

## ENERGY AND THE GLOBAL ECONOMY

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Ladies and Gentlemen,

It is with great pleasure that I have accepted the invitation to speak in this important event. The United Nations Economic Commission for Europe is celebrating its Sixtieth Anniversary this year. Events like the present conference demonstrate the UNECE's commitment and engagement to its mission and its objectives.

The topic of our session is of high priority. Sustainable energy policies are indeed instrumental to energy security and among the decisive factors for sustainable development, for peace and prosperity. Combined with the challenges set out by climate change, energy issues dominate the agenda both of political leaders and of the civil society at large. Energy has therefore been high in the agenda of the European Investment Bank. Let me thus structure my presentation in two parts:

*In the first part,* I will offer a few comments on certain key Energy Issues; and

*In the second part,* I will proceed to a short review of the EU policies and discuss the role of the European Investment Bank.

### ***The issues***

The debate on Energy issues is expanding and deepening in our society. Energy, more than ever before, touches and

conditions every aspect of our life, from heating and lighting our homes, to powering business, to transporting people and goods. Securing energy supply is therefore critical for our continuing development and prosperity at both national and global level.

Recent reports on World Energy Outlook have increased public awareness of the significantly increasing risks of security of supply. Risks which are related mainly to two factors:

First, the changing dynamics of global energy consumption, such as:

- the increase of oil and gas import dependence of major energy consuming countries from a limited number of instable regions and countries; and
- the rapid emergence of new actors as world economic players, already resulting to rapidly increases in energy demand from India and China in particular;

Second, the trend of strengthened State control on energy resources observed in all major oil and gas producing countries.

The combination of the above two factors exposes most of our world to great challenges.

As if these challenges were not enough, the alarming signals of “climate change” add another critical dimension: the need to master and curb GreenHouse Gas (GHG) emissions. The energy sector is the first to be concerned.

Since the power sector is the main GHG emitter, developments in the power sector will have major implications in the future for climate change, particularly in view of the substantial investments expected in this sector on grounds of security of supply.

In the meantime, oil prices have moved dramatically. The International Energy Agency has reviewed upwards its oil price scenarios in relation to the previous outlook. Gas prices are assumed to broadly follow the trend of oil prices. The differential between coal prices and oil/gas prices is thus expected to widen further, which leads to forecasts that coal demand will expand further. China and India are considered to be key contributors to this development. This trend has clear -and certainly global - implications in terms of CO<sub>2</sub> emissions. We see, however, quite different trends in the EU and worldwide. At world level, coal fired power generation dominates. In contrast, most of the new capacity expected in the EU is renewable energy and gas-fired generation even if building of coal power stations could not be excluded on block.

The Stern review on the economics of climate change has made a significant contribution to the debate. Stern concludes that climate change “is the greatest and widest-ranging market failure ever seen”. The analysis undertaken is global, long term, puts risk on the centre and examines non-marginal changes.

Stern supports that, if we don't act, the overall costs and risks of climate change will be equivalent to loosing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more.

According to the review, a shift to a low carbon global economy can be achieved through energy efficiency, less deforestation, and clean technologies, including renewable energy. A managed transition will be pro growth and pro-poor.

It is therefore necessary to change radically world energy trends and to move the energy development into a

sustainable energy path. Among the main challenges to consider are the availability – and security of – energy and other resource supplies; a better balance of global capital flows; a meaningful reduction in global imbalances; the shared acceptance of globalization; and of course, a credible plan for reduction in global greenhouse gases. If we do not act now on both the climate change and security of supply the economic costs and risk for the global economy are substantial.

The private sector will respond, as we have seen in many sectors of European activity, if the EU and governments set clear long term and credible targets and incentives. Private sector participants will benefit from this new area of economic activity; companies that move first will be best placed to exploit a market for low-carbon technology, goods and services that Sir Nicholas Stern believes could be worth some 400 bn EUR a year by 2050. In this sense, the challenge presented by climate change should also be seen as an opportunity to promote the Lisbon agenda.

### ***The EU policies & the role of the EIB***

The EU's response to this multiple challenge needs to be seen through the key objectives of applicable EU energy policy, which consists of: improving security of supply, enhancing competitiveness and limiting negative environmental impacts related to energy activities.

Europe is becoming increasingly dependent on imported energy, mainly hydrocarbons. Under a “business as usual” scenario, the EU's energy import dependence will increase from 50% of total EU consumption to 65% in 2030. Under the same scenario, the Commission forecasts that the increase in energy related CO<sub>2</sub> emissions (including international air transport) will exceed the 1990 level by 3% in 2010 and by 5% in 2030. Therefore, the EU has to adopt

policies bringing energy related CO2 emissions down to a more secure and environmentally sustainable path while maintaining or even improving at the same time the economic competitiveness of its industry. An “Heracles” task that requires a global approach and sharing of experiences.

Moreover, EU should maintain its global leadership “by example”. Europe has the scientific and technical knowledge and know-how to develop practical solutions. We also have the financial resources to be able to bear the costs of implementing new technologies and regulatory systems at the high end of the learning/experience curve.

The “energy package 2006-2007” of the European Commission is part of the Strategic EU energy review 2007. The documents cover issues of Sustainability, Energy mix, Internal market and External relations.

The proposal, even if somehow watered down by the Council, provides a useful guidance to the way forward:

- Concerning Greenhouse gas (GHG) emissions the Commission proposed that the EU commits itself to achieve by 2020 a reduction of at least a 20% reduction compared to 1990.
- The Commission proposed a very ambitious 2020 target of 20% for Renewable Energy share in energy mix (the previous target was 12% by 2010) and an equally ambitious 20% increase in energy efficiency by the same year.

The objectives related to climate change are very ambitious and may impact both on security of supply and cost, therefore on the competitiveness of European industry. The change of an energy system, which is fossil-fuel based, to one based on low carbon solutions in a period of around 40

years may be qualified as a very drastic one, if not revolutionary!

Support to Renewable Energy meets certainly a consensus. There is a wide agreement also on the need to support energy efficiency and R&D on energy matters. However, there are not yet easy solutions to be adopted regarding the transition from the current pillars of the EU energy system, namely oil, gas, coal and nuclear. With the possible exception of oil, for which the need to reduce dependence on is not a point of any controversy, different policies are applied in the various EU Member States. Companies need to find innovative solutions to face these important challenges.

In addition, the EU is in the process of fully liberalising and integrating its energy markets. This implies the following:

- The "old" approach of States deciding key investments in the energy sector is difficult to follow and often inefficient. The States through their policies should create the Framework and the necessary "incentives", in order that policy goals are taken into account by the energy consumers and different energy market players.
- In an integrated market, more and more policy decisions need to be taken at the EU level to avoid competition problems. Consider, for example, the case of a country that internalises fully the environmental externalities in the energy sector without a similar action by its neighbours or other EU countries: electricity prices will increase and this may generate electricity imports from those who have failed to do so.

Energy companies can find innovative solutions to address the key objectives of the EU policies if the appropriate incentives are put in place. At present, however, there are substantial policy uncertainties that prevent the development of sustainable investment strategies by

companies. This is clearly the case for the post-Kyoto after 2012. There is no doubt that the EU Emissions Trading System (EU ETS) will continue but there is uncertainty on the level of emissions targets; and as a consequence on the level of CO2 prices. The policy proposals indicate, as mentioned before, that the objective is to substantially reduce the level of emissions in the EU, but markets need regulatory certainty on this matter. If as today, the level of uncertainty is high on the post-2012, companies will apply a considerable risk premium in their investment decisions, particularly on the long-live decisions.

The EU policy should lead to a substantial increase of energy investments to both limit climate change impacts and address security of supply concerns. An important sector in this respect is the EU power sector. In the coming 10 to 15 years, substantial investments will have to be decided, particularly to replace a substantial part of the existing generation capacity that will reach the end of their life.

### **(The EIB objectives)**

- Against this background the EIB has elaborated a number of measures to reinforce its contribution to EU energy and climate change policy.

There are therefore clear market failures and both Member States and the EU should act (including EIB with its Statutory obligation to address market failures).

Being a policy driven bank in the service of the European Union, the European Investment Bank has already adopted the measures necessary to enhance its contribution to the EU energy policy.

More particularly, the EIB has had approved by its Governing bodies an explicit Action Plan setting quantitative targets and specifying qualitative initiatives:

- a global annual amount in the order of EUR 4 billion for projects that fall under a least one of the five priority areas within the energy field – and I will come back to these in a second;
- an annual sub-target of EUR 600-800 million, or more, for renewable energy projects with, as at present, 50% of EIB lending to electricity generation associated with renewable energy technologies.

To enhance value-added and efficiency, EIB energy lending comes under five priority areas within the energy field are:

- Renewable energy;
- Energy efficiency;
- Research, development and ,Innovation;
- Diversification and security of internal supply;
- External energy security and economic development

In the area of Renewable energy, EIB aims at the enhancement and diversification of its portfolio. In addition to EIB financing of investments in matured markets and tested technologies, the EIB also supports investments in less mature markets and less developed renewable energy technologies, such as solar and biomass.

In the area of Energy efficiency , the Bank seeks, first of all, to ensure that all projects supported by the Bank provide for the most energy efficient solution, independently of the project sector. Furthermore, the Bank is ready to provide finance for energy efficiency projects, such as individual investments of some size in the area of Combined Heat and Power or groups of small energy saving investments undertaken by the public sector, small and medium-sized enterprises, as well as housing units.

In the area of Research, development and innovation, the Bank supports the European Technology Platforms devoted to energy and research infrastructures. Through tailored financing instruments – some of them developed jointly with the European Commission - the EIB is able to finance high-risk research, development and innovation promoters who may previously not have had access to EIB finance.

The Bank is also ready to support RDI in carbon capture & storage (CCS) and to part finance the demonstration plants foreseen, and it is working closely with the Commission for the identification of large European research infrastructures in the energy sector.

The specific financing requirements of investments seeking diversification and security of internal supply make EIB a valuable partner in their development and the Bank's support to such projects has been sought on a systematic basis by promoters involved. Projects in this category include:

- Trans-European Energy Network projects
- electricity and gas grids
- gas/oil storage facilities
- power stations that contribute significantly to EU objectives

Last but not least, the area of External energy security and economic development which presents a vital strategic interest for the EU and its Member States. Projects in this area would need to satisfy one-or more- of the following criteria:

- Support a pan-European Energy Community with neighbouring countries
- Enhance security of energy in the EU
- Develop the pipeline of climate change projects
- Improve access to modern sources of energy by the population

Further to the above, and with a strong focus on Environment, the Bank has cooperated with other Financial Institutions in setting suitable carbon funds. Such Funds have been established in cooperation with the EBRD, the World Bank and KfW. Conscious of the gaps due to lack of arrangements post 2012, the Bank is also working on a 2nd generation post-2012 fund with the aim to promote the long term carbon market beyond 2012 and after the expiry of the Kyoto Protocol.

## **Conclusions**

Ladies and Gentlemen,

I would like to conclude by making a few remarks on the challenges and the way forward:

- The “business as usual” world energy scenario is both environmentally unsustainable and raises substantial security of supply threats. It is necessary thus to quickly move to a more sustainable and secure energy development pattern;
- It is necessary to act now. The cost of inaction will be very high for the global economy and for us all;
- It is difficult for the market alone to deal with the trade-off between future and uncertain benefits and immediate and certain cash-out;
- Global challenges require global effort. A collective action at world level will be necessary to face the challenges, particularly on climate change. This implies establishing international cooperation mechanisms for a long term.

Before leaving the floor, let me wish again UNECE a great future, at the service of people of Europe and the World.

Thank you very much for your attention.