

Sepf Annual report

European Affairs Division

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Editorial



2019 was an election year in **Europe. Some might therefore** say that it was an uneventful year. However, such a train of thought would be misleading. **The European Union underwent** significant changes last year, with major political changes taking place. We are already seeing their consequences in sectoral policies. The European Union does not stop working in an election year, even if minds are sometimes elsewhere. That was the case in our energy and climate sector.

First of all, there was the development of a 2050 vision. At the end of 2018, the Commission had proposed a "climate and energy" strategy with that timeframe. Mr Šefčovič, at that time Vice-President for the Energy Union, had expressed a firm political resolve to achieve an objective of "netzero emissions" by 2050. However, it remained to be seen whether the Council would adhere to that goal, which represented a significant shift when compared with the previous decade. The debate which was initiated at the beginning of 2019 was concluded in the second half of the year and the Council, apart from a few reservations, massively supported a carbon neutrality policy. That was a very positive result for EDF.

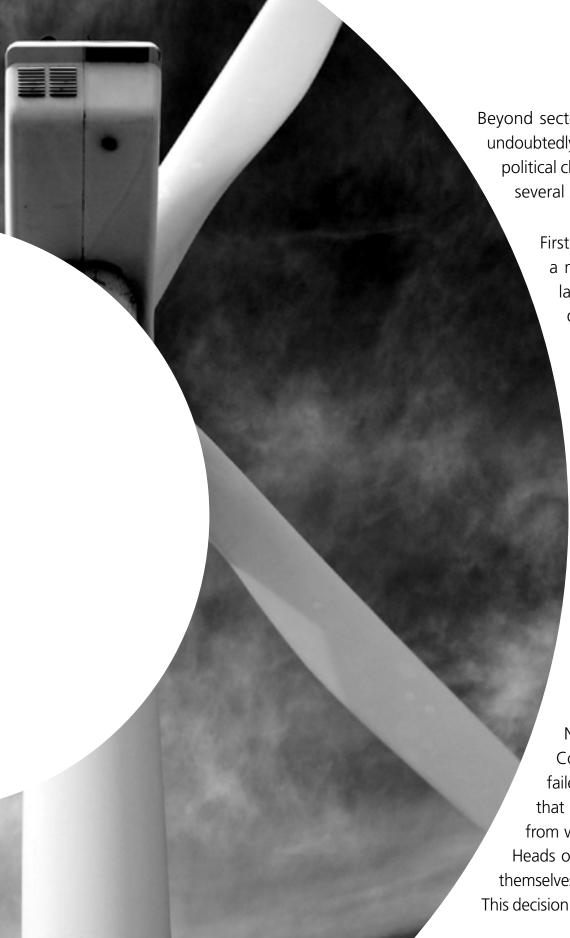
The European institutions now have a common vision of the future as regards the fight against climate change, based on an approach long advocated by the EDF Group: it is essential to effectively decarbonise the electricity sector and widely electrify the economy to successfully reduce CO₂ emissions in accordance with the recommendations of the scientific community. However, there are still some differences in the scope of this electrification of the European economy. For the Commission's "long-term strategy", as for EDF, there is still room for the direct use of renewables. Hydrogen, if it is produced using lowcarbon electricity, will occupy its rightful place. In order to keep transition costs under control, hydrogen must, however, be reserved for the areas where the direct use of electricity is not relevant, such as heavy transport and heavy industry. On the other hand,

for some, the share of electricity must be far more modest since hydrogen, produced from hydrocarbons by storing the carbon, will have a greater share of the mix. This debate, in which electricity companies, especially EDF, participated in 2019, will continue during the new term.

To make its case, the Commission has relied on two 2050 scenarios which lead to the desired result. In these two scenarios, nuclear energy has a substantial role, including for new power plants to be built after 2030. These recommendations are in line with those put forward more recently by the International Energy Agency. They have re-opened the debate on where nuclear energy fits into the future European electricity mix.

However, we should not jump too rapidly to the conclusion that the legitimacy of nuclear energy has been restored in Brussels. Nuclear energy, a decarbonised option, contributes far more to energy transition than any fossil source. It creates more than 300,000 direct jobs on the continent, while increasing Europe's ability to produce decarbonised energy and, therefore, its strategic independence. This reasoning is self-evident for us, but is not acknowledged by everyone in Europe. Experts and politicians debated throughout the year what has become known as the taxonomy of sustainable finance, and in particular a key guestion for us: in which category should nuclear energy be classified – alongside renewables, alongside gas, or should it be given a special place? The outcome remains unclear at the beginning of 2020.





Beyond sector-based developments, 2019 will undoubtedly be remembered as a year of decisive political changes. The institutions experienced several significant shifts.

First of all, the European Parliament has a new configuration. The Eurosceptic landslide predicted by some observers did not happen. However, the two main parliamentary groups, social democrats on the one side and conservatives on the other, can no longer impose a compromise without bringing other political forces onboard. Without the support of the liberals, and sometimes of the liberals and the Greens, it will no longer be possible for the two formerly dominant parties to have legislation passed. The construction of majorities is more complex and more open, since the number of stakeholders involved is larger.

Next, choosing the President of the Commission was difficult. The parties failed to win support for their argument that it was for them to nominate leaders from whom the President must be chosen. Heads of State found a compromise among themselves to choose Mrs Ursula von der Leyen. This decision was a reminder of the decisive role of

the European Council in the Brussels political and institutional system. The Commission, appointed at the end of the year, also has a new structure. It gives over-arching roles to the three Executive Vice-Presidents, including a First Executive Vice-President in charge of the European Green Deal.

This term describes a wide-ranging programme of energy, climate, environmental and industrial policies designed to give Europe a pioneering role in an economy which sooner or later will be organised around low-carbon growth. Two months before the announcement of the composition of her college, Mrs von der Leyen had confirmed her commitment to achieving the "zero net emissions" target by 2050, proposed a reduction of emissions of 50–55% by 2030, compared with an existing target of 40%, suggested a structural reform of the system of carbon quotas and called for a "just" transition that leaves no-one behind. She also indicated her willingness to invest a significant amount of funds in energy transition, which, through a leverage effect, would broaden the scope of European action and structure innovative sectors. All of that, combined with the long-term strategy of 2018, is clearly in line with the EDF Group's vision.

Lastly, even if Brexit only officially happened several weeks after the end of 2019, it clearly weighed upon European work. Not only was no British Commissioner appointed, but even the United Kingdom's right to shape a future in which it would not play a part was called into question

before the elections. There has been considerable press coverage of the upheavals caused by the withdrawal of the United Kingdom, a financial and military power. As far as energy and the climate are concerned, Brexit also marks the departure of an influential Member State convinced of the future of nuclear energy and committed to a competitive decarbonisation of the economy.

In short, for EDF, this is a decisive moment and the future is unpredictable. The Commission's major policy objectives are in line with the group's strategy: a Europe that has grasped the scale of the climate change challenge, which has left the door open to a role for nuclear energy and wants to invest in the energy transition to create growth and jobs. It is also not only a Europe without the United Kingdom, but also a Europe whose Member States do not all have the same approach to the energy sector, in particular as regards possible extensive use of decarbonised gas under reasonable economic conditions.

The EDF Group is ready and is investing in all sectors of the transition. It is up to us to get the message across in the coming years that the transition must be accomplished based on the guiding principle of reducing carbon emissions in a cost-effective way. There are no shortcuts on the pathway towards carbon neutrality.

Erkki Maillard, Senior Vice President, EDF European Affairs

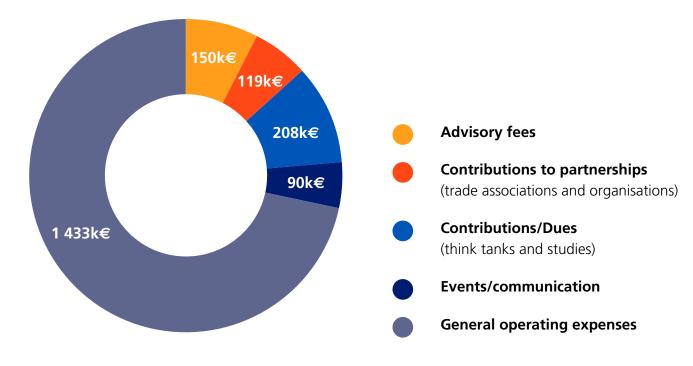
2019 Lobbying facts & figures

EDF is entered in the EU transparency register (n°39966101835-69) and is bound by its Code of Conduct (Annex 3 of the 2014 Interinstitutional Agreement) in the framework of its relations with the EU institutions.

In addition, EDF follows the rules of its own ethics and compliance Code (www.edf.fr). Generally speaking, EDF complies with applicable international conventions, doesn't seek information or decisions dishonestly, or by use of undue pressure or inappropriate behavior, and provides, to the best of their knowledge, EU members and stakeholders with complete, accurate and up to date information.

In 2019, the amount of representation activities expenses declared in the register is 2,000,000 euros. EDF's positions/answers to EU consultations are publicly available on the EU register.

European Affairs budget



Total €2.000 million

The main contributions of the European Affairs Department to think tanks in 2019 went to the Center for Regulation in Europe (CERRE) with €40,000, the Center for European Policy Studies (CEPS) with €30,000 and Confrontations Europe with €30,000. Since 2018 EDF is also a member of SmartEN (€12,000), an association which supports the development of demand side flexibility in the energy system.

Beyond these membership fees, the European Affairs Department financed dedicated actions in support of the lobbying priorities presented in this report: climate action, decarbonising the economy with electrification and energy efficiency, supporting a sustainable development and fostering Research and Innovation. The main

ones for 2019 are a study conducted by Eurelectric to understand the distributional and social effects of climate policies which will be finalised in 2020 (€15,000), a multi-client study on the perspectives of PPAs in the energy transition conducted by CERRE (€20,000), as well as the "Leading the Charge" joint video initiative with Eurelectric and the BBC where EDF pictured its investments in decarbonised hydrogen (€12,500).

EDF European Affairs also sponsored 2 high-level events: "Business Bridge" in April 2019 (€15,000) and the Energy Summit of Friends of Europe in fall 2019 (€16,000) which both brought on stage high level policy makers, NGOs and industry players to discuss different aspects of energy and climate policy.

3 main lobbying actions in 2019

Support to climate ambition: EDF strongly supported the adoption of an objective of carbon neutrality for the EU by 2050 in public events and bilateral meetings with the institutions. EDF engaged in studies and workshops to support the key role of the EU ETS and how to improve it so that CO₂ price signals really trigger investments which are aligned with the fight against climate change.

Explain why electrification is a key solution to decarbonise the EU economy: In 2018 EDF sponsored a study coordinated by Eurelectric on the potential of electrification to decarbonise other sectors. The results were used and promoted in events and meetings across 2019, also supporting our lobbying in favor of CO₂ standards in the Commission's clean mobility package. EDF signed in November 2019 a new Declaration by the Electrification Alliance calling on policy makers to take into consideration the positive contribution of electricity to fight climate change.

Support to the Sustainable Finance Action Plan and the Taxonomy Regulation as the EU instrument to provide investors with reliable, science-based and harmonised EU information on the range of technologies needed to comply with Paris-aligned investment scenarios. EDF advocated to be guided by common principles and indicators guaranteeing a similar level of ambition across sectors and an approach which takes into account all. These messages were conveyed through contacts with the institutions and through a number of associations such as Eurelectric and Foratom.







European institutions set the pace for the net-zero target by 2050

2018 ended with the publication of the European Commission's long-term decarbonisation Strategy supporting costeffective decarbonisation of electricity coupled with electrification of the economy. The role of nuclear as an essential source of dispatchable carbon neutral electricity was acknowledged. A direct electrification rate of about 50% was mentioned, which leaves a reasonable share to other energy vectors particularly in heavy transport and industry. This vision of the energy transition is shared, and was supported

The Council and the Parliament adopted a netzero target for 2050, in line with EDF's views. Regarding 2030 President von der Leyen supported a reduction target increased to 50 or 55%. Such an ambition is key to minimizing the costs since late efforts are less effective and more costly: this is why EDF supports a 55% target.

Centralised and decentralised technologies will contribute to decarbonising the European economy

Nuclear energy's strong contribution to European economic activity became increasingly clear in 2019, both in terms of GDP and jobs. EDF seized the opportunity of a communication from the European Commission to emphasize the essential role of the Euratom Treaty in support of its industrial nuclear projects. The small modular reactors attracted much interest from the European institutions and on the occasion of a major Euro-American event EDF presented its international project Nuward.

Storage will be one the key technologies of the energy transition towards a system with high renewables penetration. Alongside generation, demand-response and interconnection capacities, it will provide flexibility and contribute to security of supply in a cost-efficient way. For many years, EDF has been active in developing storage technologies and in 2019 this expertise was recognized at European level with an EDF expert being elected to the Governing Board of Batteries Europe, a major European platform.

But an adapted investment framework is required too

The implementation of the new ambitious trajectory to fight climate change will require an adequate regulatory framework.

Its first element is the carbon price. It increased in the course of 2019 to reach a meaningful level

around 25 €/t. EDF is convinced that a steady and predictable price signal will be necessary in the next decades to enable carbon-neutral investment at best cost and has supported further measures to ensure such an evolution.

Another aspect began to be addressed in 2019: the Energy and Environment State Aid Guidelines. Competitive carbon neutral energy options such as variable renewables, hydropower, nuclear generation, storage, renewable heat and district heating are all capital intensive. An adapted investment framework including long-term arrangements should in EDF's view be adopted in order to ensure their timely and cost-efficient development.

2020 Outlook

In its first 100 days the Commission is set to adopt a Climate Law which will establish the objective of carbon neutrality by 2050. Next, the European Commission will perform an impact assessment to assess the required evolution of the 2030 CO₂ target, and the definition of future EU climate policies. EDF will continue to actively support a 55% target for 2030 and will contribute to the debate on ETS reform, energy taxation, carbon border adjustment and effort sharing. The preparatory phase for the review of the Environment and Energy State Aid Guidelines will also be a key focus to ensure a sound investment environment for clean technologies.





Electrification at the core of EDF's advocacy in 2019

In 2019 electricity represented only 22% of final energy consumption in the EU while a share of around 50-60% will be needed by 2050 to achieve full decarbonisation of the European

economy¹. EDF strongly believes that electrification is the most costeffective and efficient way to fight climate change in many sectors such as road transport,

1. Eurelectric, decarbonisation

Pathways, November 2018

domestic and industrial heating and other specific industrial processes. Electrification was a top priority of EDF's advocacy and communication in 2019, for instance with the signature of the Electrification Alliance² declaration which was shared with Ditte Juul Jorgensen, Director General for Energy at the European Commission, on the occasion of the launch event in November 2019.

Especially for road transport, e-mobility is the clean way forward

With the adoption of rather ambitious CO₂ reduction targets as part of the Clean mobility Package, the EU institutions sent a clear signal to the road transport industry. Electric vehicles are now unanimously considered as the main solution for passenger and light duty transport. EDF has been actively taking part in the debate, showing with facts and figures that the EU power system is perfectly fit for electric mobility to take off. EDF also showed how Vehicle-to-Grid technologies can bring flexibility into the system and therefore enable higher shares of renewables into the electricity mix.

Hydrogen must be produced in a truly clean way

For sectors of the economy where direct use of electricity is more challenging, EDF believes that molecules will be needed. Hydrogen is widely recognised as a potential decarbonisation energy vector, especially for industry and heavy duty transport. This holds true if hydrogen is produced in a decarbonised way, implying a necessary transition in the hydrogen sector for which 95% of the production relies on natural gas. Hynamics, an EDF Group company, was launched in 2019, aiming at producing and commercialising decarbonised hydrogen obtained through water electrolysis. It is a member of Hydrogen Europe, where it advocates for carbon free hydrogen for industry and transport.

Supporting energy efficient solutions in all sectors

The Energy Efficiency Directive has to be transposed into national law by June 2020 and by March 2020 for the Energy Performance of Buildings Directive. In 2019, EDF's main advocacy actions focused on energy efficiency secondary legislation, in particular the Smart Readiness Indicators (SRI), for which EDF has developed a strong dialogue with the European Commission's services in charge of the SRI definition.

EDF has also reinforced its engagement within the European Heat Pump Association in Brussels. Because heat pumps are three to four times more efficient than usual gas boilers, EDF actively supports a regulatory framework where energy taxation really reflects the CO₂ emissions of each energy vector. Overall, EDF is in line with EHPA's support of electrification as a key decarbonisation vector.

Going beyond heating, the European Construction Technology Platform (ECTP) has been asked by the Commission to lead the effort towards an EU-wide public-private partnership for a decarbonised construction sector. This initiative is called Built4People and was recognised as a priority by the Commission in its Green Deal communication in December 2019. EDF holds the Chairmanship of the Partnership Board of ECTP and thus plays a pivotal role in the future of the construction sector.

2020 Outlook

In 2020 EDF will support all the initiatives enabling electrification to take off. For example, EDF will support the integration of vehicles in the power sector through smart charging and vehicle-to-grid provisions.

The revision of the Alternative Fuels Infrastructure Directive will be very relevant in this regard. As part of the European Green Deal a European "renovation wave" has been announced, and EDF will continue to push for an approach to energy efficiency which really reduces emissions.

In the context of industrial strategy, EDF expects IPCEIs to gain importance and stand ready to participate in an IPCEI on clean hydrogen.



^{2.} The Electrification Alliance's core members are Eurelectric, Wind Europe, AVERE, Solar Power Europe, PowerOn, the Copper Institute, EHPA and is supported by several industry players.



EDF supports the Sustainable Finance initiative

In 2018, the European Commission put forward the Taxonomy Regulation, the key element of its Sustainable Finance Action Plan. This text enables the establishment of a framework that will facilitate significant investment flows towards low-carbon activities, innovation and technologies, in the energy sector.

EDF strongly supports the Sustainable Finance Action Plan and the Taxonomy Regulation as the EU instrument to provide investors with reliable, science-based and harmonised EU information on the range of technologies needed to comply with Paris-aligned investment scenarios. EDF is a reference issuer in the Green Bond market: since November 2013, it has issued the equivalent of around €4.5bn in Green Bonds. Green Bonds are fully integrated into the Group's financing policy. EDF is an active member of the governance of the Green Bond Principles, and co-founder of the Corporate Forum on Sustainable Finance.

The EDF Group has a 90% decarbonised energy mix, with only 54gCO₂/KWh compared to the European average of 300gCO₂/KWh³. The energy sector offers huge opportunities for large-scale decarbonisation and electrification of other sectors due to the wide range of low-carbon electricity generation technologies available, combining variable generation such as wind, solar and dispatchable generation like hydropower

3. PWC study «Climate Change and Electricity. European carbon factor. Benchmarking of CO₂ emissions by Europe's largest electricity utilities». January 2020



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or nuclear, as well as energy efficiency and enabling infrastructure (e.g. storage, smart grids, electric vehicle charging, demand response). The Taxonomy can be used to prioritise and accelerate investments in low-carbon technologies whilst recognising the urgency of the challenge.

All technologies making a key contribution to carbon neutrality must be able to contribute

The Sustainable Finance initiative and the Taxonomy Regulation are therefore essential enabling tools to help deliver the 2050 EU climate neutral strategy and ambition. In doing this, it is of course essential that the initiative is guided by common principles and indicators guaranteeing a similar level of ambition across sectors and a technology neutral approach in order to ensure the best investment framework allowing a cost- efficient decarbonisation.

Environmental issues - a key focus for the EDF group

The EDF group is determined to develop a positive approach to environmental issues by improving its practices and endeavoring to avoid causing irreversible harm to the environment, going beyond an approach that focuses solely on reducing the impacts of its industrial activities on ecosystems.

In 2019, as in previous years, EDF was strongly involved in monitoring legislation in the environmental fields, such as air quality, biodiversity and water management. In these areas, the major challenge for EDF is to make a positive contribution to environmental protection while ensuring a relatively flexible regulatory framework to both maintain the existing production low-carbon capacities and develop projects on new sites. As an example, EDF took part in early 2019 in the consultation on Eel Regulation, notably commenting on

the incompatibility between high escapement targets and other priorities such as fighting climate change and developing large volumes of renewable energies. Although the Commission issued a favourable opinion on the Water Framework Directive fitness check in December 2019, EDF will keep calling for better coordination among climate/environment and energy policies regarding water management.

2020 Outlook

EDF will follow closely the legal and practical implementation of the taxonomy regulation in order to further strengthen the global response to the threat of climate change, sustainable development and efforts to eradicate poverty. The renewed sustainable finance strategy; in particular the revision of the Non-Financial Reporting Directive is also an opportunity to increase transparency by reducing transaction costs for corporates.

More generally, EDF will continue to support the ambition of the Commission, as underlined in the Green deal, to preserve and restore ecosystems and biodiversity, as well as enhancing circularity. EDF remains fully committed to tackling climate and environmental-related challenges.

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Contributing to the future EU energy system

With 2,000 people and a €500m annual budget, EDF is by far the European utility investing the most into research and innovation. Very active in the EU research and innovation network, our researchers bring their vision and expertise into several European Technology Innovation Platforms – ETIPs and Public Private Partnerships, covering a wide range of topics: Energy system (ETIP SNET), Batteries (ETIP Battery), Energy Efficiency in Buildings (EeB), Clean Vehicles (EGVi), Fuel Cells & Hydrogen (FCH JU), Cybersecurity (ECSO)... This of course also provides EDF with very good insight into the European Research arena, feeding in return its R&D teams with enriched ideas and objectives.

Supporting research projects to reach climate-neutrality in the long run

Developing the technologies, systems, tools, approaches and frameworks to ensure a successful energy transition: that's our priority. This goes hand in hand with an improved understanding of societal changes and the

necessary identification of sustainable models, including economics and business. EDF is involved in about 70 Horizon2020 projects, illustrating our ability to execute and deliver with our partners. Among others, this year allowed the launch of projects focusing on the integration of higher shares of renewables by increasing hydropower plant flexibility, strengthening the hydrogen value-chain in North-West Europe or preparing the next generation of batteries. EDF is also one of the key partners of nuclear-related research projects, aiming at always safer operation while preparing the next generation.

Innovating for a higher electrification rate

Besides breakthrough technologies and low-TRL⁴ research, EDF is also very active in demonstrating and piloting solutions which are close to market. Because of their customer base and outreach, our business units are ideal partners for impact-oriented projects, focusing on assessing the overall performance of innovations. These are usually slightly bigger projects than Horizon2020 ones, presenting higher financial risk. EU support for such projects, while still insufficient, is absolutely necessary to transform ideas into effective solutions. Our team is advocating for renewed European support for innovation, being part of expert groups for innovation at EU level.



2020 Outlook

the priorities set out in the Green Deal communication. In preparing the next Framework Programme for Research and Innovation, our experts are very active in contributing to the partnerships the Commission is calling for, through a cocreation process. Referring to innovation, EDF will be focused on large demonstrators, as well as anticipating the launch of the Innovation Fund, together with other large scale initiatives related to the energy transition and long-term climate neutrality objectives. Finally, 2020 will be an important year for our hydrogen activities.



^{4.} Technology Readiness Level

A few examples of 2019 EU collaborative projects

EDF is very much involved in European projects, with an active participation in about 130 projects since 2014. EU programs such as HORIZON 2020, LIFE, CEF or INTERREG are providing great opportunities to develop and pilot innovations. It is also an extraordinary source of fruitful collaboration and partnerships, allowing EDF work with the best European actors in their respective fields of expertise.



Focus Africa objective:

Develop sustainable climates services for the Southern African Development Community region for 4 sectors: agriculture & food, water, energy and infrastructure. EDF is in charge of energy related aspects.

Horizon2020



Alternative Fuel objective:

Develop photocatalysis processes for the production of methane and ethylene with captured CO₂. EDF is in charge of energy balance and potential market assessment.

Horizon2020



Greenfoot objective:

Develop innovative financing, especially participative scheme, to develop energy efficiency and renewables in football stadium across Europe.

EDF is in charge of designing fit for purpose energy solutions.

Horizon2020

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Naima objective:

Develop innovation battery cells for stationary application. EDF is in charge of the testing and performance assessment of cells.

Horizon2020



Corri-Door2 objective:

Deploy and operate 300 fastcharging points along main transport axis in France. EDF is in charge of deploying and operating the infrastructure.

CFF



Tiger objective:

Develop and boost tidal stream energy in France and the UK. EDF is providing its unique Paimpol-Bréhat testing facility to support these developments.

Interreg Channel





Stakeholders

EDF is active in a number of associations, think tanks and organisations, in which a number of EDF experts provide regular input. In 2019 EDF European Affairs has taken extra steps to structure this network of experts and to reiterate the principles of responsible lobbying, based on reliable, verified and up-to-date information.

EDF is active in the following associations: BioEnergy Europe, Business Europe, CEEP, EASE, EFET, EFIEES, EGVI, EHPA, Eurelectric, EUROGAS, Euroheat and Power, FORATOM, Hydrogen Europe, IETA, SmartEn, Wind Europe.

EDF is also active in the following Think Tanks: CEPS, CERRE, CLG, EPC, ERSCT, Friends of Europe, FSR, IFRI.

EDF is a member of the European Energy Forum which organises events in the European Parliament, and of Energy Solutions.



smartEn is the association of market players driving digital and de-centralized energy solution. SmartEN has been recognized for years a key player on Demand Side Flexibility, a key technology to accom-modate renewables intermittency.

In 2019, some major elements have been two reports on the State of Art in Europe on Demand Side-Flexibility and on Network Tariffs and Taxes but also intensive work on the Smart Readiness Indicator for buildings and on electromobility.

SmartEN has signed the Electrification Alliance Declaration.

Eurelectric is the sector association which represents the common interests of the electricity industry at pan-European level. There are currently over 34 members from 32 countries, all national associations. EDF is therefore an indirect member of Eurelectric through the Union Française de l'Electricité.

In 2019 Eurelectric actively advocated in favor of electrification of transport and industry as a key driver of decarbonisation, building on the industry's commitment to be carbon neutral by 2045. It also focused on the proposed sustainable finance regulation and taxonomy, providing technical input on power networks, hydro power and renewables.

Eurelectric has been a driving force in the launch of the new Electrification Alliance Declaration launched in November 2019, signed by EDF.



Hydrogen Europe is the European Hydrogen and Fuel Cell Association. It currently represents more than 100 industry companies, more than 68 research organizations as well as 13 National Associations. EDF became a Member of Hydrogen Europe in 2018, advocating for the production of low-carbon hydrogen obtained through water electrolysis, as close as possible to the needs of the industry and heavy duty transport.



EASE (European Association for Storage of Energy), with nearly 50 members from the whole value chain, actively supports the deployment of energy storage as an indispensable instrument in order to improve the flexibility and to deliver services to the energy system with respect to EU energy and climate policy.

In 2019 it has taken strong positions demonstrating the contribution of storage to decarbonisation and on more technical but essential issues like certification of hydrogen or sustainability of batteries.

EASE has signed the Electrification Alliance Declaration.

FORATOM is the Brussels-based trade association is the voice of the European nuclear energy industry in energy policy discussions with EU Institutions and other key stakeholders. The membership of FORATOM is made of 15 national nuclear associations representing nearly 3,000 firms.

In 2019, FORATOM has been very active on the topic of sustainable finance, advocating in favor of the integration of nuclear in the scope of sustainable energies. FORATOM also took part in the debate, launched by the Commission, on the 2050 energy mix and supported the role of nuclear in a carbon-free economy.



2019 Communications Highlights



Business Bridge Europe Energy Summit

A few months after the publication of the EU long-term strategy, EDF chose a partnership with Business Bridge Europe at one of the most prestigious events of the political year in Brussels. The 2019 edition confirmed the high quality of debate, bringing together representatives from all walks of the EU climate and energy sectors, as well as an audience of almost 500. EDF pledged to strongly develop electrification, underlining its role as European champion of low-carbon energy production in particular with the launch of its Electric Mobility plan at the end of 2018.



European Commission visited EDF R&D

Klaus-Dieter Borchardt, at the time Deputy Director General for Energy, with some of his team, visited EDF Lab les Renardières, EDF's largest research and development centre. EDF showed its knowhow in all areas of energy transition and certain carbon-free solutions for the future: mobility, connected home, concept grid, heat & pump and batteries. Illustrating the benefits of how a more than 50% electrification of EU economies could be the compass for energy transition.

Eurelectric campaign #leadingthecharge

Eurelectric launched a series of mini-documentaries on electrification, made by the BBC, to illustrate both the benefits of increased electrification for Europe and the commitment of the EU energy sector to decarbonise and lead energy transition. Each documentary focused on concrete electrification projects and EDF joined the initiative to showcase its strategic projects on hydrogen through on-site interviews with its subsidiary Hynamics. The final programme was unveiled at Eurelectric's Power Summit and extensively shared on social media.



Friends of Europe Climate & Energy Summit

Organised by the think tank Friends of Europe, this is a flagship event in Brussels, bringing together high-level speakers and stakeholders from all walks of the EU climate and energy sectors. The main theme of the 2019 edition was the importance of aligning financial sector objectives with climate needs in achieving the objectives of the Paris Agreement and the 2030 Agenda for Sustainable Development. A crucial issue shared by EDF, the first corporate issuer of green bonds in 2013 and whose carbon footprint is the lowest among big energy producers in Europe.

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Social Media figures @ EDF_Europe



more than 800k impressions 960 followers



more than 900k impressions **20K followers**

EDF welcomed the Energy Union plan as soon as it was launched by the Juncker Commission. You are Europe's leading electric utility, the biggest producer of renewable energies and the number one nuclear power operator in Europe, serving more than 35 million customers a day... As the EU changeover approaches, it seems a good time to review what has been done: how would you describe the progress made on the outgoing Commission's flagship project and, more generally, on the European energy transition?

Letter: EU must include nuclear power in its list

Save Nuclear power is the single biggest source

of low-carbon electricity in Europe today and is

recognised in many of the scenarios assessed by the Intergovernmental Panel on Climate

Change, the International Energy Agency and

other organisations as having a critical role to play

in responding to the climate emergency.

of sustainable sources

transition. The transport sector currently accounts for close to 20% of greenhouse gas emissions in Europe. With this in mind, EDF believes decarbonised electricity is the solution of the future for clean transport. Electric mobility will see robust growth over the coming years. This is clearly a societal issue, one that affects all citizens and that will be resolved in large part on a territorial level. What could motivate people more than the prospect of coming together to tackle a challenge as important as global warming and improving the quality of the air we breathe?

Electric mobility is a key component of energy

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Press clippings

Ursula von der Leyen is setting up the European Green New Deal in context of climate emergency. This emergency can also be a huge opportunity for our society and for the European industry, writes Jean-Bernard Levy. Europe needs to speed up this historic transition, scaling up its 2030 climate mitigation target to 55% and leveraging all available low-carbon options to fight climate change in the most cost-effective way. The European Commission is up to this task and the EDF Group is fully mobilised to share its ambitious vision and its expertise.

Energy Solutions is a cross-national, sectorial and cross-party European Parliamentary Network with a focus on the energy transition. In its brochure "The future is green: 15 solutions for the EU 2015 decarbonisation goal", Energy Solutions asked each of corporate members to present a low-carbon solution. EDF seized the chance to present its V2G smart charging solution for increasing the value of EVs to customers while contributing to the decarbonisation of the EU transport sector.







Climate Action & Decarbonised Mix



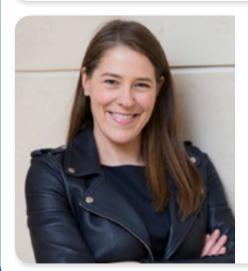


#FORATOM Olivier Bard @EDFofficiel: "We need to make a decision now to be ready in 2035 and to deliver #netzero target in 2050." #Nuclear4Climate #ClimateActionNow #EnergyTransition





#CLGEurope is supporting a significant increase in the EU GHG emissions reduction target for 2030 in order to remain in line with climate neutrality by 2050.





"CLG Europe's instrumental leadership in catalysing European businesses towards a commitment to carbon neutrality gives hope for better policies in line with what is needed for Europe to deliver the Paris agreement. EDF strongly supports CLG Europe's initiative as our first Corporate Social Responsibility goal is to go beyond the 2 degrees trajectory by drastically reducing our CO₂ emissions and contribute to carbon neutrality in 2050."

Sustainable Development





#EUSEW2019 - @ahoua_anderson @EDFofficiel: "EDF would not be only an investor, but a partner on strategy for Africa." #EUAfrica #innovation #partnership





#leadingthecharge - Yannick Phulpin from @EDF_Europe underlines the neccesity of financial tools to mitigate the investors risks, and therefore achieve the #EnergyTransition at a lower cost. #GreenNewDeal





E.Maillard, Senior VP in charge of EU Affairs at @EDF_Officiel: "Sustainable management of #water resources must be a priority in the fight against #climatechange, including through #renewable energies. We supports the @EU_Commission efforts to move in this direction." #WFD



Electrification & Energy Efficiency





Energy Solutions EU · 9 juil. 2019

@EnerSolutions

Building a #greenEU requires a combination of technology solutions from all sectors. We're excited to hear about our members' latest technological developments bringing us one step closer to a #decarbonised economy and society





EDF Europe · 17 oct. 2019 @EDF Europe

#ElectrificationEurope - Thanks to all speakers and more than 750 participants to these 2 days full of discussions and exchanges. Think global to embrace this shift: we all have the responsibility to take part in the #electrification of the #EU economy! #EnergyTransition





Eurelectric · 25 nov. 2019

@eurelectric

As a part of its #eMobility Plan @EDFofficiel has created DREEV - a joint venture with @NuvveCorp - to develop & commercialize smart charging & "Vehicle to Grid" offers.

Research & Innovation





#SMR @xursat: Today, EU countries are looking at SMR as a potential #nuclear solution, complementary with mid & large power reactors. Given the existence of a high-quality EU industrial supplychain, we believe we can build on this strong European history to meet SMRs' challenges.





Mr Etienne Briere from EDF was also elected to be part of the Governing Board of #BatteriesEurope. He will be contributing with his expertise as the member in charge of #stationary applications. Congratulations!





#EUW2019 - Sandrine Charousset, EDF R&D: « @Plan4Res is a an end-to-end planning and operation tool, composed of a set of optimization models based on an integrated of the pan-European energy system. » #EDFLab



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EDF European Affaires Division, Communication Unit

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