SVILUPPO A BASSE EMISSIONI DI CARBONIO

La Commissione Ambiente e Industria del Parlamento Europeo ha organizzato il 19 ottobre a Bruxelles un workshop con rappresentanti del Parlamento, della Commissione, dell'impresa e della ricerca per acquisire pareri sulle azioni da avviare a breve termine nell'ambito della "Roadmap for moving to a competitive low carbon economy in 2050". L'ENEA era rappresentata da Massimo Busuoli, di cui riportiamo l'intervento

L'ENEA al Parlamento Europeo per la Low Carbon Roadmap

Massimo Busuoli

ENEA is the Italian National Agency for New Technologies, the Energy and the Sustainable Economic Development. With its 3000 employees, it is one of the major Italian Research Bodies whose activities are targeted to research, innovation technology and advanced services in the fields of energy, Climate and the Environment, New Technologies.
ENEA identified at a first sight *four strategic points* to be addressed in the next three years, trying to take into account all related sectors and technologies that will contribute to pave the way to respect and achieve the proposed roadmap objectives.
The first point is *Energy Efficiency*. The short-term energy efficiency actions, for the roadmap 2050, will have to take into account different approaches to reduce energy consumption, addressing both the demand and the supply side. Introducing instruments such as smart meters, efficiency standards for buildings, promoting smart cities and raising the awareness that consuming less is better, will definitely contribute to the reduction of the consumption from the demand side. On the other hand, from the supply side, the power sector will have to be more efficient, moving towards distributed generation of electricity and heat, minimizing the losses and the need of stocking large amounts of energy. Improving the EU energy labelling initiative and setting standards for products will drive this change. Introducing as a common practice the use of energy audits should support all these actions. Certified Escos (Energy Service Companies) should assist companies and individuals by improving the efficiency of the economic system.
Thus, short term period priorities should be:

- *Energy efficiency in buildings and industry and promotion of "smart cities"*
- *Opening of smart meters concept to consumers to optimize consumption.*

The second point is *Low Carbon Technologies.* We believe that in the next three years, the EU should give the confidence for a full deployment of the Renewable Energy (RE) market. We should address the stabilization of the incentives to RE, especially the role of feed-in-tariffs or premiums. These incentives require a strong political support, public funding and a redefinition of European priorities. A first step, and a strong political signal, should be the elimination of subsides to fossil fuels. The amount saved could be re-invested in support mechanisms

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for renewable energy deployment/development. Concerning Carbon Capture and Storage (CCS), we believe that CCS could play a major role, especially from 2020 to 2030, when fossil fuels will still be competitive. After this period, CCS should be phased out as the economy approaches to zero carbon emissions.
A mention to the European Emission Trading System needs to be done as actions to make it stronger are needed. The price of CO_2 allowances needs to reach a higher value to support clean tech investments. This means that actions to set more stringent carbon emission CAPs could be needed and supported by an EU carbon labeling such as the "carbon footprint". Auctioning is a key element for this especially if applied to the electricity sector.

Thus, short term period priorities should be:
- *Reverting the subsides to fossil fuels into incentives for Renewable Energy*
- *Creation of appropriate "CAP and TRADE" and "carbon labeling" systems*
- *Deployment of existing RE technologies, including CCS (up to 2030).*

The third point is *Infrastructures*. Europe has an urgent need to upgrade the transmission and distribution system. This requires a large amount of investments especially in the early years, in order to create a fully interconnected European grid that will allow cross-border transmission of electricity and support the development of RE technologies. This process should be supported by a policy of unbundling, where utilities that produce electricity should not be the same as the ones distributing it. In these upcoming three years, by addressing this problem, Europe will prepare the field for an increasing RE market that needs to be served by an efficient and interconnected grid. It appears important also to develop storage system that will allow for better integration of renewable energies into the transmission and distribution system and into the generation mix.

Thus, short term period priorities should be:
- *Promote the development of a free energy market*
- *Promote fully interconnected electricity networks and infrastructures.*

As the fourth point, let me finally close by mentioning the sector from which ENEA come from: the *Research* one. Research will have a key role for the achievement of the roadmap objectives. It is clear that an increase of efficiency and safety of the available RE production systems, will definitely contribute to the achievement of the expected roadmap targets. The European Energy Research Alliance (EERA – http://www.eera-set.eu), one of the SET-PLAN instruments, could represent a key actor for the speeding up of the development of new generation low carbon energy technologies. A proper economic and political support linked with the reinforcement of the links and collaborations with industry will definitely make the difference.
But the development of the low carbon technologies is not in itself the only future need. Climate Change assessments at European scale, through appropriate research and modelling of the climate system, is fundamental in order to evaluate the mitigation potential that could derive in the different economic energy-related sectors from political decisions. This could help to better develop the appropriate adaptation strategies at regional and local level. A proper European system of research in the Climate field needs to be better organized, and initiatives like the newly born European Climate Research Alliance (ECRA – http://www.ecra-climate.eu) could give a decisive contribution and should be properly reinforced and supported.
Thus, short term period priorities should be:
- *Support to R&D of new and more efficient RE production technologies*
- *Support to R&D for integrated assessment of the climate change effects.*

Let me conclude that, according to ENEA's view, a successful long term outcome of low carbon strategies and actions as well as of an effective public private cooperation in the area of low carbon technological development, can be enhanced by an integrated implementation of the different European initiatives such as the efficient use of resources (COM(2011) 571 final; 20.9.2011), the transition to a green economy (COM(2011) 363 final; 20.6.2011) and the research and innovation programs (Horizon 2020).