Speech at OFGEM seminar, London, 10 February 2011

Europe's Energy Challenges

Lord Mogg, Mr Buchanan,

Distinguished guests,

Let me start by thanking OFGEM for hosting this seminar on Europe's energy challenges, less than a week after our Heads of State and Government gathered in Brussels to discuss precisely this topic.

Let me first pay tribute to the work of OFGEM in encouraging competition and choice in the UK energy market. You have done much to draw attention to the need for greater market opening in Europe and the benefits the UK can gain from a pan-European market. I will be interested in reading your assessment of the British power market which is due, I believe, next month.

And may I take this opportunity to wish Lord Mogg every success as Chairman of the new Agency for the Cooperation of Energy Regulators, which will be central in helping to finally complete a genuine internal energy market.

The challenges we face are well known to you: rising international energy prices, rising energy demand from third countries, scarcity of resources, geopolitical instability, climate change and the need for billions of pounds of investment against a backdrop of cuts in public and private spending.

I am not saying it is going to be easy to address these challenges.

What I can say for sure however is that the European Commission is fully committed to the task.

The European Council dedicated to energy which took place last Friday in Brussels, clearly shows that a European energy policy is now a priority.

With the strong guidance provided by Heads of state and Government, I am confident that we will be able to reach the ambitious objectives laid out in the "Energy 2020" strategy adopted by the European Commission in November.

It rests on the following pillars:

1. Reducing our overall consumption

According to the International Energy Agency estimates, world primary energy demand is projected to increase by more than 30% until the year 2035. Rising demand in developing countries is diverting energy supplies away from Europe. China alone is expected to use 20% of global energy by 2035.

There is wide-spread consensus that one of the most cost-effective way to face this challenge is to reduce our energy consumption.

However, while we are on a good way to achieve the 2020 targets for emission reduction and renewable energy, we are seriously lagging behind as far as energy efficiency is concerned. By 2020 we will only reach half of the 20% target if we carry on at the current pace.

The European Council has given new impetus to our pursuit of energy efficiency. More efficient energy use is the key to unlocking massive environmental and economic benefits - and reducing Europe's annual energy bill by around €200 billion. It could also create 2 million jobs by 2020 and of course contribute to our energy supply security.

In the coming weeks I will present an Energy Efficiency Plan proposing specific measures to boost energy efficiency. The Commission will then review the progress achieved with these measures by 2013 and will consider further measures - including proposing legally binding targets - if necessary. One element of the plan will be public procurements. With stringent standards in public procurement, the EU can give a real boost to energy efficiency.

2. Making a technological shift

The UK has an ambitious carbon reduction objective – 80% by 2050. The Cancun climate change agreement seeks 80% reductions in global emissions. The EU has the ambition to largely decarbonise the electricity and transport sectors by 2050. None of this will happen without a technological revolution.

This implies a more effective innovation strategy, which the 4th of February European Council called for.

The Council also confirmed that research & technology development for low-carbon technologies deserves priority treatment in future programmes. It is not just how much money there is. Even more important is the effective use of all the funds which are available. Energy has to be a priority in the next Framework Programme for Research. We also need a clear European commitment for international large- scale research cooperation projects like ITER.

3. External relations

The European Council has called for concrete progress on the external dimension of energy policy. This must start at home. We will be stronger abroad if we have a strong and effective single market at home. We must also develop new approaches to ensure coordination and cooperation for the conclusion of intergovernmental agreements.

Last month I visited Azerbaijan and Turkmenistan on Europe's access to the Caspian gas fields which would enable the realization of the Southern Corridor. An important breakthrough was achieved with the signature of a Joint Declaration with Azerbaijan and a concrete commitment from Turkmenistan to supply gas to Europe.

This visit sent a clear message: when the EU takes key decisions on energy jointly in Europe we are a strong player in the global race for energy resources.

I would like now to spend a bit more time on one of the core objectives of the Energy 2020 strategy: completing a well-interconnected single energy market.

4. An integrated energy market

The UK understood long ago already the benefits of a competitive energy market: 21 years ago, the UK energy market opened to competition. Since then, the task of ensuring secure, sustainable and affordable energy supplies and enabling cost-effective energy networks has moved away from governments towards the market.

Although it took longer, Europe is now moving along the same path. The January 2009 gas crisis certainly worked as a wake-up call: if the internal market had been functioning and the necessary infrastructure had been in place to transport gas to where it was needed, nobody would have had to stay in the cold.

A truly integrated internal market on energy is key to deliver more growth and jobs, promote technological progress, modernise our infrastructure and reduce our exposure to import and price volatility. To put it in more concrete terms, it means:

- 0.6%-0.8% increase in GDP
- 5 million more jobs by 2020
- That each consumer could save €100 a year by switching supplier/tariff option

National governments are rising to the challenge: they have confirmed that the European energy market should be completed by 2014 and that there should be no more energy islands in Europe after 2015. All this will only be possible with a deep transformation of our energy system in the next years.

The electricity generation from renewable sources in Europe is to double by 2020. Our networks, based on centralised coal, nuclear and gas generation, have to adapt.

A significant share of generation capacities will be concentrated in location away from the major centres of consumption or storage. Demand for renewable energy is rising across the continent and internationally. In the UK for example, there has been a tripling of photovoltaic installations since the introduction of the feed-in tariff last year. Up to 12% of renewable generation in 2020 is expected to come from offshore installations, notably in the Northern Seas. Significant shares will also come from ground-mounted solar and wind parks in Southern Europe or biomass installations in Central and Eastern Europe. However, decentralised generation can put a stress on distribution networks designed for conventional production.

In the UK, the level of investments required by 2020, for new power stations and grid upgrades alone, is over 110 billion pounds – twice the rate of the last 10 years. One quarter of Britain's generating capacity needs to be replaced within ten years. At the same time, demand for electricity follows an upward trend with an ever growing multiplication of applications and technologies relying on electricity as an energy source.

5. Infrastructure investment

The question is now: How will we pay for this?

One part of the answer was given by yourself, Lord Mogg, when you said that completing the internal market is central to the successful delivery of infrastructure investments. Market is the key word indeed, since it will be providing the bulk of the funding in infrastructure.

Under the current circumstances, these investments are however not happening. A new policy in the way energy infrastructures are planned, developed and financed is needed. That is why, in November 2010, the Commission presented a new approach which has now been endorsed by the European Council.

Let me explain why a new approach is necessary. I will give you five reasons:

1. Firstly, permitting procedures require at least 10 years for an electricity line to be commissioned. For complex cross-border projects that seem to benefit the neighbour not the local population or in case of new technologies and numerous local initiatives the process may take up to 20 years.

2. Secondly, pan-European energy infrastructure projects fail to attract the investments required. The level of the investment needs is huge: for gas, electricity and CO2 transmission networks we assume a total need of 200 bn Euro for 2020 (600 bn if distribution is included). National regulation does not sufficiently incentivize energy infrastructure development. Projects with a strong regional dimension, with the participation of a number of Member States, innovative technology projects or projects enhancing the security of gas supply – e.g. reverse-flow –, regularly are not reflected under cost oriented tariff regulation.

3. Thirdly, there remains uncertainty about future technologies, their availability and the risks (Offshore grids, Smart Grids or Carbon Capture and Storage / CCS), about the future energy mix and the geographical distribution of the energy mix (gas);

4. Fourthly, the yet incomplete internal energy market is linked to the absence of sufficient interconnections between the still very national markets;

5. Fifth point, the political obstacles hinder also the construction of complex energy infrastructure projects (both gas and electricity) which are partly or mainly outside of the EU territory but are vital for the security of supply of the EU.

In order to meet these challenges we need a European Master Plan – a Blueprint for our infrastructure development - on the basis of clear European priorities, stronger regional cooperation, efficient permit granting procedures and improved cost allocation and regulatory and financial incentives.

Amongst the priorities identified in the communication, there is the need to reinforce the grid to connect the offshore wind energy in North Europe and to interconnect it with Central Europe. This is of particular importance to the UK.

As part of this project, in December 2010, the UK, with 9 other states and myself signed a Memorandum of Understanding in order to proceed further with the development of offshore windfarms of the North Seas (North Sea, the Channel, Celtic Sea, Irish Sea) covering a surface area of about 760,000 km².

The bulk of the funding in these priority projects will need to be financed by the network users across the tariff systems.

The third internal energy market package creates the incentives for national regulators to think European and the companies to invest in new opportunities.

But, for some projects we will not be able to cover all costs via tariffs. That is why we will need to allow for targeted support to a limited number of projects of European interest.

The new European infrastructure instrument has to be substantial in terms of financial support: we need to move away from the grant system of TEN-E for feasibility studies towards a market-based and innovative financing approach. An approach that allows equity or bond participation according to the nature of the project and level of risk. And we need to better exploit synergies between the different EU financing instruments, be it the cohesion funds, the neighbourhood funds or others.

6. Providing a long- term view: the 2050 Roadmap

In addition to a map of the critical infrastructure for Europe and the right regulatory framework, investors need predictability over the long term.

Under the so-called "Energy Roadmap 2050", I want to present different paths to meet not only our greenhouse emission reduction target (80-95% compared to 1990) but also secure the provision of energy at competitive prices. Based on different scenarios, it will aim at presenting the policy measures needed in the coming years to firmly set the energy sector on the right track.

It will in turn provide a comprehensive picture of the alternatives in terms of both generation and transport choices with their respective cost/benefit balance. This should provide the necessary guide for investors and decision makers.

Conclusions

Our energy future is a dilemma for governments, markets and consumers alike. The way forward is through European policy.

This is something which successive UK governments, as well as OFGEM, have well understood. I remember that it was under the UK Presidency (December 2005 at Hampton Court, under then Prime Minister Tony Blair) that the European Council first called for a more integrated European energy policy.

Together, the UK and EU are making progress towards a common future – a low-carbon efficient energy economy. The barriers are considerable: financial, technological and social. The need for investment, new networks and international collaboration is greater than ever before. But with a European approach, supported and shared by all Member States, all industries, and all individuals, we can deliver the secure, competitive and low-carbon energy future we want.

I look forward to working closely with you all, to make this possible.

Thank you for your attention.