

# Energy Technologies and the Environment Protection.

Suggestions for introductory remarks by state secretary Stefan Stern.

## **N.B.: Actual remarks may differ from written material!**

First of all, I would like to thank you for the kind invitation to this important event.

Recent events in the energy markets – with high prices of oil, gas and electricity, and fears of supply disruptions - have once more demonstrated the strategic importance of the energy sector.

Furthermore, the climate change issue is now accepted as a key factor for future development. In short, it has become clear that we have to transform our energy systems to a sustainable path.

As an illustration to the importance of energy sector development, the European Summit recently made a very firm statement on future energy policy in the European Union.

The Heads of State thus called for an Energy Policy for Europe, based on the three main objectives security of supply, competitiveness and sustainability.

In particular, the need for strengthening the EU leadership by adopting an Action Plan for Energy Efficiency, to consider to raise the present goals for biomass and for the proportion of biofuels. Furthermore the importance of implementing the recently launched Biomass Action Plan was underlined.

Energy services are essential for economic and social development. A secure and affordable energy supply is needed for people to have greater prosperity, choice, and opportunity in their lives.

But the energy system of today threatens the environment and our ever increasing reliance on imported energy threatens our economic security.

So we need to use available technology better, and we need research and new technology for the future.

This must be technology not only for Environment Protection but for a sustainable energy system in all its three dimensions – economic, social and environmental.

Before turning to the topic of today's discussion, I would like to draw some quick conclusions of what Sweden has achieved in the past years.

- Reduced dependence on oil: From a record-high dependency of oil in the magnitude of 75-80 per cent in the middle of the 70's, Sweden's dependence today is just over 30 per cent, primarily in the transportation sector.
- Increased use of bio-energy. The use of bio-energy has increased drastically over the past years, and accounts today for 17 percent of total energy supply.

- Increased energy efficiency, particularly in the industrial sector and the building sector. Despite an economic growth well above the OECD average, Sweden's energy use has only increased very modestly in the last 20 years. This is primarily due to increased energy efficiency, particularly in the industrial sector.
- A dramatic drop in emissions of sulfur and a steady decrease of emissions of nitrogen oxides. Swedish scientists were among the first to discover the effects of acid rain and this was a focal point in the first UN Environmental Conference in Stockholm in 1972, 20 years before the following conference in Rio 1992. Swedish industry was also among early world pioneers in demonstrating the first technological solutions for flue gas desulphurization.
- Sweden and the Nordic countries are among the true pioneers in liberalized electricity sector. Much effort is now being put into improving the transmission system and increasing the international interconnections using modern technology, in order to further integrate the Nordic energy market.

We would of course be happy to share our experiences in these and other areas with other countries.

Coming back to the topic of Energy Technology and the environment, let me point out that – in my opinion – climate change is the over-riding threat that we face today. Any responsible policy in the fields of energy and the environment must be carried out with this in mind.

To be able to successfully use new Energy Technologies to reduce emissions and other environmental effects, we have to start out from a solid platform. Thus, we must establish

- A clear and coherent vision
- Ambitious and credible goals
- A stable and transparent policy framework.

While the threats we face are common and require strong international co-operation and commitment, it is likewise obvious that each country has its own characteristics, and that an effective division of labour is a difficult balancing act between contributions of each country and joint efforts.

We need to share technical experience, promoting the use of state-of-the art technology, and we need to co-operate on Research and Development

Energy investments are often seen in a long run perspective with long lead times and slow capital turnover. Short-term adjustment to changing circumstances is therefore costly.

This is why the urgent requirements posed by climate change mitigation and Kyoto commitments to reduce emissions are difficult to achieve without the flexibility provided by the Kyoto mechanisms.

These mechanisms make it possible to take on far-reaching commitments without sacrificing investments before their economic life time is over (by spreading the necessary adjustment geographically without diluting responsibility).

Sweden and Romania have concluded a MOU on co-operation with joint implementation and one CHP-project is already completed. It is our hope that this project will be followed by additional joint implementation projects. We also have an MOU with Bulgaria and negotiate

with Russia and the Ukraine (all countries adjacent to the Black Sea). Joint implementation is a concrete vehicle to facilitate international co-operation in the field of sustainable energy!

So, in short, I think achieving a sustainable energy system is one of the more important challenges we face today, and energy technology will be the main part of the answer.

I am sure international collaboration will make our task easier!