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from:	General Secretariat of the Council
to:	Delegations
Subject:	Informal Meeting of Energy Ministers (Gödöllő, 3 May 2011) - Energy Roadmap 2050

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Delegations will find attached the summary of the debate on the Energy Roadmap 2050 that took place at last May Informal Meeting of Energy Ministers. This summary was drawn up by the Presidency under its responsibility, without prejudice to detailed comments contributed by delegations orally and in writing.

## Energy Roadmap 2050

### Summary of the debate at the Informal Meeting of Energy Ministers

The framework for decarbonisation is laid down in the Low-Carbon Economy Roadmap<sup>1</sup> which aims for an 80-95% reduction in greenhouse gas emissions by 2050 to be met cost-effectively. On this basis the Energy Roadmap 2050 will investigate how to achieve a reduction of carbon-dioxide emissions of over 90% in the power sector by 2050 bearing in mind the EU objectives of energy security, sustainability and competitiveness. A forward thinking attitude is necessary since the decisions to be made in the near future will lock in the energy sector for a longer term.

Delegations agreed that secure, sustainable and competitive energy supply has become one of the toughest challenges of the 21st century. Nevertheless, it cannot be emphasized enough that this challenge also means opportunity for the energy sector in the decades to come. It is our common responsibility to ensure that these possibilities are conveyed to citizens and market actors. Participants expressed their belief that the Energy Roadmap 2050 should stand as the commonly accepted and ambitious – but at the same time the feasible – foundation for the long term European energy policy.

It was agreed that the EU and its Member States must act immediately in order to initialize the transition to a low-carbon economy. The first and most important step is to create consistency at EU level between the different strategies and targets, as all sectors of the economy and society are involved in the transition. A competitive low carbon and resource efficient economy can only be built through the coordinated actions of the various policies.

While recognizing the need for EU wide energy policy and targets, many participants stressed that the Energy Roadmap 2050 must take into account the different positions of Member States given their domestic natural resources, socio-economic characteristics and geographical location. While agreeing with the progress of decarbonisation and taking into account possible impact on other Member States, the pathways and the energy mixes should remain the competence of the Member States.

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<sup>1</sup> doc. 7505/11.

Most of the Member States highlighted energy efficiency as the priority area, followed by the further development of renewable energies which, for some Member States, should reach the highest share possible. In the energy mix of several Member States nuclear energy, natural gas or coal will also play a significant role in the longer term, while other Member States have decided not to use or to phase out nuclear energy. Hence, for those Member States which choose it, nuclear energy with the highest safety standards, as well as CCS and “clean coal” technologies, are likely to play a significant part in reaching decarbonisation targets in some cases.

Regarding the uncertainties, and not forgetting the risk of “lock-in”, many mentioned the setting of intermediate targets, which can stand as milestones and send clear signals for the market. At the same time these intermediate targets must be supported by an analytical framework, and consider actions already taken previously. Intermediate targets ought to assure the flexibility of the roadmap and to avoid closing down options given long term uncertainties.

During the transition the established objectives of the EU energy policy, i.e. security, sustainability and competitiveness must be considered and the possible conflicts between them must be resolved. The decarbonisation of the power sector and the efficient handling of resources will obviously push the energy sector towards sustainability.

The competitiveness of the EU can be improved further by the completion of the internal energy market, as well as by innovation and a workforce meeting the requirement of emerging technologies. However, to take the full advantage of the transition the training and education must be expanded and adapted to the new challenges.

The external dimension of the EU energy and climate policy will play an important role during the transition. On the one hand, the consistent development of infrastructures and the good relations with external partners is necessary to maintain the security of supply. Infrastructure development through the interconnection of Member States is also fundamental in the completion of the internal market and balancing of the electricity market. On the other hand, to prevent carbon leakage and assure competitiveness the EU must promote greenhouse gas emission reduction with the related targets and trading mechanisms on a global scale.

Another important issue mentioned during the meeting is the financing of the transition. While acknowledging the challenges being faced by the market due to the transition, the EU has chosen a market-based approach in its energy policy. Investors need long term perspectives with clear signals and stable policy frameworks which can ensure the adequate funding mostly from the private sector. Therefore, it is crucial to implement such a taxation and financing mechanism which considers CO2 emissions and energy efficiency. The proper pricing of CO2 is required to lead investments. With the creation of the Energy Roadmap 2050 and through innovative and emerging technologies the market can find the opportunities for triggering investments in favour of the low-carbon transition.

Long term EU energy policy must pay attention to consumers too. Many Member States underlined that the price signals of energy services play the most important role in shaping the consumers' attitude. However, these savings are driven by the need to cut energy bills and not by environmental awareness. Emphasizing the protection of vulnerable consumers, the actions taken against energy poverty and social responsibility, access to energy should be affordable for everybody. For this reason, but not necessarily in the framework of energy policy, the social aspects and the price sensitivity of the different consumer groups must be considered during the transition.

The key step in forming the habits of consumers is to provide them with detailed information about their consumption and its impact on economy, society and environment especially on the climate. Technologically, this demand side management will be feasible through the introduction of smart meters and the expanded use of the energy labeling of household equipments. While recognizing the necessity of these instruments, without enhanced awareness of the general public and deliberate action at individual level the gap between supply and demand can be too wide to close. Providing information will also facilitate the public acceptance of the transition. Energy efficiency measures and energy saving must take place in the everyday decisions of consumers and households.

Despite the fact that technologies and tools are already available given to carry out the transition, more effort and knowledge are needed to bring them into the mainstream. Therefore the management of the transition and R&D constitutes a priority both with regards to finance and policy. The SET Plan, the NER300 scheme and future Framework Research Programmes need to be aligned more towards improving the efficiency of existing renewable technologies as well as bringing forward some of the new emerging technologies. Enhanced cooperation and knowledge sharing between Member States, stakeholders and the R&D sector must be created in order to catalyze the realization of local innovations that can help us to move towards a low carbon economy.