Annual General Meeting
Policy Updates

April 2015

EU Research and Innovation Policies

EU Funding - Horizon 2020: Horizon 2020 is replacing FP7, which expired at the end of 2013, and will run from 2014 to 2020. It combines all existing EU research and innovation funding programmes under a single simplified scheme. Horizon 2020 reflects the priorities of the EU strategic energy technology plan (SET-plan). It has a budget of nearly 80 billion EUR where the energy sector will receive around 5 billion EUR for non-nuclear energy research for the period 2014-2020 (of which 15% (78 M€) has been reserved for projects to support fossil fuels). In December 2013, the European Commission published the 2014-2015 calls for projects under the new research and innovation funding programme Horizon 2020. The next calls (work programme 2016-2017) are currently being prepared and are set to be published in the third quarter of 2015.

National Funding - Eurogia2020: Eurogia2020, the EUREKA low-carbon energy technology cluster, is a programme which addresses all areas of the energy mix, from renewable energy to efficiency and reduction of the carbon footprint of fossil fuels. It covers the entire energy value chain of all forms of primary energy sources (except nuclear). It is a funding programme open for application on a continuous basis, with four cut-off dates per year which gives flexibility to project proposers to apply at any time of the year. Each call follows a two-stage procedure, where the quality of the project proposal is evaluated and improved, which allows applicants to access national funding.

All innovative project ideas that will reduce the carbon footprint of energy production and use potentially qualify for EUROGIA2020 label. This label facilitates the access of project ideas to the national and regional funding and also to the interested customers. Between the years 2008-2013, 29 transnational projects were labelled, representing close to 200 M€ of project costs.

EU Energy Policies

Energy Union Strategy: On 25 February, the European Commission (EC) presented the Energy Union Strategy, a non-binding document outlining a wide range of initiatives to foster an EU-wide energy policy allowing a free flow of energy throughout the EU territory. The EC stated that the EU has energy rules set at the European level, but that in practice it has 28 national regulatory frameworks, hence the need for this new strategy. The Energy Union was as well triggered by the Russian threat to its gas supplies.

The Strategy consists of five main close interrelated dimensions:

1) Enhancing EU security of supply;

2) Building a single energy market which is highly competitive;

3) Increasing energy efficiency;

4) Reducing energy production pollution by decarbonising EU's economy;

5) Boosting renewable energies by investing in R&D.

The Energy Union will cut across a number of policy sectors including energy, transport, research and innovation, foreign policy, regional and neighbourhood policy, trade and agriculture.

As the EU treaty protects the member states' power to control their own energy mixes, it is limiting the EC's power to force change. Therefore, the real impact of the Energy Union remains to be seen once more concrete proposals are tabled. Until then, the biggest uncertainty is whether the Member States have the political will to harmonise their national strategies. In a recent event in Brussels, Maroš Šefčovič has stated that the objective of the European Commission is to finalise a detailed Energy Union Strategy proposal by November 2015.

2030 Energy and Climate Change Package: In October 2014, Member States agreed on the 2030 Climate and Energy Package, covering Greenhouse Gas (GHG) emissions reduction, energy efficiency, renewable energy, interconnections and the Emissions Trading System (ETS). The new framework aims at keeping the EU on track to meeting its long term objective of cutting emissions of 80-95% by 2050. The main targets agreed during the European Council are:

- At least 40% emissions reduction from 1990 levels by 2030 (nationally binding);
- At least 27% energy efficiency increase by 2030 (binding only at EU level). To be reviewed in 2020 having in mind a 30% target;

- At least 27% renewable energy share by 2030 (binding only at EU level);
- 15% increased energy interconnections between Member States by 2030 (binding only at EU level).

To achieve the overall 40% target, the sectors covered by the EU emissions trading system (EU ETS) would have to reduce their emissions by 43% compared to 2005. Emissions from sectors outside the EU ETS would need to be cut by 30% below the 2005 level. This will need to be translated into Member State targets.

EU Emissions Trading System (ETS) Reform: To strengthen carbon prices, the European Commission (EC) proposed a plan in 2014 to remove hundreds of millions of surplus carbon allowances from the market as of 2021, also called the Market Stability Reserve (MSR). The proposal was backed by Environment Committee (ENVI) members of the European Parliament in a vote in February 2015. However, Members of the European Parliament are in favour of introducing the MSR by the end of 2018, two years earlier than the EC's proposal. Members of the ENVI Committee gave the green light to start the negotiations with Member States which should start in April 2015. The objective is to reach a deal by June 2015.

The Market Stability Reserve more in details: According to the EC, if the market stability reserve would operate from December 2018 (as proposed by the European Parliament), this would raise the carbon price to an average 35 EUR/ton in the next decade. It shall allow to manage surpluses and shortages of allowances and the trigger is based on volumes:

- Surpluses of allowances: 12% of the total number of allowances that was still in circulation 2 years before should be placed in a reserve mechanism, unless these 12% are equivalent to less than 100 million.
- Shortages of allowances: if there are less than 400 million allowances in circulation or if for more than 6 consecutive months the carbon price is more than three times the average carbon price during the two preceding years, 100 million allowances should be released from the reserve (if not available, all remaining allowances in the reserve).
- Postponement of auctioning: It also foresees a postponement of auctioning (similar to back-loading) at the end of each phase: if the volume of allowances exceeds by 30% the expected average volume for the two first years of the following period (Phase IV), 2/3 of the difference shall be set aside and auctioned in equal instalments during year 1 and 2 of Phase IV.

Background: The EU ETS is the world's largest carbon market and aims to encourage companies to invest in low-polluting technologies otherwise they would have to buy allowances to cover their annual emissions. It is currently failing its role as a driver towards low carbon investment, due to the very low carbon price (currently around 7 euro) caused by the economic crisis and the over-allocation of allowances.

Shale Gas Developments: To additionally increase the knowledge on unconventional hydrocarbon extraction technologies and practices as well as to further reduce potential health and environmental impacts and risks, the EC established a ***European Science and Technology Network*** on Unconventional Hydrocarbon Extraction. The Joint Research Centre (JRC) has received the mandate to establish and manage this network in close cooperation with DG Environment and DG Energy, involving also DG Research & Innovation (RTD), DG Climate Action (CLIMA) and DG Enterprise and Industry (ENTR). The Network aims at bringing together experts from industry, research, academia and civil society. The Network will collect, analyse and review results from exploration projects as well as assess the development of technologies used in unconventional gas and oil projects.

Current European positions on shale gas drillings as of July 2014: A number of Member States are in the process of granting or have granted concessions and/or prospection/exploration licences over the past four years: Denmark, Germany, Hungary, Poland, Portugal, Romania, Spain, Sweden, Lithuania, Estonia and the United Kingdom. Member States that have banned fracking or put a moratorium include France, The Netherlands and Bulgaria.

Background: The high volume hydraulic fracturing technique, also commonly referred to as "fracking", has triggered concerns about potential environmental effects. The EU has deferred the decision to explore shale gas to each member state, which means that national governments retain the right to decide if and where they want to explore for shale gas.

EU Presidencies: Latvian Presidency (January-June 2015): The energy priorities of the Latvian Presidency mainly consist of developing a resilient Energy Union based on an interconnected internal energy market, energy governance, self-sufficiency and coordinated energy diplomacy. The Presidency is also committed to creating a market reserve to improve the stability of the EU carbon market and to push ahead the Air Quality Directive, which includes the Medium Combustion Plant Directive.

Upcoming EU Presidencies: Luxembourg (July-Dec 2015), The Netherlands (Jan-June 2016) and Slovakia (July-December 2016).

EU Climate Change and Environmental Policies

Industrial Emissions Directive: The Industrial Emissions Directive (IED) was adopted in 2010 and merges a number of former directives into one, including the **Large Combustion Plant Directive (LCPD)**. The LCPD was the instrument which currently governs the permitting and required Emission Limit Values (ELV) for a number of recent gas turbine (GT) fired plant, with the very newest being permitted under IED. The IED applies to installations of 50MWth or above, and can incorporate units of 15MWth where they are aggregated to a total of 50MWth or more. This aggregation would be the case where units have a common flue within the plant, or the Competent Authority setting permits deems they could be considered as aggregated. The IED sets NOx and CO ELVs for GT plant, though installations operated off-shore are excluded from these. Different ELVs apply according to fuel type (gaseous or liquid), and flexibilities are in place for certain criteria, such as load factor. The IED also contains other requirements around the setting of permits based on the contents of BAT Conclusions; these conclusions are derived from the Best Available Techniques Reference Documents.

The reference document for Large Combustion Plant, the LCP BREF, is currently under review. This is known as the "Sevilla Process". All operational plants must adhere to the revised opinion on BAT. While off-shore assets are exempt from the IED ELVs, they are not exempt from this requirement for the application of BAT in permit setting. There remains legal uncertainty as to whether plants in the IED flexibilities must apply BAT as stated in the BAT Conclusions.

For more information on the Large Combustion Plant Best Available Techniques Reference Document Revision, please refer to the ETN Briefing Note enclosed in the participant folder.

Medium Combustion Plant Directive (MCPD): A new Medium Combustion Plant Directive is currently being proposed under the Air Quality Directive. This seeks to bring plant in the range of 1-50MWth under regulation, setting Emission Limit Values (ELVs) for plants by fuel and type. As it is still in development, its final form is not yet known. For more information on the MCPD, please refer to the ETN Briefing Note enclosed in the participant folder.

Carbon Capture and Storage (CCS): In 2014, the European Commission (EC) acknowledged that CCS may be the only option available to reduce direct emissions from industrial processes at the large scale needed. Increased R&D efforts and commercial demonstration of CCS are therefore essential over the next decade so that it can be deployed in the 2030 timeframe. However, in January 2015, RWE (Gemany), Electricité de France (France), Vattenfall AB (Sweden) and Gas Natural Fenosa (Spain) have announced their withdrawal from the Zero Emission Platform (ZEP), which advises the EC about CCS technologies. The companies stated in a letter that they currently do not have the necessary economic framework conditions in Europe to make CCS an attractive technology to invest in.

White Rose Project (UK): In August 2014, the EC announced that the UK based White Rose CCS Project will be awarded up to €300 million in funding as part of the second round of the NER300 programme. Capture Power, the developer of the project, is a joint venture set up by Alstom, Drax and BOC to develop White Rose in close co-operation with National Grid, who will provide the CO_2 transportation and storage infrastructure. Located on land adjacent to the existing Drax Power Station, near Selby in North Yorkshire, the 426MW new build power plant will burn coal with the potential to co-fire sustainable biomass and meet the equivalent power needs of over 630,000 homes. Fully equipped with CCS technology from the outset, 90% of all the CO_2 produced by the plant will be captured and transported by pipeline for permanent off-shore storage deep beneath the North Sea seabed. If the plans go ahead and development consent is granted, construction would be likely to begin in 2016.

CCS in the world: The world's first large-scale carbon capture and storage (CCS) project in the power sector commenced operation in October 2014 at the Boundary Dam power station in Saskatchewan, Canada. Two additional large-scale CCS projects in the power sector – at the Kemper County Energy Facility in Mississippi and the Petra Nova Carbon Capture Project in Texas – are planned to come into operation in 2015 and 2016 respectively. Construction is also underway on the world's first large-scale CCS project in the iron and steel sector, the Abu Dhabi CCS Project in the United Arab Emirates (UAE). These four projects are among the 22 large-scale CCS projects in operation or construction around the world.

UN Climate Negotiations COP21: From 30 November to 11 December 2015, France will be hosting and presiding the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21/CMP11), otherwise known as "Paris 2015". COP21 will be a crucial conference, as it needs to achieve a new international agreement on the climate applicable to all countries, with the aim of keeping global warming below 2°C.

Background: The Conference of the Parties (COP) is the supreme decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC) created in 1995. It is an international treaty between cooperating countries that have pledged to work together to limit average global temperature increases and the resulting climate change. In 1995, countries launched negotiations to strengthen the global response to climate change, and, two years later, adopted the Kyoto Protocol. The Kyoto Protocol legally binds developed countries to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on 1 January 2013 and will end in 2020.