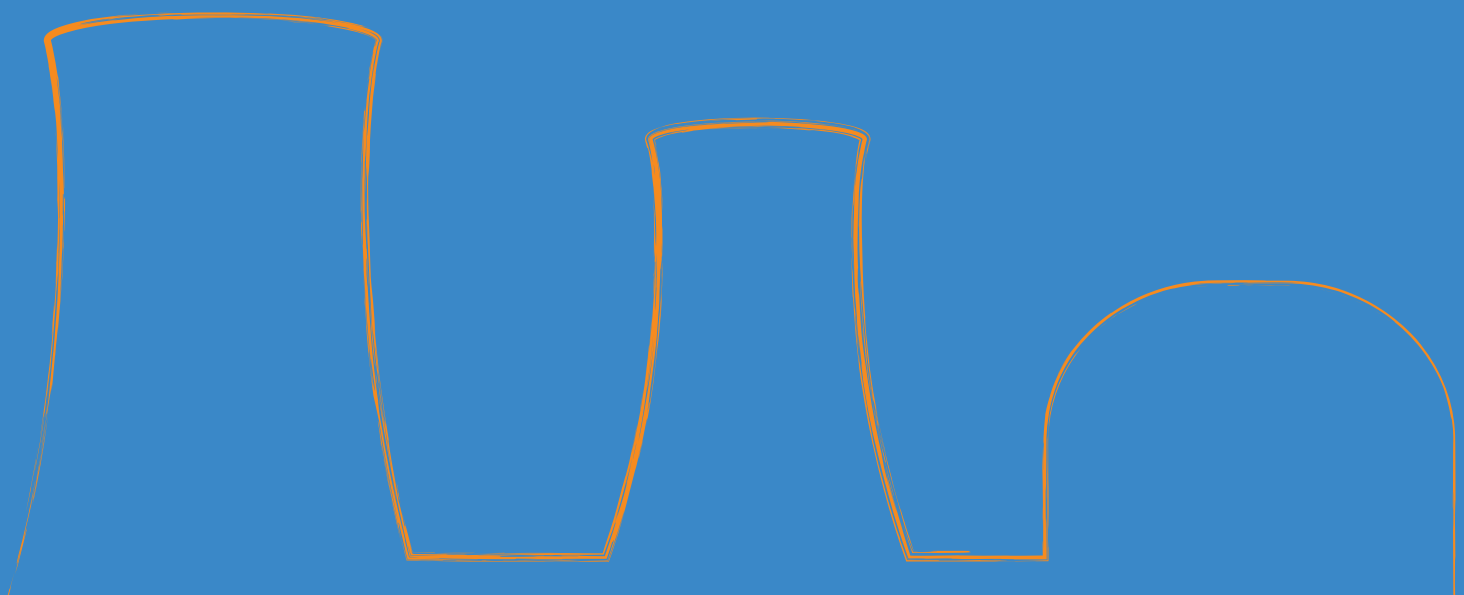
FORATOM

THE VOICE OF THE EUROPEAN NUCLEAR INDUSTRY

ANNUAL REPORT 2014



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VIEW FROM THE BRIDGE

2014 will be remembered for the winds of political and institutional change that blew through the corridors of power in Brussels. The election of a new Parliamentary Assembly in May was followed in the autumn by the nomination of a new European Commission President, Jean-Claude Juncker, a new President of the European Parliament, Martin Schultz, and a new President of the European Council, Donald Tusk. The elections represented a fundamental break in tradition insofar as for the first time, in a process of 'indirect democracy', candidates to the Presidency of the EC were chosen by the European parties and campaigned openly, whereas before Member States had always proposed their respective candidates.

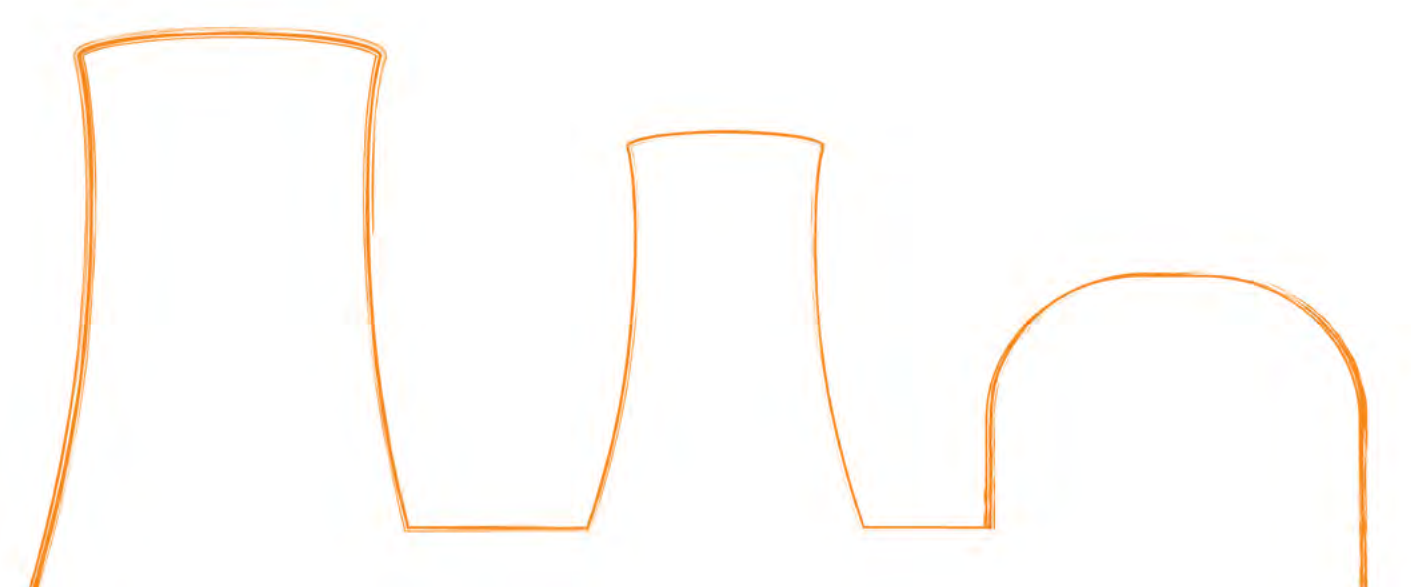
The new President of the EC wasted no time in outlining the main priorities of his administration, which include an investment plan an EU Energy Union and the fight against climate change. Maroš Šefčovič was nominated the first ever Vice President for Energy Union, and Miguel Arias Cañete the first ever Commissioner for Energy and Climate Change. These innovations represented a significant change in leadership style and structure and a positive development for the European nuclear industry. By combining the two portfolios of energy and climate change under the responsibility of one Commissioner, President Juncker clearly showed the strategic direction of the new EC and gave fresh impetus and a renewed sense of purpose to the EU's institutions. Europe's political and institutional landscape was redrawn.

One inevitable consequence of change is that it engenders a situation of flux and uncertainty. What part would nuclear play in Europe's energy policy following such an upheaval? What new blueprint for action would translate vision into reality? And how would it impact upon the nuclear industry?

FORATOM responded quickly and effectively to a new operational environment. It set about creating a new network of contacts among the reconfigured EU institutions and the wider stakeholder community. It maintained and raised the profile of nuclear in a refocused energy debate involving different dialogue partners. And yet, during this period of transition its fundamental role remained the same, namely to act as the voice of the European nuclear industry in energy policy discussions with the EU Institutions and other key stakeholders, and to provide a bridge between its members and European policy-makers, thereby helping the industry to play a leading role in the policy debate. The central message that FORATOM reiterated at every opportunity also remained unchanged. This was that nuclear energy provides a low-carbon, reliable and competitive base-load electricity supply, while at the same helping the EU to meet its 2030 energy and climate targets. This illustrates the consistency and continuity of the work that it carried out on behalf of its members in what was a momentous year.

Among the major strategy and policy developments that marked 2014, four in particular stand out.

The first was the continued preparation of the EC's *2030 Climate and Energy Framework*, with its objective of promoting 'a competitive, secure and low-carbon EU economy. The Framework aims to achieve this goal by reducing greenhouse gases (GHG) by 40% below the 1990 level, by encouraging greater energy efficiency and establishing a new set of indicators to ensure 'a secure and competitive EU energy system, and by bringing in



a binding EU-wide target for renewables of 27% of the total energy mix. To achieve the latter objective, each Member State will be required to submit a national plan and will discuss it with the EC according to a new model of governance.

FORATOM welcomed the 40% reduction in GHG, but in the Position Paper it published it expressed the European nuclear industry's regret that the policy statement had failed to recognise the role that nuclear plays - and will continue to play - in reducing GHG, or the fact that nuclear new build will help reduce levels still further.

Secondly, the energy security implications of the ongoing conflict in the Ukraine spotlighted the urgent need for the EU to take urgent action to ensure its energy security. In May 2014, the EC published its *European Energy Security Strategy* (EESS), which was based on an in-depth study of Member States' energy dependence. The Energy Commissioner called for 'a European Energy Security Strategy based on the pooling of resources, the diversification of energy sources, interconnected networks and negotiation as one voice with third parties.' This major strategic initiative provided the nuclear industry with a platform for emphasising how nuclear energy can provide the secure, non-intermittent, competitive and low-carbon supply of electricity that the EU's consumers so crave. In June, FORATOM responded by publishing a Position Paper on EESS in which it expressed its support for the strategy and pledged its continued commitment to helping the EU achieve its energy security goals.

The third major development in 2014 was the favourable Hinkley Point C (HPC) state aid ruling, which gave fresh impetus to nuclear new build. The approval by the EC of the innovative 'contracts for difference' (CfD) investment model as being 'compatible with EU competition law' was a major success story for the European nuclear industry. The UK's ground-breaking new build project will mobilise considerable large-scale new investments in the UK, enable the construction of the first nuclear power plant in the country for 25 years and create around 25,000 jobs during the construction phase and 900 once operational. In addition to boosting the UK's GDP by over €6 billion per year and generating around €130 million per year for the local economy, the HPC project will provide a major shot in the arm for European industry as a whole.

Finally, 2014 saw continued action in the area of nuclear safety. In July, the Council adopted the final version of the revised Nuclear Safety Directive. The new Directive reinforced the national legislative, regulatory and organisational framework for nuclear safety in Europe. Among its main provisions was the carrying out every six years of topic-specific peer reviews related to the safety of relevant nuclear installations. In addition, complementary peer reviews of national safety frameworks will be performed at least every ten years. These periodic reviews illustrate how the revised Nuclear Safety Directive spotlights the responsibility of operators and regulators to ensure the highest possible standards of safety at all nuclear facilities. This, for the first time, included the peer reviewing of one Member State's safety regulations by one or more other Member States.

The nuclear industry welcomed the revised Directive, which in its view represented the successful culmination of eighteen months of consensus building between Member States' governments, their national regulatory authorities and the EC, and endorsed agreed safety objectives for nuclear power plants consistent with the recommendations of the Western European Nuclear Regulators' Association (WENRA).

Jean-Pol Poncelet
Director General

Keith Parker
President

THE VOICE OF THE NUCLEAR INDUSTRY

FORATOM's mission is to act as the voice of the European nuclear industry in energy policy discussions with EU Institutions, thereby providing a bridge between them and its members. But it goes farther than that. The nuclear industry can only influence EU energy policy if its voice is listened to; simply being heard is not enough.

WHO WE ARE

FORATOM is the Brussels-based trade association for the nuclear energy industry in Europe. FORATOM acts as the voice of the European nuclear industry in energy policy discussions with EU Institutions and other key stakeholders. The membership of FORATOM is made up of 16 national nuclear associations representing over 800 firms.

The industry can only interact with its interlocutors if that bridge is built on firm foundations and kept permanently open. Sustained and focused lobbying and communications activities are crucial to FORATOM maintaining its status as a constructive and proactive dialogue partner for EU policy-makers.

✓ Networking, lobbying

The major political changes that took place in 2014 (see 'A new political and institutional landscape', below) meant that FORATOM had to meet the challenge of identifying, lobbying and communicating with a largely new set of institutional dialogue partners. FORATOM adapted quickly to the new structure and leadership style of the EC change, in order to ensure continuity when it comes to making the European nuclear industry's voice heard loud and clear within the corridors of power. A constructive dialogue was maintained with the European Institutions, think-tanks and other stakeholders as part of an inclusive political process. A new network of interlocutors was built. New supporters and opponents were identified.

Close interaction with Commissioner Miguel Arias Cañete, senior officials at DG Energy and with the Vice President Maroš Šefčovič, was established as a priority. FORATOM wasted no time in meeting and discussing key issues with them and their respective teams, and in particular making known to them the industry's views on the Energy Union initiative. FORATOM also provided input, via a range of media and communications tools, to the climate change debate ahead of the COP21 talks in Paris, in December 2015. A constructive and positive relationship was established from the start.

WHAT WE DO

Provide information and expertise on the role of nuclear energy; produce position papers, newsfeeds, responses to public consultations, analyses of public opinion etc; organise regular networking events like dinner debates, workshops, one-on-one meetings, press briefings, visits to nuclear facilities etc.

FORATOM also set about sensitizing a new generation of MEPs to the benefits of nuclear energy, identifying the movers and shakers, enlisting their support for and advocacy of nuclear energy and monitoring closely the activities of the EP's re-constituted ITRE (Industry, Research and Energy) and ENVI (Environment, Public Health and Food Safety) Committees.

The European Council, although it does not fulfil a legislative function, determines the general orientation and priorities of EU policy. The Council of Ministers, on the other hand, plays a decisive role in deciding EU legislation. By contributing to the work of the Council's Atomic Questions Group (AQG) FORATOM was able to continue contributing to that process too.

✓ Communicating

In 2014, the objectives of FORATOM's communications strategy remained unchanged: to identify nuclear advocates and opponents, monitor and report on political developments to its members and other key stakeholders, to articulate the industry's key messages, to respond to and support the media and to use all the communications channels and tools at its disposal to inform stakeholders of the facts about nuclear energy.

The social media arena is a crucial medium for conveying our key messages and for keeping abreast of and responding to evolving news. Not surprisingly, it was a special focus of FORATOM's communications activities in 2014. The results spoke for themselves. The number of followers of FORATOM's *Twitter* account totaled 2,300 by the end of the year. These included journalists from the European, international and specialised media, who use our *Twitter* account as a source of breaking news and information. A number of EU decision-makers are also followers. The rest are made up of nuclear employees and companies, NGOs, consultants, researchers etc. FORATOM tweeted 900 times during 2014, which were re-tweeted around 700 times. Consequently, they were potentially seen by almost 1 million people. FORATOM's newly-created infographics were posted on *Facebook* and Twitter. They were retweeted over 60 times, which resulted in a *Twitter* 'retweet reach' of nearly 60,000 people.

FORATOM's *Facebook* page gained around 100 'fans' and reached a total of 400 fans in 2014. Most of them were male, in their 30's, and living in Belgium, Italy, the Czech Republic, the US or France. They formed a core group of well-informed nuclear advocates. On average 50 to 300 people read FORATOM *Facebook* posts every week. The number of followers of FORATOM's *LinkedIn* page also more than doubled in 2014 reaching over 600 followers, most of which were from the energy sector. FORATOM used *LinkedIn* mainly to promote its publications and events. Each FORATOM post on *LinkedIn* was seen on average by 700 users. These results were achieved without using *Facebook*, *Twitter* or *LinkedIn* ads, making FORATOM's social media traffic purely 'organic.'

IEA@IEA
#Nuclear power plays an important strategic role in enhancing #energysecurity for countries.

FORATOM@FORATOM_nuclear
@EU_Commission says #HinkleyPoint C deal conforms to EU competition law @AlmuniaJoaquin@edfehinkleyc@edfenergy.

FORATOM posted three videos on its *Youtube* channel in 2014. In an effort to develop FORATOM's *Youtube* account and maximise the use of videos, a short 10-second animation was commissioned. It summarizes visually what FORATOM is and does. This "jingle" is included at the beginning of every FORATOM video.

This heightened social media activity brought FORATOM closer to the views, concerns and aspirations of stakeholders interested in EU energy policy in general, and nuclear in particular. By keeping abreast of evolving social communications, FORATOM remained in touch with its target audiences and with developing news.

The traditional media in Brussels increasingly uses social media as an information resource and as a forum for discussion with the nuclear industry. In 2014, the number of journalists that regularly engaged with FORATOM via the social media increased all the time, and the posting of FORATOM newsfeeds, position papers, *Youtube* video clips, etc. on *Twitter* encouraged that. Press interviews with senior FORATOM management and record attendance at FORATOM events gave the European nuclear industry greater visibility than in the past.

The regular updating of FORATOM's website, with its sustained emphasis on accessibility and visual simplicity, was the catalyst for a number of communications initiatives. Re-designed publications, a reinforced graphic identity and the creation of a new generation of FORATOM infographs (on the European nuclear industry, climate change, security of supply and competitiveness) helped to convey the facts and debunk the myths about nuclear in a visually appealing way. FORATOM also created a section dedicated to the "Nuclear for Climate" initiative ahead of the COP21 climate talks scheduled for December 2015.

"NUCLEAR FOR CLIMATE" INITIATIVE

Nuclear for CLIMATE

"Nuclear for Climate" is an initiative launched by several nuclear societies, including the European Nuclear Society (ENS), the American Nuclear Society (ANS) and the French Nuclear Society (SFEN), with the goal of jointly promoting the climate change credentials of nuclear ahead of the COP21 climate talks in Paris (in December 2015).

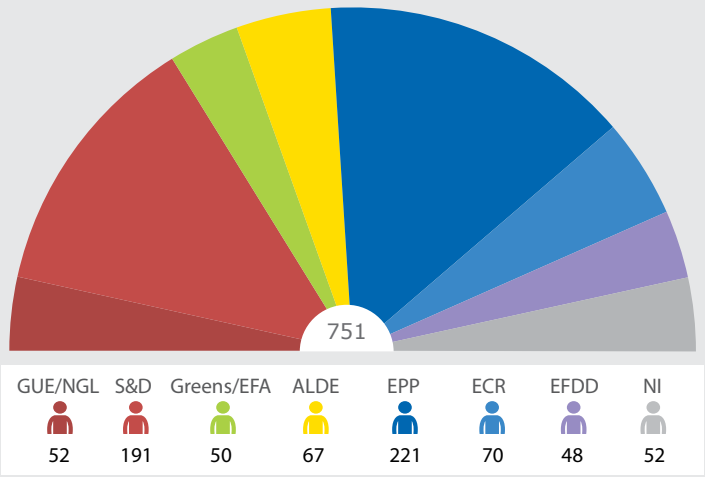
These website upgrades added to the accessibility and contemporary feel of the website and of FORATOM's communications.

As a result of these innovations, coupled with an increasingly effective presence in the fermenting cauldron of the social media, FORATOM's communications output enabled the European nuclear industry to reach out to a broader range of target audiences, engage regularly with more stakeholders, and articulate its position on evolving policy initiatives and issues more rapidly and in a more universal language.

A NEW POLITICAL AND INSTITUTIONAL LANDSCAPE

During his acceptance speech on 15 July, President Juncker, who officially took office on 1 November 2014, highlighted energy as one of the core components of the new EC's political programme. He said: "It is in everyone's interest that energy not be used as a political tool. It's time Europe stood tall on its own feet, pooling our resources, combining infrastructures and uniting our negotiating power." Traditional rhetoric gave way to more concrete substance as he outlined the plan of action that will define the new administration and the structural changes that would facilitate policy delivery. The appointment of Maroš Šefčovič as Vice President for Energy Union created a new dynamic and sense of purpose, putting in proper context and proportion the fundamental importance of energy policy as a pillar of the EU's overall policy programme.

The New European Parliament



Combining the two portfolios of energy and climate change under the responsibility of one Commissioner, Miguel Arias Cañete, showed unequivocally how the two are inseparable at the heart of the EU's new strategic direction. The realignment of energy and climate policy in this way was timely and appropriate for the European nuclear industry. It provided it with a springboard for promoting more forcefully the strong climate change credentials of nuclear energy, and an opportunity to further emphasise the central role that nuclear energy plays in helping the EC to achieve its low-carbon economy objectives. The COP21 talks taking place in 2015 added political relevance and urgency to the process.

A prominent feature of the reconfigured EP was the rise in support for parties on the outer fringes of the political spectrum. Another was the notable increase in Members of Parliament (MEPs) elected on a Eurosceptic platform. In spite of these developments, the European Peoples' Party (EPP) and the Socialists and Democrats (S&D) maintained control of the political centre ground, with healthy majorities over the smaller groups. However, most political commentators agreed that the two main groups would need to further compromise and cooperate in order to effectively meet the challenges posed by this increased representation of far-right and far-left policies.

Of course, it was too early to see exactly how this redrawn political and institutional landscape in Brussels might influence the level of support for nuclear or impact upon FORATOM's work.

STRATEGIC FRAMEWORK

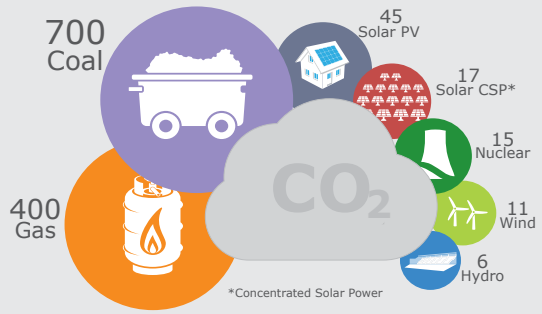
✓ 2030 Framework for climate and energy policies

On 22 January 2014, the EC published *A Policy Framework for Climate and Energy in the Period from 2020 to 2030*. It proposed an overarching reduction of greenhouse gas (GHG) emissions of 40% below the 1990 level, an EU-wide binding target for renewables of 27%, increased emphasis on energy efficiency, and a new set of indicators to ensure a secure and competitive EU energy system. The EC also outlined proposed reform of the Emissions Trading System (ETS).

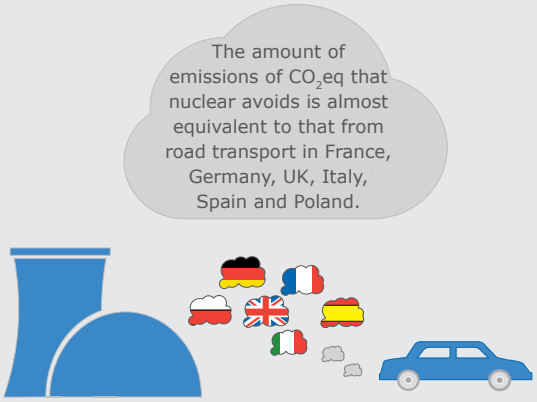
Contributing to the fight against climate change by avoiding CO_2 emissions

The amount of CO_2 emitted by nuclear energy is comparable to that of renewables.

Comparison of greenhouse gas emissions CO_2 eq/kWh



Source: European Commission, NEEDS Project, 2009



Source: Eurostat, 2014

On 3 March 2014, FORATOM issued a response to the EC's Communication, highlighting in particular its support for a GHG emissions reduction target. However, FORATOM said it would like to see more emphasis placed on enabling measures for investment in all low-carbon technologies. FORATOM's views were shared with the EC, European Parliament and Member States' representatives in Brussels.

The EP also offered its views on the dossier via a report from co-rapporteurs Anne Delvaux (EPP, Belgium) and Konrad Szymański (ECR, Poland). Their report was adopted in February 2014.

Member States began preliminary discussions on the dossier during the March 2014 European Council meeting. Agreement was reached in October 2014 when they adopted a binding national target of 40% reduction in GHG emissions, an EU-binding target of 27% for renewables, and a non-binding energy efficiency target of 27%. FORATOM was pleased to note that the right of Member States to choose their energy mix was upheld and that the 27% renewables target was not binding on individual Member States, giving them the desired flexibility regarding nuclear energy.

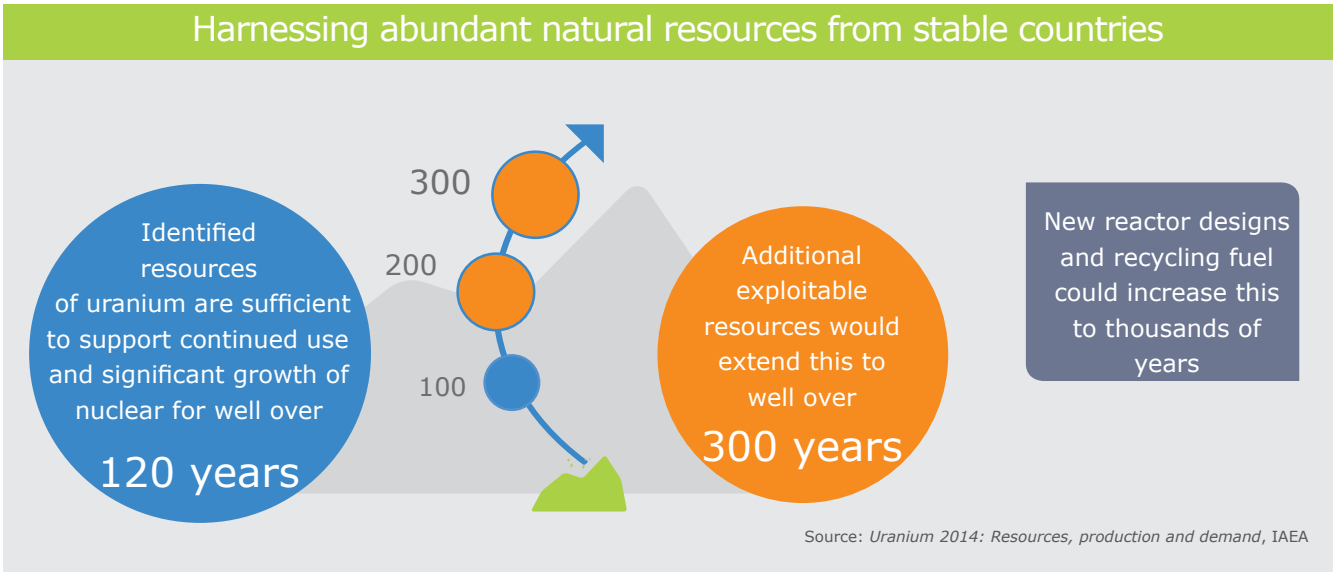
✓ Energy security of supply

In the light of the on-going Ukraine crisis, the European Council called on the EC to carry out an in-depth study of the EU's energy security, and to deliver, by June 2014, a comprehensive plan for the reduction of EU's energy dependence.

In May 2014, the EC published a Communication outlining its recommendations for a European Energy Security Strategy. Nuclear energy was highlighted in the document as playing an important role in energy security owing to aspects such as low fuel costs, strong supply of uranium, and Europe's technological leadership.

FORATOM responded to this Communication in June 2014 by publishing a Position Paper entitled *Ensuring Europe's security of energy supply: the role of nuclear.* This paper explained at length how nuclear energy already contributes significantly to EU energy security and avoids the need for significant additional imports of fossil fuels.

The EC's Communication was discussed during the October 2014 European Council meeting where Member States agreed to ensure they reach the 10% interconnections target in 2020. Likewise, projects of common interest linking the countries on the periphery of the EU to the rest of the EU market would be highlighted. The European Council also recognised that the EU's energy security could be increased by having recourse to indigenous resources, as well as safe and sustainable low-carbon technologies. Future projects in the gas sector were also outlined.



✓ Energy Union

When incoming EC President Jean-Claude Juncker addressed the EP for the first time in July 2014, he talked about creating a 'European Energy Union' as one of his main priorities for the coming five years. In this regard, he was picking up a theme voiced by former Polish Prime Minister Donald Tusk in the context of the Ukrainian crisis and resulting threats to EU energy security, as well as a proposal put forward several years previously by Jacques Delors and Jerzy Buzek to create an EU 'Energy Community'. When Maroš Šefčovič was subsequently appointed EC Vice President for Energy Union, Šefčovič elaborated that such a Union would ensure energy supply security and solidarity among the Member States, integration of national energy markets, reduction of European energy demand, decarbonisation of the energy mix and increase of investments in research and innovation.

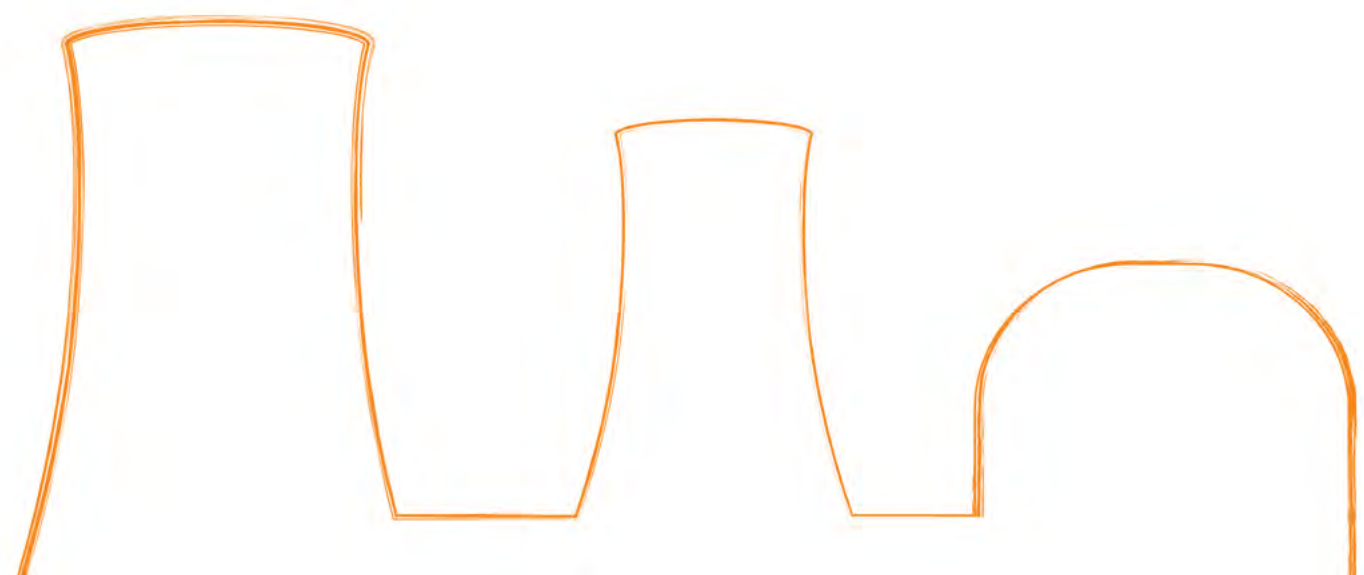
Towards the end of 2014, FORATOM prepared a response to this initiative, setting out the contribution that nuclear energy could or should make under each of these so-called 'dimensions'. An EC Communication detailing its plans for achieving an Energy Union was published in February 2015.

✓ Juncker Plan for Investment and Growth

Another of President Juncker's initiatives launched in 2014 was a plan to create a strategic investment fund of €315 billion for loaning to projects of European interest likely to spur growth and jobs. FORATOM welcomed the inclusion of a significant number of nuclear investment projects in the indicative list of priority investments that was published in the Final Report of the EU Task Force on Investment, on 9 December 2014. The Task Force was made up of the Member States, the EC and the European Investment Bank (EIB).

Among the notable projects listed were three nuclear new build projects in the UK (Hinkley Point C, Moorside and Wylfa), as well as Poland's first-ever nuclear power plant construction programme. The list also included three major nuclear R&D projects: MYRRHA (Belgium), the pioneering prototype particle accelerator-driven reactor; ALLEGRO (Central Europe), a gas-cooled fast breeder reactor prototype; and PALLAS (the Netherlands), a High-Flux research reactor that could produce over 60% of Europe's medical radio-isotopes. FORATOM noted that these innovative pan-European nuclear R&D projects will help maintain Europe's global leadership in the field of nuclear technology.

It remains to be seen how many of these indicative projects will finally be selected for funding in early 2015.



THE POLICY AGENDA 2014

✓ Nuclear safety

In 2011, as well as announcing the review of the safety of all EU nuclear power plants, the European Council mandated the EC to review the existing legal and regulatory framework on the safety of nuclear installations. In June 2013, the EC tabled a revised Euratom Directive that was sent to the Council and the European Parliament. The EP gave an Opinion on it in April 2014. The European Council approved a final version of the revised *Nuclear Safety Directive* in July 2014.

The new Directive represented the successful culmination of eighteen months of hard work and consensus-building between Member States and their nuclear regulators, the industry and other stakeholders. FORATOM held a series of meetings with various Member State representations, using its Position Paper to support the documents previously prepared by the European Nuclear Installations Safety Standards (ENISS) and the European Nuclear Energy Forum's (ENEF) Nuclear Installation Safety Sub-working Group (NIS SWG). The Position Paper presented FORATOM's views on a number of the key issues raised by the Proposal, including peer reviews, the role of national regulators versus the role of the EC, legal interpretation and definitions.

FORATOM welcomed the adoption by the European Council of the revised Nuclear Safety Directive, which reinforced a national legislative, regulatory and organisational framework for nuclear safety in Europe. The European nuclear industry supported in particular how it strengthens the role and independence of Europe's national regulators, and endorses agreed safety objectives for nuclear power plants, in accordance with the recommendations of the Western European Nuclear Regulators' Association (WENRA).

At least every six years, peer reviews of national assessments of the safety of relevant nuclear installations will be performed. Each one will be based on a specific topic. Complementary peer reviews of national safety frameworks will also be performed at least every ten years. All these reviews will highlight the responsibility of operators and regulators to ensure safety at all nuclear facilities.

WENRA

WENRA is an organisation that brings together the heads of regulatory authorities responsible for nuclear safety within Europe to develop a common approach to nuclear safety in Europe by comparing national approaches to the application of the IAEA safety standards.

In March 2012, WENRA mandated its Reactor Harmonisation Working Group (RHWG) to conduct an in-depth review of the existing Safety Reference Levels (SRLs) in light of the lessons learned from the Fukushima accident and to develop guidance documents on assessment of natural hazards and the evaluation of margins for cliff edge effects.

WENRA Safety Reference Levels

WENRA Safety Reference Levels (SRLs), which are based on IAEA safety standards and reflect best national practices in WENRA countries, represent a consensus view of the main requirements to be applied to ensure nuclear safety.

WENRA launched a public consultation on revised operating reactor SRLs, which started on 1 December 2013 and ended on 28 February 2014. ENISS carried out an in-depth analysis of the revised SRLs and developed Position Papers, highlighted the problems and challenges encountered and assessed the potential impact that the SRLs might have on the nuclear industry. WENRA received a total of 142 comments, one third of which were provided by ENISS.

WENRA approved the revised SRLs on a silent procedure basis that was initiated on 20 June and ended on 11 July 2014.

WENRA presented the revised SRLs on 24 September 2014 at a side event of the IAEA General Conference that was organised to celebrate WENRA's 15 years of activity in the field of improving nuclear safety. The updated SRLs were then published on the WENRA website.

WENRA RHWG's work was also devoted to the preparation of guidance documents aiming at providing insights and explanations as to the purpose and intent of the revised SRLs. The two main guidance documents on natural hazards and on design extension conditions were finalised at the WENRA RHWG September 2014 meeting, and submitted for approval at WENRA's October plenary meeting. The *Issue F Guidance Document Design Extension of Existing Reactors* was published on 3 November 2014 on WENRA's website.

Three hazard-specific guidance documents (earthquakes, flooding and extreme weather conditions) are currently being prepared and the three documents should be ready for adoption by WENRA at its meeting in November 2015.

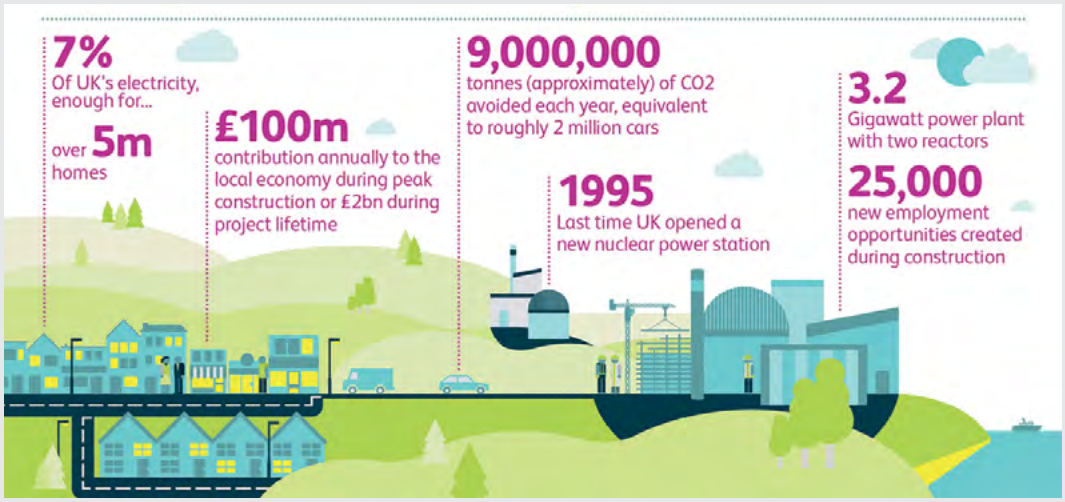
WENRA released on 19 November 2011 a draft report on SRLs for waste disposal, covering all waste types – from low-level waste (LLW) to high-level waste (HLW) – as well as repository types from surface to deep geological. ENISS set up an Expert Group to analyse WENRA's report and provide comments. The Expert Group was made up of waste disposal experts, including licensees and representatives of national waste management agencies. A WENRA/stakeholder workshop to discuss the fundamental issues took place on 4 July 2014. The report was approved by WENRA at its meeting in October and published on WENRA´s website on 22 December 2014.

ENISS also analysed and provided comments throughout the year related to the IAEA's *Draft Safety Requirements and Safety Guides*, addressing important issues such as NPP design and operation, management systems, safety assessments, waste management, decommissioning and radiation protection. ENISS also contributed to the work of a number of the IAEA's technical and consultancy groups and participated, as an observer, in the Agency's Safety Standards Committees (SSCs) and the Nuclear Security Guidance Committee (NSGC).

✓ New Build

FORATOM activities during 2014 mainly focused on the UK's Hinkley Point C (HPC) new build project and, in particular, on obtaining the approval of the EC's Competition Directorate General for the investment deal agreed between the British Government and EDF Energy.

Hinkley Point C: Number power



FORATOM's Secretariat produced a response to the EC's Public Consultation on the Hinkley Point C State Aid case, for which the deadline was 7 April 2014. The main arguments put forward by FORATOM were that HPC represented an important contribution to the decarbonisation of the UK economy, as well as to the EU's overall competitiveness and security of energy supply. Furthermore, it would be regarded as an important model for planned nuclear investments in a number of other EU Member States, given that there was a market failure in respect of low-carbon investments in general. FORATOM also took issue with a number of the assumptions the EC had made in its Opening Statement on the HPC case.

The EC announced its approval of the state aid case for HPC on 8 October 2014.

Also in the context of new build, FORATOM responded to the Second Public Consultation on *Environmental & Energy State Aid Guidelines* (EEAG) launched by the EC with a deadline of 14 February 2014. Taking as a basis the response to the First Consultation (April 2013), FORATOM highlighted the need for having a level playing field for all forms of low-carbon technology, while insisting on the need for current market failures and bottlenecks for investment in the EU to be identified, existing financing instruments to be reinforced and new ones to be established.

The EC finally published an 'informal' version of the EEAG on 9 April 2014. Instead of including a chapter on nuclear energy, the EC decided to continue to assess the competition aspects of nuclear projects on a case-by-case basis.

✓ Subsidies and Costs of EU Energy

On 13 October 2014, the EC published an Interim Report on *Subsidies and Costs of EU Energy*, covering public interventions for all Member States and for all forms of energy, including nuclear. FORATOM was invited to attend three stakeholder meetings during the preparatory phase of the project, held separate discussions with the author of the section on decommissioning & waste management, and sent written comments to DG Energy in September 2014, relating in particular to the uranium resource depletion issue.

The total direct support for nuclear in 2012 was estimated in the report to be just under €7 billion, out of a total annual support of €122 billion for all energies, of which €41 billion for renewables, €35 billion for energy savings, €14 billion for ETS free allocations, €10 billion for coal, and €5 billion for gas. The breakdown of the €7 billion for nuclear, in terms of what was Member States' support and what was EU-level support, shows that €2.8 billion came from the UK and €3.3 billion from EU funds; the contribution from the other Member States was minor.

FORATOM wrote to Commissioner Oettinger on 29 October 2014 summarising its views and offering to follow up with a more detailed analysis. FORATOM planned to publish this detailed analysis in spring 2015.

✓ R&D

The first Calls for Proposals under the Horizon 2020 EU R&D Programme were issued in December 2013, with a deadline for applications of 17 September 2014. A total of 64 proposals were received in the Euratom Fission area, against a budget of €103M for the two years 2014 and 15. Of the 64 proposals, 37 were for reactor system design and safety, 10 for radioactive waste, 4 for radioprotection and isotope production, and 13 for education & training and socio-economic aspects. Under the latter heading, a consortium proposal 'SPRINT' was submitted for coordination & dissemination activities within the Sustainable Nuclear Energy Technology Platform (SNETP). Both FORATOM and the European Nuclear Society (ENS) are included as partners. The requested budget for the proposal is €600k over four years. The proposal received the EC's approval in February 2015. The project is expected to start by the beginning of June 2015. As a late addition to the Euratom Fission Programme, a separate call was launched in July 2014 for 'Supporting the licensing of Western nuclear fuel for reactors of VVER design operating in the EU'; the deadline for submissions was 20 November 2014.

SNETP

The SNETP brings together some 75 members from 19 European countries, including all the major industrial and research organisations, technical safety organisations, academia and civil society, with the aim of better coordinating European research activities in the area of nuclear fission safety and systems.

As regards SNETP, FORATOM continued to participate actively in meetings of the Governing Board and Executive Committee, as well as in meetings of an editorial group preparing a revision of the Platform's 2010 Deployment Strategy document. In May 2014, funding for the SNETP's Secretariat, which had previously been provided by DG Research under the FP7 'SMILE' project, came to an end. SNETP has

been working towards establishing a regime for self-funding the basic secretariat activities through fees collected from the members. This has required the identification of an organisation willing to act as treasurer to collect the fees and issue a call for tenders for the secretariat service. The process has been protracted but finally CEA (France's Atomic and Alternative Energies Commission) agreed to undertake this role, subject to the granting of a mandate from the SNETP's Governing Board. A selection process for the secretariat should be launched early in 2015.

NUGENIA is an association dedicated to the research and development of nuclear fission technologies, with a focus on Generation II and III nuclear plants. It gathers stakeholders from industry, research, safety organisations and academia, committed to developing joint R&D projects in the field.

Other news from SNETP in 2014 included the following: the NUGENIA branch launched a pilot call for proposals, having already approved 24 projects since April 2014; SNETP contributed to the SET-Plan Integrated Roadmap (to be published in 2015), and collaboration with the Implementing Geological Disposal Technology Platform IGDTP was enhanced through the preparation of a joint factsheet.

SET-Plan

The European Strategic Energy Technology (SET)-Plan is the main tool for supporting decision-making on European energy and climate policy. Its goal is to:

- accelerate knowledge development and technology transfer
- maintain the EU's industrial leadership on low-carbon energy technologies
- foster the development of energy technologies to achieve the 2020 energy and climate change goals
- contribute to the worldwide transition to a low-carbon economy by 2050

✓ Third Party Nuclear Liability

The EC is considering a legislative initiative to harmonize the disparate legal systems currently in place across the EU, in order to avoid market distortions and to mitigate possible discrepancies in compensation paid to affected European citizens in the event of a major accident.

Following the public consultation conducted in 2013, the EC, together with the European Economic & Social Committee (EESC) and the Brussels Nuclear Law Association (BNLA) organised a Workshop entitled Taking Nuclear 3rd Party Liability into the future – fair compensation for citizens and a level playing field for operators, in Brussels, on 20 and 21 January 2014. Around 300 people attended. It was expected after the workshop that the EC would come forward in the spring of 2014 with a Communication on *Nuclear Liability and Emergency Preparedness*, but this has been delayed. The EC did, however, publish a review of Member State Emergency Preparedness & Response Arrangements.

The existing nuclear liability regime has a number of key characteristics that the industry considers to be sound, for example liability is strict, channelled and limited. Although the industry acknowledges that there is room for improvement, changes could have huge financial consequences for operators. Moreover, the insurance market has not demonstrated its willingness to support a significant change of the current system. Meanwhile, the 2004 *Revised Paris Convention* is expected to enter into force by January 2016.

FORATOM EVENTS

A broad palette of activities was organised by FORATOM in 2014. A number of them featured record press attendance and resulted in widespread media coverage.

In January, the latest FORATOM EU Affairs Course took place in Brussels. It was entitled *Insight into EU Nuclear Lobbying*. Speakers representing the EC, the EP, the Council's Atomic Questions Group (AQG) and academia outlined for FORATOM's members the mechanisms of the decision-making process in Brussels. They also highlighted best practices when lobbying the EU institutions, and discussed the EC's *2030 Framework for Climate and Energy policies*.

Also in January, FORATOM organised, in collaboration with EDF and the World Association of Nuclear Operators (WANO), a debate at the EP in Strasbourg on the subject of the revised Nuclear Safety Directive. It was hosted by Romana Jordan MEP (EPP, Slovenia) and a number of her colleagues attended.

In March *A Briefing on the EC inquiry into HPC* was organised in Brussels. Two guest speakers animated the debate, Hergen Haye of the UK Government's Department of Energy and Climate Change (DECC) and Paul Spence, Director of Strategy and Corporate Affairs at EDF Energy. They emphasised the economic and social advantages for the UK of HPC in particular and of new build in general.

In June FORATOM organised a workshop entitled: *The challenge to deliver new nuclear investment to Europe*. The guest speakers were Dominique Ristori, Director General of DG Energy; François Lévêque, Professor of Economics at Mines-Paris Tech; Kim Fyhr, Public Affairs Manager for Fortum Corporation (Finland) and Jonathan Brearley, Director of Brearley Economics, a consultancy specialised in energy matters.

June also featured a workshop organised by FORATOM's Communications Task Force (CTF). It focused on the subject of storytelling in corporate communications and how it can provide a platform for articulating key messages about nuclear to a broader audience. The event was run by the consultancy, Radley Yeldar, who tailored the workshop to meet the specific needs and challenges of the nuclear industry. It was followed by a seminar entitled *Ask your Voice* that focused on voice projection techniques and on how to improve oral communications, presentations, interviews and event moderation.

In September, FORATOM organised a cocktail reception at the EP in Strasbourg at which networking took place with new MEPs who had recently taken their place in the reconfigured Assembly.

In November, FORATOM co-organised, in conjunction with the European affairs think-tank Friends of Europe and the International Energy Agency (IEA), a high-level panel discussion on the subject of *World Energy Outlook: What energy mix can keep the lights on?* Discussions revolved around a presentation by Fatih Birol, Chief Economst at the IEA, of the Agency's recently published *World Energy Outlook (WEO)*. Thomas Becker, CEO of the European Wind Energy Association, Marie Donnelly, Director, New and renewable sources of energy, energy efficiency and innovation, DG Energy, European Commission and Erik Waerness, Chief Economist at Statoil.

In December, Alexander Bychkov, Deputy Director General of the International Atomic Energy Agency (IAEA), was guest speaker at a FORATOM Workshop. Mr. Bychkov outlined the achievements of the Agency over the past five years and highlighted current global developments and the future prospects for nuclear energy worldwide. He emphasized the main benefits of nuclear power as a base-load, reliable and low-carbon source of electricity at a stable price. A press briefing followed.

INTERNATIONAL DIMENSION

Throughout the year FORATOM interacted with major global organisations and intergovernmental bodies, like the IAEA, the OECD's Nuclear Energy Agency (NEA), the World Nuclear Association (WNA), the IEA and WANO. The statistical analysis, advice and recommendations that these organisations provide in publications like the *World Energy Outlook* (IEA) and the *Red Book* on global uranium resources (NEA and IAEA) have great credibility due to the acknowledged expertise and objectivity of these organisations.

The publications provide an invaluable resource for nurturing the international energy debate. FORATOM analysed and communicated the information from the aforementioned publications to its members, and to the general public, at every possible opportunity. As mentioned before, experts from these organisations participated in some of the workshops and events that FORATOM organised in 2014.

Positive contacts were also maintained with interest groups, think-tanks, trade associations and independent experts from outside of the EU, each of whom brought specialized knowledge and a different perspective to the debating table. FORATOM participated in a number of events, including some organised by the European Energy Forum (EEF), EURELECTRIC, the Belgian Nuclear Forum, the Centre for European Studies (CEPS), Friends of Europe and Confrontations Europe.

World Energy Outlook 2014

Key findings about nuclear generation:

- capacity expected to increase by 60% by 2040
- avoided the release of around 56 Gt of CO2 since 1971 (equivalent to 2 years of emissions at current rates)
- will avoid the release of almost 4 years of CO2 emissions at current rates by 2040

What does nuclear power contribute to Europe's economy?

131
Nuclear reactors in operation in the EU

Turnover of 70 billion/year

53%
of low-carbon electricity

27%
of EU's total electricity production

European nuclear industry supports 800,000 jobs

NAMES & FACES

Our Members

The membership of Foratom is made up of 16 national nuclear associations- active right across Europe and the companies that they represent, and two utilities, the Polish nuclear company, PGE and the Czech energy company, ČEZ. Over 800 firms are represented- from Europe's (and the world's) largest nuclear utilities and nuclear fuel cycle companies to other undertakings engaged in the transport of nuclear materials and the management of radioactive waste:

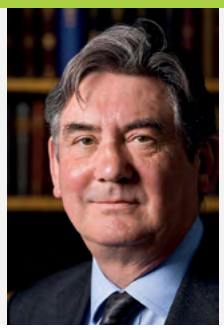
- reactor and component vendors
- europe's (and the world's) largest nuclear utilities
- nuclear fuel reprocessing companies
- uranium mining, milling and enrichment companies
- engineering companies
- plant decommissioning companies
- nuclear transporters
- waste storage facilities
- lawyers, consulting, insurance and service companies

ČEZ (Czech Republic) and PGE (Poland) are Corporate Members

The Board

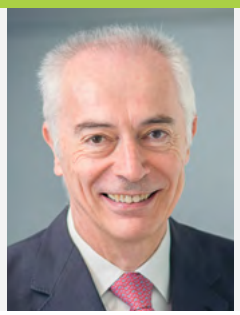
- Antonio Cornadó Quibús, Nuclenor sa, Spain
- Bertrand de l'Épinois, AREVA, France
- Keith Parker, NIA, Nuclear Industry Association, United Kingdom
- Luca D'Agnese, Slovenské elektrárne as, Slovak Republic
- Mats Ladeborn, Vattenfall AB, Sweden
- Paul Rorive, GDF SUEZ, Belgium
- Ralf Güldner, E.ON Kernkraft GmbH, Germany
- Teodor Chirica, EnergoNuclear, Romania

The President



Keith Parker, NIA, Nuclear Industry Association, United Kingdom

The Director General



Jean-Pol Poncelet

The Team

15 PEOPLE

9 LANGUAGES

OVER 10 AREAS OF EXPERTISE

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Communications Director

Daphné Charleton
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As of 1 May 2015

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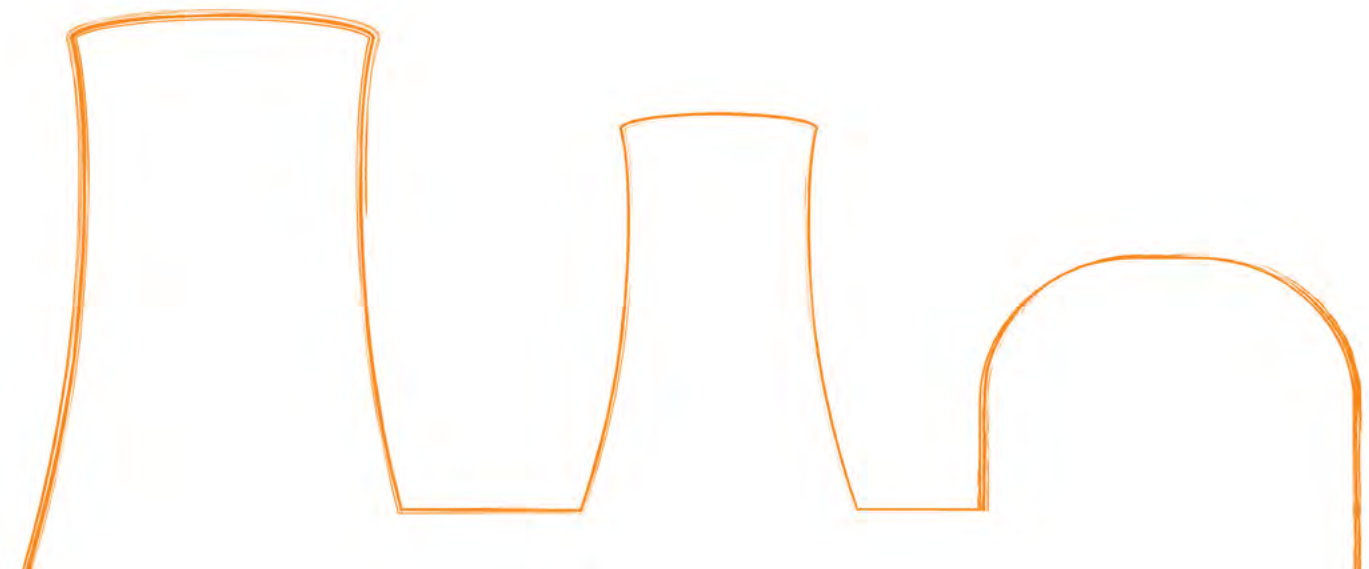

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