

EU Nuclear Energy Policy Forecast 2014

February 2014

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Impact of EU institutional changes on nuclear policy

This year's European elections will have a major impact on the European Union (EU)'s political agenda and will put EU nuclear energy policy on the back burner for a while. The elections to the European Parliament (EP) will be held in all EU Member States between **22 and 25 May 2014**, as decided unanimously by a decision of the Council of the European Union. It will be the eighth Europe-wide election to the European Parliament since the first direct elections in 1979.

Nuclear debate in national election campaigns

The election campaign started in **February 2014** and nuclear power could be one of the issues debated in some European countries during the campaign. For instance, in the UK, where the Hinkley Point C deal is currently being investigated by the European Commission (EC)'s DG Competition, nuclear new build could be one of the issues at stake. In the Czech Republic, which recently urged the EU together with the UK to adopt a more technology-neutral 2030 energy policy by not fixing any binding renewables target, nuclear power could be part of the elections debate too. Similarly, in Germany, where the government has decided to phase out nuclear power, the "energy transition" both at national and European level could be among the topics discussed in the run-up to the European elections.

A new balance of power

Following on from the elections and in accordance with the Lisbon Treaty that entered into force on 1 December 2009, a new Commission President will be elected by the EP on the basis of a proposal made by the European Council taking into account the results of the European elections. The new President of the EC will, therefore, depend on the political balance in the EP that will result from the elections. A new college of Commissioners will be nominated and their nomination will also have to be endorsed by the EP. Energy Commissioner, **Günther Oettinger**, will stand down and it is not yet known who will replace him. The new EC is expected to enter into office **at the end of October 2014**.

The European elections and the nomination of a new European Commission will of course influence how nuclear-related issues will be dealt with at EU level. However a number of issues will continue to unfold during the first half of 2014 and will certainly be taken up by the new EP and EC.

Major nuclear policy issues in 2014

In 2014, safety will remain at the top of the EU's nuclear energy policy agenda. Member States will have to continue implementing the recommendations of the safety reassessments ("stress tests") process carried out following the Fukushima accident and the EC is expected to publish a report on their implementation. The EC's Proposal for a revised Safety Directive published in June 2013 should be adopted by the European Council. Other developments are in the pipeline like the publication of a Proposal on nuclear insurance and liability, the environmental and energy state aid guidelines and the *EU 2030 Climate and Energy Framework*.

Defining EU energy policy objectives

Energy Roadmap 2050

The EC published the *Energy Roadmap 2050* in December 2011. The document indicates that nuclear energy makes "a significant contribution to the energy transformation process" and is "a key source of low-carbon electricity generation." The European Economic and Social Committee (EESC) gave its Opinion on it in May 2012 and the Danish Presidency adopted its *Conclusions on the Roadmap* in June 2012. In January 2013, the EP's Committee on Industry, Research and Energy (ITRE) endorsed Rapporteur MEP **Niki Tzavela's** (EFD Group, Greece) draft *Report on the Energy Roadmap 2050*. The EC is currently updating the scenarios contained in the Energy Roadmap 2050 and they should be published **at the beginning of 2014**.

2030 Climate and Energy Framework

The EC published in March 2013 a Green Paper entitled, *A 2030 framework for climate and energy policies*, which launched an EU-wide consultation that lasted until July 2013. The framework is intended to reach the target of an 80-95% greenhouse gas (GHG) emission reduction in 2050 compared to 1990 elaborated in the *Roadmap for moving to a low-carbon economy by 2050*, in order to foster long-term competitiveness, security of supply and sustainability, and to provide a long-term perspective for investments until 2030.

The EP's *Draft Report on the Green Paper* written by MEP **Anne Delvaux** (EPP, Belgium) and **Konrad Szymański** (ECR, Poland) was published in October 2013 and the ITRE/ENVI Joint Committee voted on it on **9 January 2014**. It was adopted by 66 votes to 44 against with 3 abstentions. The report includes an amendment that calls for ambitious binding targets on greenhouse gas (GHG) emission reduction, renewable energy sources, and energy efficiency (a 40% cut in GHG emissions, and 30% market share for renewables by 2030). The report will be voted in plenary **at the beginning of February 2014**.

On 22 January 2014, the EC published a *Communication on 2030 Climate and Energy Policy* in which it promotes "a competitive, secure and low-carbon EU economy." To achieve these objectives it proposes a reduction of GHG emissions of 40% below the 1990 level, an EU-wide binding target for renewables of 27%, increased emphasis on energy efficiency without setting a new target, and a new set of indicators to ensure a 'secure and competitive EU energy system'. Although binding at EU level, the 27% renewables target will not be translated into national targets. The Member States will have to prepare instead national plans for competitive, secure and sustainable energy, in which they will fix a national target for renewables under the guidance of the EC **by 2016**. The Communication should be discussed by the European Council **on 20 & 21 March 2014 and in June 2014**.

IEA studies

Studies carried out by the International Energy Agency (IEA) are likely to influence the EU's energy policy orientations. The IEA is currently preparing a second review that should be published this year (the first one was conducted in 2008) of all relevant

areas of EU energy policy and will examine progress on the recommendations made five years ago. The yearly [World Energy Outlook](#) also published by the IEA will focus this year on nuclear power. It is expected to be released in **autumn 2014**.

EU's internal electricity market

Internal Market Communication

In November 2012, the EC published [a Communication](#) assessing the state of play of the EU's internal energy market, which was meant to be completed **by 2014**. The Communication encouraged Member States to step up their efforts to promote the internal energy market highlighting the benefits that a truly integrated European market could bring to citizens and business. In the context of the Communication, the EC carried out from December 2012 to February 2013 a [public consultation](#) on generation adequacy, capacity mechanisms and the internal market in electricity. However some Member States have not yet completed their national electricity markets and the EC is expected to launch infringement procedures against them **in 2014**.

Public intervention

On 5 November 2013, the EC published a Communication entitled [Delivering the internal electricity market and making the most of public intervention](#), which gives recommendations to the Member States on how to design and adapt state aids in the electricity market. Although the document is not legally binding, it sets the main principles on which the EC will assess state interventions in this sector.

The EC launched in December 2013 its second Consultation on its draft 2014-2020 [Environmental and Energy State Aid Guidelines](#) for 2014-2020, which will run **until 14 February 2014**. The EC recently decided to exclude nuclear from these guidelines. Each case will therefore continue to be examined on the basis of the existing treaties. *The Environmental and Energy State Aid Guidelines* are expected to be adopted by the EC by **July 2014**.

The EC also launched [a call for tender](#) for a study on energy costs and subsidies in the European Union that ran until **29 January 2014**. The study should be completed **by the end of 2014**.

Hinkley deal investigation

In this context, the Competition Commissioner, **Joachim Almunia**, announced in December 2013 that an in-depth investigation was proceeding into the investment agreement between the British government and EDF Energy for the Hinkley Point C nuclear new build project in the UK. **At the end of January 2014** the EC published a Decision letter to the UK that will kick off the second phase of the investigation and a one-month consultation period once the Decision is published in the EU's *Official Journal*. The EC should come up with its Opinion before **June 2014**. The result of this investigation will determine the criteria according to which all similar investment contracts in the nuclear sector will be assessed.

EU Emissions Trading System

The EU emissions trading system (EU ETS) is one of the EU's instruments to fight climate change by reducing industrial GHG emissions cost-effectively. It is a system for trading GHG emission allowances. The EU ETS covers more than 11,000 power stations and industrial plants in 31 countries, as well as airlines. This system favours nuclear power, which is a low-carbon technology.

The EU ETS has been deemed inefficient due among other things to a low carbon price. This low carbon price can be accounted for by a surplus of emission allowances allocated to Member States. Therefore on 22 January 2014, the EC adopted [a Proposal for a Decision concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme](#) amending the EU ETS Directive. The reserve would both address the surplus of emission allowances that has built up and improve the system's resilience to major demand shocks in the future. The Proposal was submitted to the European Council and the European Parliament and should be adopted by both institutions **in 2014**.

Nuclear safety

Stress tests

Following on from the safety reassessment ("stress test") process, the European Nuclear Safety Regulators' Group ([ENSREG](#)) published an Action Plan in August 2012; according to which national regulators were required to prepare their national [action plans](#) by the end of 2012 in order to implement the recommendations of the safety reassessments. The action plans were peer-reviewed during [an ENSREG Workshop](#) in Brussels in April 2013. The EC should publish a report on the implementation of the stress tests' recommendations **in June 2014**. ENSREG should also carry out a follow-up Review of the implementation of the stress tests' recommendations **in 2015**. It is important to recall that the assessments were done on a voluntary basis and that all EU Member States agreed to carry them out.

Revised Safety Directive

In June 2013, the EC put forward a draft [Proposal for a Nuclear Safety Directive](#), to amend the 2009 Safety Directive. The European Economic and Social Committee (EESC) (rapporteur Richard Adams, UK) adopted its Opinion on the Proposal in September 2013. Subsequently, the EC adopted its final Proposal in October 2013 and formally transmitted it to the EP and European Council.

Romana Jordan MEP (EPP, Slovenia), the EP's ITRE Committee rapporteur, drafted a Resolution that backs the Proposal and recommends small changes that was presented to the ITRE committee **on 23 January 2014**. The draft Resolution supports the idea of compulsory EU-wide peer reviews and suggests that the topic of the first review be decided no later than three years after the Directive's entry into force. It adds that definitions in the Directive should be aligned "as much as possible" with the terminology used by the International Atomic Energy Agency (IAEA). She also suggests a revision of the Euratom Treaty that would give MEPs the same co-

decision powers on nuclear issues as for other energy sources. The rapporteur's draft Resolution highlights the importance of accident prevention. "Preparedness and coordination in the case of an accident should be at the very core of nuclear safety," Ms. Jordan said in an explanatory statement. The EP is expected to adopt its Opinion on the revised Nuclear Safety Directive **by April 2014**.

In Council, the Atomic Questions Group (AQG) has already made headway on the dossier. The current Greek Council Presidency that will run until **June 2014** is expected to organise a joint meeting of national authorities and national regulators on the issue of the peer reviews together with ENSREG. The Council is expected to adopt the revised Directive **by June 2014**.

Basic Safety Standards

The 1996 Basic Safety Standards Directive fixes the basic standards for radioprotection within the EU. The EC revised the 1996 BSS Directive and published in May 2012 a Proposal for a *Council Directive laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation*. [The final Directive](#) was adopted by the Council in December 2013. **On 10 January 2014**, the European Commission adopted a Proposal for [a Council Regulation laying down maximum permitted levels of radioactive contamination of food and feed following a nuclear accident or any other case of radiological emergency](#). The EC Proposal will now be discussed by the AQG. The EP and the EESC are expected to adopt their Opinion on it and the Regulation should be adopted by the Council **in 2014**.

Nuclear Safety Cooperation

The Council of the European Union adopted on 13 December 2013 a *Regulation on the Instrument for Nuclear Safety Cooperation* (INSC). It is an EC-funded programme (Regulation), which aims at financing measures to support a higher level of nuclear safety, radiation protection and the application of efficient and effective safeguards of nuclear materials in third countries. It has a global budget of over €225 million **for 2014-2020** and is a continuation of the previous 2007-2013 programme. The budget will be divided into three priority areas: the promotion of an effective nuclear safety culture and implementation of the highest nuclear safety and radiation protection standards (50%); safety of radioactive waste and spent nuclear fuel management, including environmental remediation of former nuclear mining sites (35%); and nuclear safeguards (10%). The money will be allocated to projects in countries all over the world. It is significant for the European nuclear industry since it encourages third countries to adopt and/or maintain the EU's high standards of safety.

Third party nuclear liability

The EC launched on 30 July 2013 [a Consultation](#) on whether common EU rules on insurance and compensation for nuclear accidents are needed. Stakeholders were also asked their views on whether those common EU rules should be fixed through a binding law, or through non-binding recommendations. The consultation lasted until October 2013. FORATOM responded to this consultation by publishing a [Position Paper](#) on 23 October 2013 to communicate its view on the current nuclear liability regime and how it could be improved.

DG Energy appointed a consultant (Triple E) to carry out a limited impact assessment on the commercial implication of imposing much higher (€100 billion) limits of financial responsibility on nuclear operators in the event of an accident. A report on the impact assessment is likely to be published together with the Proposal for a Directive **towards the end of 2014**.

On 20 and 21 January, a Nuclear Liability Workshop in Brussels was organised jointly by the EC, the Economic and Social Committee (EESC) and the Brussels Nuclear Law Association (BNLA) on a range of issues relating to nuclear liability. An EC non-binding Communication on nuclear liability together with a Paper on off-site emergency preparedness is expected to be published **in March 2014**.

Nuclear research

Sustainable Nuclear Energy Technology Platform

The Sustainable Nuclear Energy Technology Platform ([SNETP](#)), which was created in 2007, aims to facilitate closer integration between researchers and industry, to enable the definition and implementation of a Strategic Research Agenda (SRA) and corresponding Deployment Strategy (DS), as well as to maintain Europe's leadership in the nuclear research sector.

The Platform is currently redefining its structure and in December 2013 the SNETP's Executive Committee (Ex Com) recommended a fee-paying structure (similar to that of NUGENIA) **as of June 2014**, with all SNETP members paying something. An application will be made to the *Horizon 2020 EURATOM Programme* for EC funding that could substantially reduce the level of fees required. The next Executive Committee meeting took place **on 7 February 2014**. The way forward was agreed at the next SNETP Governing Board meeting, **on 12 February 2014**. [NUGENIA](#), an association dedicated to the research and development of current nuclear fission technologies, with a focus on Generation II and III nuclear plants, published its *Roadmap* in October 2013 and asked stakeholders to make comments on it **by the end of February 2014**. NUGENIA works within a general scope defined by the *Strategic Research and Innovation Agenda (SRIA)* of SNETP.

Horizon 2020

The European Union's *Horizon 2020*, a €77 billion programme for investment in research and innovation was adopted on 3 December 2013 by [the Council of the EU](#). It includes a EURATOM section that will cover the period from 2014 to 2018. The EURATOM projects, including nuclear fusion, will be allocated around €1.6 billion.

The EURATOM programme budget is divided between fission, safety & radioprotection (€315 million), fusion excluding ITER (€728 million) and the Joint Research Centre (JRC) (€560 million). The budget also includes money earmarked for specific activities of the SNETP.

The EC launched on 11 December 2013 its first calls for projects under *Horizon 2020*. The budget allocated to these projects will amount to more than €15 billion over the first two years, including €102 million for EURATOM projects. The EC's DG for

Research & Innovation published a [Work Programme](#) to cover the first two years (2014/15) of the new EURATOM programme, which lists the types of project eligible for support. The deadline for responding to the EURATOM call is **17 September 2014**.

Integrated Roadmap on Energy Technologies

On 2 May 2013, the EC published a [Communication](#) setting out a strategy to enable the EU to have a world-class technology and innovation sector, fit for coping with the challenges up to 2020 and beyond. As part of the key measures put forward in this Communication is the development of an Integrated Roadmap under the guidance of the Strategic Energy Technology (SET) Plan Steering Group and based on expert-based input, which will incorporate the key principles and measures identified in the Communication. *The Integrated Roadmap* will consolidate the (updated) technology roadmaps of the SET Plan.

The EC and industry are working on an Integrated Roadmap on Energy Technology, due to be published in the **spring 2014**. Member States and the EC should then follow up with an action plan by **summer 2014**.

Situation report on education and training in the nuclear energy field

An EC Staff Working Document on the 2nd situation report on education and training in the nuclear energy field in the European Union will be published **during the first half of 2014**. This Staff Working Document will propose a number of training opportunities designed to strengthen the competence of staff in the nuclear sector. In particular the report will deal with education and training actions and programmes at the national level.

European Nuclear Energy Forum developments

The European Nuclear Energy Forum ([ENEF](#)), which was created in 2007, brings together stakeholders in the nuclear field and provides advice to European policy-makers on: security of energy supply, incentives for investment, EU legislative issues, public opinion, R&D, knowledge management, safety and waste management. ENEF is divided into three Working Groups (WGs): the Opportunities WG (next meeting: **14 March 2014**), the Risks WG (next meeting: **21 March 2014**) and the Transparency WG (next meeting: **early May 2014**).

A combined meeting of all three ENEF Working Groups (WGs) took place in Luxembourg on 3 December 2013 to review the status of EU energy policy initiatives and set the scene for the Berlin Forum meeting (the first time that all the energy forums got together) **on 10 and 11 February 2014**, where there was a broader dialogue on energy generation and system issues. A combined meeting will be organised again **at the end of 2014**. The next ENEF plenary meeting will be held **in Bratislava in June 2014**.

The Opportunities WG

In 2014, the work of the Opportunities WG will focus on two unfolding EU initiatives: the legal issue of nuclear third party liability and the 2030 climate and energy framework. The Opportunities WG has created four Sub Working Groups (WGs): the

Competitiveness one, the Financing models one, the Legal roadmap one, and the Smart-grids one (dormant).

The legal Roadmap Sub WG in cooperation with the Nuclear Installation Safety (NIS) Group prepared a Position Paper in response to the EC consultation on nuclear liability and insurance. The Position Paper was endorsed by the Opportunities WG and sent to the EC in October 2013. The Position Paper emphasized that a strong international regulatory regime already exists to which all EU Member States with operating nuclear power plants adhere and that there is a strong nuclear safety culture in the EU with no single severe accident ever having occurred in a civil nuclear installation in nearly 60 years. The Paper suggests encouraging all EU Member States to adhere to either one of two revised Conventions and to ratify the Joint Protocol that provides a bridge between the two. It also proposes to adopt harmonised and realistic minimum financial security amounts for compensation. The EC is expected to publish a Communication on nuclear liability **in spring 2014**. In 2014, the Legal Roadmap Sub WG will continue to work closely with the NIS Group to define the methodology for costs of a severe accident in order to ensure consistency with international nuclear liability regimes.

In 2013, the Competitiveness Sub WG published a Position paper entitled, [*the contribution of nuclear power to EU 2030 energy and climate strategy*](#) that was presented at the Prague ENEF meeting in May 2013. It also prepared ENEF's answer to the EC consultation on the 2030 framework that was sent to the EC in June 2013. In 2014, the Competitiveness Sub WG will continue to follow-up on this issue in particular by carrying out studies assessing the costs and the benefits of nuclear power. The Competitiveness Sub WG already published a study on [*Socio-economic benefits of the nuclear industry in the EU to 2050*](#) in May 2013. [*A report on nuclear costs*](#) carried out by **Prof. William D'haeseleer**, which was commissioned by the EC and reviewed by the Competitiveness Sub WG, was finalised in November 2013. The Sub WG also intends to work more on fair comparisons with different technologies regarding the issues of integrated system costs, liability and insurance etc.

In 2014, the Opportunities WG will define an integrated communications strategy with the Transparency WG to reach out to different target groups and communicate the results of its work more effectively.

The Risks WG

In 2014 the work of the Risks WG will focus mainly on the issues of waste and safety. The Risks WG has established three Sub Working Groups (Sub WGs): the Waste one, the Non-proliferation one and the Nuclear Installation Safety (NIS) one.

The Waste Sub WG is working on a range of guidelines and recommendations to help Member States implement the [*Directive establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste*](#) adopted by the Council in July 2011. The Directive entered into force in August 2011 and the Directive had to be transposed into national law by August 2013. Member States are required to submit their first national programmes **in 2015**. Member States have to indicate in their national programmes a specific schedule on how they will handle their national radioactive waste. The Waste Sub WG working with a Core Group, called NAPRO (NAtional PROgrammes), developed guidelines for the establishment of the

national programmes. [The guidelines](#) were endorsed by ENEF's Risks WG in January 2013 and presented during the ENEF plenary meeting in Prague in May 2013. The Waste Sub WG is now preparing further specific guidelines on how to handle the requirements of the Strategic Environmental Assessment (SEA) for radioactive waste management and also recommendations for countries with small nuclear programmes. Both Papers should be presented at the next ENEF plenary meeting **in June 2014**. The EESC plans to organise a conference **in the second half of 2014** to promote responsible and transparent radioactive waste management.

The NIS Group (next meeting: **4 March 2014**) is now preparing an update of the Recommendation on Long Term Operation. The updated Recommendation should be finalized **in March 2014** and presented at the next ENEF plenary meeting **in June 2014**. The NIS Group is also working on a study entitled, *severe nuclear accidents and assumptions for third party liability costs* together with the Legal Roadmap Sub WG. A Preliminary draft was presented to the Risks WG in November 2013. The Recommendation was expected to be finalised **in February 2014**.

Transparency WG: crisis communications and ethics

Task Group Crisis Communications (TG-CC) has been created within the Transparency WG. The overall goal for the TG-CC is to identify possible gaps in crisis communications provision and to establish new recommendations for Member States - should its findings confirm the need for them. The TG-CC's work is particularly focused on communicating with the general public both during the emergency preparedness phase and during and after a real crisis.

The TG-CC prepared a questionnaire on crisis communications that was sent out to a sample of representative stakeholders. The Group has already received a number of replies to the questionnaires. The next step in the process is the [Public Hearing on Crisis communication with the Public in Case of a Nuclear and Radiological Emergency](#), which is scheduled for **12 February 2014**.

In addition, another Task Group has been launched called the Foundation Principles of Energy Production (FPEP). The FPEP is drafting a response to the opinion of the European Group on Ethics' (EGE), which has proposed an integrated ethical framework together with specific recommendations that address the questions raised by the production, use, storage and distribution of energy. The FPEP met **on 15 January 2014** to discuss the first draft response entitled, *Nuclear Power in the context of Foundation Principles for energy Production and use*. The FPEP members intend to meet **before the end of February 2014** in order to finalise a coherent draft to be presented during the ENEF plenary meeting **in Bratislava in June 2014**.

Above all, the Transparency WG wants to increase its cooperation with the Risks and Opportunities WGs and will probably call a joint meeting with the other two **in 2014** in order to identify and plan common activities.

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