

EU Energy Policy Diary 2011

January 2012

EU Energy Summit hints at nuclear as low-carbon technology



On 4 February 2011, during the first ever EU Energy Summit, European heads of state agreed upon a number of priorities that should govern the EU's energy policy. These were defined within the framework of the Europe 2020 Strategy, which is aimed at promoting jobs and growth. The main priorities identified were: the completion of an integrated internal energy market by 2014, the modernisation and

expansion of Europe's energy infrastructures, greater energy efficiency and improved interconnections so that "No EU Member State should remain isolated from the European gas and electricity networks after 2015."

The European Commission (EC) was urged to accelerate implementation of the Renewable Energy Directive, to issue a Communication on security of supply and international cooperation and to develop a low-carbon 2050 Strategy.

The Summit conclusions emphasised that "the EU and its Member States will promote investment in renewables and safe and sustainable low carbon technologies and focus on implementing the technology priorities established in the European Strategic Energy Technology plan (SET-plan)". Mention of the need to promote the "highest standards for nuclear safety" was the only direct reference to nuclear. However, references to "safe and sustainable low carbon technology" and to the SET-plan (which defines nuclear energy as a low-carbon technology and provides a platform for the creation of a European Sustainable Nuclear Energy Industry Initiative, ESNII) endorsed the role of nuclear in EU energy policy.

For further information, please [read the conclusions](#) of the Energy Council.

EU Energy Ministers endorse 2020 Energy Strategy



On 28 February 2011, during an EU Transport, Telecommunications and Energy Council EU energy ministers adopted the EU Council's conclusions on the EU's ten-year energy plan, entitled *Energy 2020: A strategy for competitive, sustainable and secure energy*, which the EC published in November 2010. The Conclusions reiterated the position reached by heads of state during the EU Energy Summit of 4 February 2011, namely that "the Energy 2020 Strategy should contribute to promoting a more energy and resource efficient,

sustainable, low carbon, secure, interconnected and competitive Europe, to the benefit of all consumers (households as well as businesses)." They also stressed the need to invest more in research and innovation into "safe and sustainable low-carbon energy technologies."

Although the Conclusions only mentioned nuclear twice, within the context of safety and indigenous energy sources respectively, its importance is hinted at whenever low-carbon energy sources are referred to.

For further information, please [read the conclusions](#) of the Council.

Nuclear's role in the EU's 2050 climate change strategy is recognised



On 9 March 2011, the EC published a Communication entitled *A roadmap for moving to a low-carbon economy by 2050*, which presented the strategy required to promote Europe's transition to a low-carbon economy by 2050. The central components of this strategy are reducing EU greenhouse gas (GHG) emissions by 80% by 2050 compared to 1990 levels

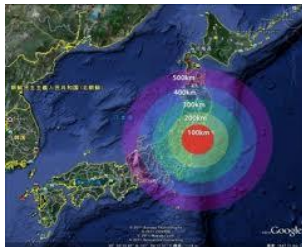
and increasing the share of low-carbon technologies in the EU's energy mix, which includes nuclear energy, to almost 100% by 2050.

The findings outlined in the Communication are based on a sector-by-sector analysis, carried out by Directorate General (DG) Climate Change using different models and scenarios, of how the EU can achieve the necessary GHG emission reductions that underpin the 2050 low-carbon economy objectives. Special emphasis was given to how global climate change action relates to the energy sector and to how the electricity generating sector, in particular, can be CO₂-free by 2050.

Speaking after the publication of the Communication the EC's Energy Commissioner, Günther Oettinger, said: "In electricity generation, I think we will be very successful and we will not have CO₂ emissions (by 2050). In other words, non-carbon technologies will be deployed for this particular purpose and all this has been incorporated into the energy roadmap, of course renewables have their place in this energy roadmap, but nuclear can keep its place, as well as coal, gas and cogeneration, however, only when we have a reduction of CO₂ emissions."

For further information, please [consult the EC's press release](#) on the Communication.

Fukushima accident triggers political debate at EU level



On 15 March 2011, the EC, Member States' energy ministers, regulators, experts and industry representatives met to discuss the impact of the Fukushima accident in Japan (11 March 2011) and what measures should be put in place to ensure that such an accident never occurs in Europe. The major outcome was an agreement to introduce risk and safety assessments ("stress tests") at all nuclear power plants in Europe. It was decided that the European Nuclear Safety Regulators Group (ENSREG), in cooperation with Member States and the EC, would define the

scope and modalities of the risk and safety assessments. The main focus would be on risks associated with earthquakes, floods, cooling systems, backup power and the age and design of the reactor.

On 22 and 23 March 2011, the Western European Nuclear Regulators Association (WENRA) contributed to the process by putting forward a proposal detailing the scope, methodology and schedule of the safety assessments. It also created a task force in charge of defining the tests. For further information, please [read WENRA's proposal](#).

Further information is available on the [ENEF website](#).

The nuclear industry, for its part, declared its commitment to contributing to the risk and safety assessment process. The European Nuclear Installations Safety Standards (ENISS), a specific organisation within FORATOM that brings together decision-makers, operators, specialists from the nuclear industry and European regulators, played a key role in helping to define the risk assessments criteria. ENISS set up a special task force on Safety Terms of Reference (STORE TF) to propose the terms of reference of the risk and safety assessments carried out at NPPs – both those in operation and those under construction.

On 24 and 25 March 2011, the European Council's Conclusions stated that the tests were to be carried out by the national regulatory bodies, with neighbouring countries urged to follow suit. The results were to be communicated to the EC, ENSREG and the general public in the autumn of 2011. The risk and safety assessments process was adopted in June 2011 and the assessments were carried out on a voluntarily basis because nuclear safety is an area of shared competence between the EU and the Member States. At the end of the year, the European Council gave its assessment of the findings based on the report it received from the EC.

Further information is available on the [ENISS web site](#).

For further information, please [read the FORATOM's Q&A document](#).

Nuclear Forum discusses “stress tests”



On 19 and 20 May 2011, the plenary meeting of ENEf (the European Nuclear Energy Forum) took place in Prague. It was attended by EU and national policy makers, officials from international organisations, representatives from the nuclear industry and regulators. The turnout was high, probably in anticipation of news regarding the risk and safety assessments (“stress tests”) and bearing in mind the disagreement on their

definition that existed at the time between ENSREG and the EC.

The Prime Ministers of the Czech Republic and Slovakia supported the criteria for stress tests as defined by ENSREG. The Czech Prime Minister, Petr Nečas, said that “stress tests should remain a technical issue, not a political one.” The French Industry Minister, Eric Besson, said “nuclear safety is too important to be exploited for political purposes as it is today.”

Günther Oettinger reiterated his desire to have a broader definition of the “stress tests” to include, for instance, the impact of terrorist attacks. A meeting between the ENSREG Chairman, Andrej Stritar, and Günther Oettinger took place during the ENEf plenary, but failed to resolve the stalemate.

Peter Faross, Deputy Director General of DG Energy, concluded the meeting by stressing that “ENEf delivers and lives up to people’s expectations”.

For further information, please [consult the ENEf website](#).

EC and regulators agree on stringent stress tests’ criteria



On 25 May 2011, the EC and ENSREG agreed on the criteria for the risk and safety assessments to be carried out at all NPPs in operation or under construction in the EU from 1 June 2011.

They would not cover security threats (e.g. terrorist attacks), which were to be dealt with separately by the competent national security authorities. The primary task was to assess safety levels in the event of natural disasters, like floods and earthquakes, as well as a combination of both. Of particular focus were the ability of nuclear plants to withstand black-outs and loss of cooling systems and issues linked with human error. The risk and safety assessments also evaluated the impact of man-made accidents such as transport crashes. Operators were required to submit a preliminary report to their national regulators by 15 August 2011. The latter submitted their national reports by 15 September 2011.

Council agrees on extension of nuclear research programme



On 28 June 2011, the Council agreed in principle to extend for another two years the framework programme (EURATOM FP7) for nuclear research, which is designed to maintain Europe’s leadership in the nuclear field by supporting research and encouraging the transfer of technology between the research community and the industry. FP7 also contributes to maintaining the highest level of safety and security at European NPPs.

Current European nuclear research funding was scheduled to run for five years, until the end of 2011, while funding for the rest of the programme lasts until 2013. The extension of EURATOM FP7 would, therefore, enable both parts of the programme to be covered by the same period of funding. The EC proposed to extend the budget of the EURATOM FP7 as follows: €2.2 billion (86% of the overall sum) for nuclear fusion research and, above all, to

the construction of the international experimental fusion reactor ITER, in Cadarache, France; €112 million to nuclear fission, education and training, and safety and radiation protection; €233 million to the activities of the Joint Research Centre.

For further information, please [consult the press release](#) of the Council of the European Union.

European Council adopts Radioactive Waste Directive



On 19 July 2011, the European Council adopted its long-awaited *Directive Establishing a Community Framework for the Responsible and Safe Management of Spent Fuel and Radioactive Waste*. The Directive establishes a first-ever Community-wide legal framework for the safe and sustainable management of the radioactive waste and spent fuel produced by Europe's nuclear power plants. Member States' governments will have two years to ensure that their national legislation is in line with the new Directive and are required to submit national radioactive waste management programmes to the EC that feature specific targets and timeframes, inventories, estimations of the cost of the programmes over a 10-15 year period and how they will be financed. Among the key issues covered under the new legislation is the question of exports. Radioactive waste can be exported to third countries provided the latter can guarantee safety standards that conform to the provisions of the Directive.

As far as the long-term management of highly radioactive (high-level) waste is concerned, the Directive recognises the importance of deep geological repositories as the option of choice: "It is broadly accepted at the technical level that, at this time, deep geological disposal represents the safest and most sustainable option as the end-point of the management of high-level waste and spent fuel considered as waste."

Günther Oettinger emphasised the significance of this key piece of EU legislation: "This is a major achievement for nuclear safety in the EU... With this directive, the EU becomes the most advanced region for the safe management of radioactive waste and spent fuel."

The Directive entered into force at the end of August 2011.

For further information, please [consult the EC's press release](#) and [FORATOM's press release](#).

SNETP reaches over 100 members



On 5 October 2011, the Sustainable Nuclear Energy Technology Platform (SNETP) approved the membership applications of five organisations, bringing the total number of members to 102. The SNETP was created in September 2007 with the EC's support and aims to promote and co-ordinate research activities in the field of nuclear fission. It brings together representatives from industry, research, safety organisations, universities and non-governmental bodies based in Europe, and its goals are in line with those of the EU's Strategic Energy Technology Plan (SET-Plan).

For further information, please [consult the SNETP website](#).

EC launches Horizon 2020 to boost EU research and innovation



On 30 November 2011, the EC presented *Horizon 2020*, a package of measures intended to boost research, innovation and competitiveness in Europe. The EU's Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn, announced that *Horizon 2020* will provide €80 billion of funding for investment into key research and innovation projects across the EU. As far as nuclear fission research is concerned, €1 billion will be set aside for Euratom research programmes and €656 million for Joint Research (JRC) projects. This new packages of measures follows on from Euratom's Seventh Framework Programme 7 (FP7).

EC's 2050 Energy Roadmap recognizes nuclear energy's role in Europe's low-carbon future



On 15 December 2011, the EC published its *Energy 2050 Roadmap*, which stresses the important contribution that nuclear energy makes in helping the EU to achieve its goal of reducing CO₂ emissions by 80% by 2050, whilst at the same time ensuring security of energy supply and promoting competitiveness.

The *Energy 2050 Roadmap* indicates that nuclear energy makes “a significant contribution to the energy transformation process” and is “a key source of low-carbon electricity generation.” It also emphasises that nuclear energy “contributes to lower system costs and electricity prices”. The document analyses different scenarios in order to determine Europe's low-carbon energy economy by 2050. They are based on the four ways of decreasing CO₂ emissions: energy efficiency, renewables, nuclear, and carbon capture and storage (CCS).

Günther Oettinger said: “The central goal of the Roadmap is to reduce CO₂ emissions to near zero by 2050. If we focus on that task alone, nuclear is perfect to perform it.” He added that it was up to the Member States to decide whether they want to use nuclear technology to reach the targets set by the EU.

To coincide with the launch of the EC's Energy Roadmap, FORATOM published an updated version of its report entitled *Energy 2050 Roadmap: Contribution of Nuclear Energy*. The original version was printed in February 2011 and the updated version, which was printed in November 2011, took into account post-Fukushima developments. FORATOM's report outlined how nuclear energy will contribute significantly to the goal of achieving a low-carbon energy mix by 2050 and how it lies at the heart of the EU's Energy 2020 Strategy. The report also featured critical analyses of the different scenarios featured in the EC's Roadmap that were carried out by the Paul Scherrer Institute (Switzerland), the International Energy Agency (IEA), the OECD/NEA, Eurelectric, the EC and the World Energy Outlook. The main conclusion of FORATOM's report is that if the EU wants to achieve its security of supply, competitiveness and climate change goals, the share of nuclear generation should be at least maintained.

For further information, please [read FORATOM's report *Energy 2050 Roadmap: Contribution of Nuclear Energy*](#), the [EC's press release](#) and [FORATOM's press release](#).