. We want to become the European technology leader in the innovative segment of CO₂-free coal based power generation through our research and investment activities.
- With a view to the upcoming need for investment in the next decades, it is therefore justified to say that the need for qualified research has never been more pressing than today. I am keen to see whether the Federal German government takes this into account when the central areas of research in energy will soon be defined.

- There is a risk that we might lose our scientific competence in this field in a few years time, similarly to what has happened on quite a large scale in nuclear energy research in recent years. We do need research because we want new, more sustainable power plant generations with higher efficiencies which show the world how we can perform better and better even in fossil-fired generation.

The conclusion: Economic efficiency and innovation are key to security in energy supply. Let's strengthen classical generation through excellence and the use of locally available energies!

Many thanks for your attention.