

## **EU Energy Policy and Targets**

### **Energy Efficiency Plan**

In March 2011, the European Commission adopted a plan for saving more energy through concrete measures. Energy efficiency is a key tool to strengthen Europe's competitiveness and reduce energy dependence, as well as the level of emissions. The measures proposed aim at creating substantial benefits for businesses and public authorities.

Using adapted innovative policies, it will, according to the Commission's objectives, be able to achieve 20% energy savings by 2020 and a decarbonised and resource-efficient economy by 2030. The measures proposed in the Action Plan foresee the proper renovation of public buildings, the improvement of power and heat generation as well as energy management systems in the industrial sectors. Moreover, the optimisation of energy consumption through smart energy measures and techniques and the acceleration of the renovation and adaptation of private buildings with energy saving appliances complete the Commission's targets. These will take legally binding forms in order to guarantee their realisation.

### **Energy Efficiency Directive**

On 22 June 2011, the European Commission proposed a set of measures in the form of a Directive in order to fill the legal gap in the area. The Directive establishes a common framework for the promotion of energy from renewable sources. It sets mandatory national targets for the overall share of energy from renewable sources in gross final consumption of energy and for the share of energy from renewable sources in transport. It lays down rules relating to statistical transfers between Member States, joint projects between Member States and with third countries, guarantees of origin, administrative procedures, information and training and access to the electricity grid for energy from renewable sources. Moreover, it establishes sustainability criteria for biofuels and bioliquids.

According to the national targets set by EU Member States, the national overall share of energy from renewable sources in gross final consumption of energy is 2.9% for the Republic of Cyprus with a national target to achieve 13% by 2020, whereas Sweden's target is set at 49%.

### **European Energy Efficiency Fund (EEE-F)**

On 1 July 2011, the Commission launched a new fund, the "European Energy Programme for Recovery" (EEPR). The new EEE-F will allocate EUR 146 million towards this financial facility dedicated to projects in energy saving, energy efficiency and renewable energies particularly in urban settings.

### **Renewable energy**

Renewable sources of energy, wind power, solar power (thermal, photovoltaic and concentrated) and tidal power, geothermal energy and biomass are essential alternatives to fossil fuels.

Their use reduces greenhouse gas emissions, diversifies the energy supply and reduces our dependence on unreliable and volatile fossil fuel markets, such as oil and gas, for instance.

In parallel, the stimulation of employment is inevitable with the creation of new technologies and the improvement of the European trade balance in the internal market.

### **Smart Grids**

With the Communication “Smart Grids: from innovation to deployment”, adopted by the European Commission on 12 April 2011, a set of policy directions is settled regarding future European electricity networks. The objective is to bring together all the advanced “Information and Communication Technologies” (ICT) in order to economise electricity and spend it at the cheapest cost.

According to estimations CO<sub>2</sub> emissions should be reduced by 9% and the annual household energy consumption by 10%.

Even though renewable technologies have matured, production of renewable energy has risen steadily and costs have come down, renewable energy still represents only a small share of the EU’s total energy mix. Many renewable energy sources are under technological and commercial development. Certain sources such as biomass, hydro and solar thermal sources can prove to be economically viable under favourable conditions. Nevertheless, photovoltaic energy requires increased demand in order to improve economies at scale.

### **Renewable energy actions**

The European Commission has developed an energy efficiency plan and has undertaken a number of renewable energy actions accordingly. In 2009, it launched a new environment for building professionals, local authorities and building occupants, “Build Up”, willing to share their experience on how to cut energy consumption in buildings. Secondly, the “Covenant of Mayors” is a commitment by signatory towns and cities to go beyond the objectives of EU energy policy in terms of reduction in CO<sub>2</sub> emissions through cleaner energy production and use.

In parallel, a campaign was launched in 2005 aiming to change the landscape of energy and spread best practices and build alliances among sustainable energy stakeholders serving as a think-tank. On the other hand, “Concerto” is an action supporting local communities in developing and demonstrating concrete strategies and actions that are both sustainable and highly energy efficient.

The “Intelligent Energy Europe” (IEE) programme helps realise EU targets to sustain the competitiveness of EU’s economy while fighting climate change. The programme becomes concrete through the realisation of such projects. Finally, through the “Eco-Innovation Funding Scheme”, the EU aims to support innovative products, services and technologies which are able to better use natural resources while reducing the EU’s ecological impact.

## **Energy research and development**

The EU objective of energy research is realised under FP7, aiming to create and establish the necessary technologies, adapting in parallel the current energy system into a more competitive secure and sustainable one. Moreover, the growing global demand for energy increases the demand for the development of cost effective technologies for a more sustainable energy economy not only for Europe but also worldwide, ensuring the potential of the European industry to compete successfully on a global stage.

Special emphasis will be given to certain activities connected to renewable fuel production, renewable electricity generation, hydro and fuel cells, smart energy networks, CO<sub>2</sub> capture and storage technologies for zero emission power generation, as well as renewables for heating and cooling, energy efficiency and savings.

## **International cooperation**

Given the global nature of the threats, challenges and opportunities of energy matters, the EU provides the opportunity to third countries to participate in FP7 activities aiming to increase cooperation and improve worldwide participation of scientists based on mutual benefits and common interests.

Under the FP7 Cooperation Scientific programme, international cooperation can be implemented through three actions: the “Targeted Opening” which is designed to promote participation of targeted International Cooperation Partner Countries (ICPC); the “Opening Up” which foresees the participation of research entities from third countries in all the research areas of the annual work programme for energy; and the “Specific International Cooperation Action” (SICA) which is dedicated to the international cooperation with partners from third countries aiming to transfer the technology and capacity building as well as to engage emerging economies with significant energy needs. As a result, energy research dialogues may lead to the realisation and implementation of specific actions through coordinated calls for EU co-funded projects.

On the basis of these priorities and the action programme presented, the European Commission will come forward with concrete legislative initiatives and proposals to achieve the 2020 goals within the coming months.

Christos Floridis  
Advocate – Head of European Affairs Department  
Andreas Neocleous & Co LLC  
<http://www.neocleous.com>