In terms of climate and energy policy, 2021 was notable for two major events.

In the first half of the year, the European Union started to identify a new legislative arsenal to achieve its climate ambition of carbon neutrality by 2050. The ‘Fit for 55 package’ proposed by the European Commission should make it possible to accelerate the reduction of greenhouse gas emissions in all sectors by 2030. This package is based on two key points: firstly, the direct electrification of uses and, secondly, strengthening the price of carbon pollution.
Along with the promotion of all sources of low carbon electricity, these are also the priorities of EDF as detailed in this activity report. We are committed to working with associations and partner organisations that share these objectives for the purpose of contributing to the Brussels debate in favour of the fight against climate change. And we’re committed to conduct all of our lobbying in line with EDF’s Raison d’être and the goals of the Paris Agreement.

Electricity in Europe is already largely decarbonised with more than 60% of production decarbonised thanks to nuclear and renewable energy. The carbon intensity of electricity in Europe continued to decline, from 253 gCO₂eq/kWh in 2019 to 241 gCO₂eq/kWh in 2021. Despite the current challenges of rising gas prices, electricity generation is expected to be fully decarbonised by 2050. Along with energy efficiency, electrification is therefore the principal driver for decarbonising other sectors that are currently highly dependent on fossil fuels: heating of buildings, transportation, industrial processes. The European Commission’s proposals to promote the use of electricity, in particular for mobility, are therefore headed in the right direction.

Secondly, all economists demonstrate that a price must be put on the pollution caused by greenhouse gas emissions in order to guide investments. EDF supports the European Commission’s intention to strengthen and extend the current carbon trading scheme (ETS), as well as encourage third countries to develop a comparable approach. In this respect, the carbon adjustment mechanism at the borders would level the international competitive playing field for European industries.

2021 was, however, also notable for an unprecedented rise in energy prices. This crisis makes the implementation of an ambitious energy and climate policy more complex and expensive. However, it also serves as a reminder of the value of often forgotten concepts. This crisis is, first and foremost, a crisis of imported fossil fuels. Energy independence is one element of energy security. This is an additional incentive to promote renewable energies and nuclear power in Europe. This is also the reason why we need to support renewable hydrogen and low carbon hydrogen produced by electrolysis in Europe. Finally, this crisis reminds us that the costs of energy transition must be controlled for consumers, without affecting the investment capacity of companies committed to the fight against climate change.

As a leader in renewable energies in Europe, EDF produces nearly a quarter of all the continent’s carbon-free electricity.

As a leader in renewable energies in Europe, EDF produces nearly a quarter of all the continent’s carbon-free electricity.
EDF is duly referenced in the EU transparency register (n° 39966101835-69) and is bound by its Code of Conduct (Annex 3 of the 2014 Inter-institutional Agreement) in the framework of its relations with the EU institutions.

In addition, EDF follows the rules of its own ethics and compliance Code (https://www.edf.fr/en/the-edf-group/taking-action-as-a-responsible-company/ethics-and-compliance-programme/the-edf-group-s-commitment-to-ethics-and-compliance). Additionally, the European Affairs Division has adopted its specific ethical charter “European Union Lobbying principles” – which is a public document, displayed in our premises and distributed to incoming personnel. Generally speaking, EDF complies with applicable international conventions, doesn’t seek information or decisions dishonestly, nor by use of undue pressure or inappropriate behavior, and provides, to the best of their knowledge, EU representatives and stakeholders with complete, accurate and up-to-date information.

In 2021, the amount of representation activities expenses declared in the register is 2,000,000 euros. EDF’s answers to EU consultations are publicly available on the EU register. Moreover, EDF communicates publicly on its positions and messages on its key areas of interest on social media (LinkedIn & Twitter).

Staff awareness is raised to ethical issues through dedicated meetings and delivery of relevant documents (such as Code of conduct, EDF’s Ethics and Compliance Code, “European Union Lobbying Principles”). Training is strongly encouraged for instance in the field of anti-corruption where 100% of the staff should have completed the internal in depth anti-corruption program in 2022.

EDF’s European Affairs Division monitors closely its engagement with trade associations and think tanks and especially their alignment with EDF’s “raison d’être” which is “to build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive wellbeing and economic development”.

A dynamic process has been put in place which triggers – when needed – follow up actions. At the end, the process may result in EDF opting out of some organisations or considering joining new ones.
The main financial contributions of the European Affairs Division to think tanks in 2021 went to Bruegel (€33,000), the Center for Regulation in Europe (CERRE) with €30,000 and the Center for European Policy Studies (CEPS) with €20,000.

Beyond these membership fees, the European Affairs Division financed dedicated actions in support of the lobbying priorities presented in this annual report: climate action promoting a low carbon energy mix, accelerating electrification and smart use of hydrogen, and sustainable finance & investment frameworks. The main ones for 2021 are an event on the revision of the energy efficiency directive with European Policy Centre (14k€) and a study on Revision of the Renewable Energy Directive (REDII) with CERRE (investment 25k€).

Other communication actions and related costs incurred by EDF are detailed in the “Communication” chapter.

### 4 main lobbying actions in 2021

- **Supporting EU climate ambition:** EDF strongly supported the proposals of the European Commission to strengthen the EU ETS to achieve “at least -55%” emissions reduction for the EU by 2030. In public events, bilateral meetings with the institutions, consultation answers and its external communication. EDF engaged in workshops to support the key role of the EU ETS and carbon pricing so that CO₂ price signals really trigger low carbon investments. Among others EDF participated in a briefing on the EU ETS for European Parliament assistants with the European Energy Forum.

- **Calling for a regulatory framework in favor of electrification to decarbonise the EU economy, complemented by renewable and low carbon hydrogen:** In 2021 EDF continued to highlight the key role of electrification in decarbonising the building and transport sectors, and the need to price the CO₂ emissions of all energy carriers. EDF supported ambitious national objectives for the deployment of electric vehicles’ charging infrastructure in the context of the AFIR revision. EDF also engaged in a social media campaign “#ElectrifyNow” together with the “Electrification Alliance” and other utilities. When it comes to hydrogen EDF promoted the recognition of the role of hydrogen produced with carbon neutral electricity including hydropower and nuclear in the context of the review of the State Aid Guidelines, Taxonomy for sustainable activities and of the TEN-E regulation.

- **Supporting the development of low carbon electricity sources:** EDF supported a target of 40% renewables in the EU energy mix in 2030 in the context of the ‘Fit for 55 package’. In bilateral meetings and events EDF also continued to raise the issue of permitting as the main issue to be solved to accelerate renewable deployment. The role of nuclear was highlighted by EDF’s CEO Jean-Bernard Lévy in a sponsored Politico panel on 1st December and EDF supported the launch of a high level roundtable on Small Modular Reactors (SMRs) by the European Commission. EDF also contributed to the organisation of a delegation of MEPs to the World Nuclear Exhibition in Paris in November.

- **Supporting 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 for the taxonomy to be guided by common principles and indicators guaranteeing a similar level of ambition across technologies. These messages were conveyed through contacts with the institutions and through several associations such as Eurelectric and Foratom.
As a worldwide global leader in low carbon energy, the EDF Group is active across the low carbon energy value chain, from generation to retail, from energy efficiency to trading. **EDF has adopted in 2020 its "raison d’être" which is to build a CO₂ neutral energy future, by reconciling the preservation of our planet, well-being and development thanks to electricity and to innovative solutions and services.**

EDF’s activities are mainly located in Europe accounting for 90% of its turnover. EDF is the European leader of carbon-free electricity, being the largest EU nuclear and renewables generator. Its electricity emits 58 g CO₂ per produced kWh compared to an EU28 average of 299 g CO₂.

EDF Group supplies electricity and gas to nearly 39 million residential consumers, businesses and local authorities in Europe, being number one in France and number 2 in UK, Italy and Belgium. In line with EU energy policies, EDF considers electrification as a major way forward to decarbonise the EU economy.

The ambition of EDF Group is to be a champion of low carbon growth, committed to meeting the new expectations of customers, as well as of all stakeholders, by offering them value-added goods and services.

Sharing our ethical values and complying with laws and regulations are at the heart of our commitment and reflect our corporate responsibility.

The Code of Ethics and Compliance and the information on the Group alert system are accessible on [www.edf.fr](http://www.edf.fr).

**"We must be exemplary in our behavior and promote ethics in all of our professional activities."**

Jean-Bernard Lévy - Chairman and CEO of EDF
Values of the EDF Group

EDF is committed to transparent and responsible lobbying

EDF’s EU lobbying refers to the promotion or the defense of the company’s interests by its representatives towards the European institutions (European Commission, European Parliament, Permanent Representations of Member States) with the aim of directly or indirectly influencing proposals or decisions which are likely to have an effect on the EU’s climate and energy framework and more specifically on the company’s activities.

While conducting its EU lobbying, EDF is committed to behave in a transparent and responsible way.

EDF also complies with applicable international conventions, does not seek information or decisions dishonestly, or by use of undue pressure or inappropriate behavior, and provides, to the best of their knowledge, EU representatives and stakeholders with complete, accurate and up-to-date information.

When lobbying the EU institutions, employees and representatives contracted by EDF must behave in a transparent and responsible manner, respecting the following principles:

- Identify themselves as EDF employees or as acting on behalf of EDF before engaging in a lobbying action or any public intervention;
- Develop arguments always based on reliable, verified and up-to-date information;
- Respect the positions of other stakeholders;
- Comply with EU laws, regulations, conventions etc. governing lobbying, and follow the codes of conduct of the institutions being lobbied;
- Communicate and defend positions that are in line with EDF’s strategic framework and “raison d’être”;
- Be identified by the European Affairs Division.

They must never:

- Try to influence the position of a public official by offering him undue advantages, or by inciting to the violation of the ethical rules of the institution;
- Use, for commercial or advertising purposes, information obtained from an EU institution, or sell to third parties any copies;
- Seek information or decisions dishonestly, or by use of undue pressure or inappropriate behavior;
- Deceive or mislead third parties and/or public officials, or claim any formal relationship with the EU or any of its institutions in their dealings with third parties.

EDF subscribes to:

- Universal Declaration of Human Rights
- Convention on the Elimination of All Forms of Discrimination against Women
- International Convention on the Rights of the Child
- Convention of the Organization for Economic Cooperation and Development on the fight against the corruption of foreign public agents in international commercial transactions
- Conventions of the International Labour Organization guaranteeing the fundamental principles and rights of employment and fighting against discrimination
- Guidelines of the Organization for Economic Co-operation and Development for Multinationals
- United Nations Convention against Corruption
Virtual but effective

With many meetings and events being held virtually, last year a practice that has now become the norm - parliamentary activities carried out by the European Affairs Division (EAD) required greater flexibility once again this year. However, some field trips were organised, allowing us to physically reconnect with our interlocutors. While awaiting the publication of the summer and winter climate packages, our lobbying topics at the European Parliament were the TEN-E regulation, the battery directive and the digital files. The second part of the year was devoted to the first exchanges on the ‘Fit for 55 package’ and establishing our primary positioning, with a focus on the revision of the Renewable Energy Directive and the directive on sustainable mobility within the framework of a parliamentary delegation during the World Nuclear Exhibition in Paris-Villepinte (December). The presentation of the 2050 scenarios of the EDF strategy to key Members of European Parliament (MEPs) was also an opportunity to highlight the role of a decarbonised mix combining nuclear and renewable energy in order to contribute to the objective of carbon neutrality.

Focus on decarbonisation challenges

Clean mobility was a widely discussed topic prior to ‘Fit for 55’. While most MEPs are ambitious, some are more averse to the electrification of vehicles. Key event
- Co-organisation of a conference (January 2021) on sustainable mobility within the framework of the parliamentary intergroup devoted to climate change, biodiversity and sustainable development, with a presentation by Olivier Dubois EDF’s Electric Mobility Director.
- Erkki Maillard’s (Sr VP EU Affairs ) presentation on electro-mobility in the context of Energy Solutions (October).

Dealing with sensitive energy issues, the TEN-E regulation on the financing of trans-European energy infrastructures was the subject of many political battles surrounding the issue of natural gas. The main elements important to EDF were adopted following numerous exchanges: scheduled end to aid for fossil fuel projects and consideration of low carbon electrolysis.

Digital matters increasingly related to the issue of decarbonisation were at the heart of parliamentary priorities as well. The EAD conveyed the EDF’s messages on the NIS2 cyber security directive and ensured regular monitoring of the text. Additionally, AIDA, a sub-committee dedicated to artificial intelligence, was established to prepare the parliamentary work on the Artificial Intelligence (AI) Act that will take effect in 2022. Key event
- Erkki Maillard’s presentation on the role of digitalisation in the achievement of climate neutrality given at the Energy Solutions webinar in the presence of Commissioner for Competition and Digital, Margrethe Vestager (June).

Actions before and after the publication of the ‘Fit for 55 package’

The Parliament started to make swift progress following the publication of the ‘Fit for 55 package’. The EAD has been closely involved in the early stages of this legislative process by providing expertise and reaffirming its commitment through briefings in the various parliamentary bodies of which it is a member (Energy Solutions, European Energy Forum). In addition, regular exchanges with key MEPs on these issues allowed to raise awareness of the issues identified and mobilise them in order to obtain the role of rapporteur, for example.

Key events
- Participation of Solène Charpentier (EDF European Affairs) and Florent Le Strat (EDF R&D) at a briefing on EU-ETS organised by the European Energy Forum (March 26)
- Participation of S. Charpentier at a briefing on RED II in the context of Energy solutions (May)
- Participation of Marion Labatut (EDF European Affairs) at a ‘Fit for 55 package’ workshop by Energy Solutions on the role of direct and indirect electrification (September 1)
The year 2021 was a decisive year for climate action in Europe.

By December 2020, EU member states had agreed to a new target for reducing emissions from 1990 levels by at least 55% by 2030 and achieving climate neutrality by 2050. These two goals were made legally binding in the Climate Law formally adopted in early July 2021. A few days later, the Commission unveiled 13 proposals in its ‘Fit For 55 legislative package’, marking the beginning of the reform process to align EU policies with the new climate goals.

Supporting the climate ambition of the ‘Fit For 55 package’

The ‘Fit for 55 package’ includes a wide range of reforms covering the EU’s main climate policies, as well as various related proposals on energy, transportation and taxation. Regarding climate change, specifically, the Commission proposes the revision of existing legislation to put Europe on the new decarbonisation path: strengthening the Emissions Trading Scheme (EU ETS), setting higher national targets in the Effort Sharing Regulation (ESR) and adding binding targets for member states by 2030 in the Land Use, Change of Land Use and Forestry Regulation (LULUCF). The Commission also put forward new measures such as the pricing of emissions coming from heating and road transport in a parallel quota system and a carbon border adjustment mechanism (CBAM) to tax carbon-intensive imports in certain sectors such as steel and cement.

Throughout 2021, EDF participated in the public consultation processes on legislative initiatives for the ‘Fit for 55 package’ both ahead of the proposals in March 2021 and then ex-post following publication. EDF supports the ambition of the ‘Fit For 55 package’, which should set Europe on the path to carbon neutrality. In particular, EDF welcomes the reform of the European quota trading system and recalls that the priority in Europe is to reduce dependence on fossil fuels by relying primarily on direct electrification of uses. EDF also reiterates that it is essential to ensure a fair and inclusive energy transition, in particular by controlling the social impacts of a rise in the price of carbon.

Strengthening and expanding the European carbon market

The Commission has confirmed the key role that the EU Emissions Trading System (EU ETS) must play in the ‘Fit For 55 package’ in order to achieve climate objectives, notably through two key proposals.

The first expected reform is the revision of the
current EU ETS system to align it with the new, more ambitious EU 2030 target. All of the changes to the current system should now result in an overall reduction in emissions of 61% by 2030 compared to 2005 in the sectors concerned. EDF supports the ambitious reform proposed by the Commission, in particular the combination of re-basing and increasing the linear factor, in order to rapidly reduce the number of allowances placed on the market, the strengthening of the stability reserve to increase the stability of the system and the extension of the EU ETS to the maritime sector. EDF continues to promote the implementation of a carbon pricing corridor to increase the predictability and allow for better anticipation of investments in low carbon technologies.

Finally, it is important to note that this extension of the carbon price is widely controversial, particularly because of the risk of significant societal impacts. EDF clearly recognises this risk and fully supports the establishment of the Just Transition Fund proposed by the Commission as well as the obligation to re-use 100% of the revenues from the ETS for climate purposes.

Guaranteeing competitiveness of European industry through the carbon border adjustment mechanism

Another key proposal of the ‘Fit for 55 package’ is the introduction of a new carbon border adjustment mechanism (CBAM). The system aims to set a carbon price for imports of certain products in order to prevent ambitious climate activity in Europe from causing carbon leakage. EDF supports the principle of CBAM which provides a level playing field between European industries and those in other countries that contend with less stringent carbon pricing. EDF welcomes the Commission’s choice of a system with the same carbon price reference, but which is separate from the EU ETS and therefore has no impact on the latter’s volumes. EDF supports the inclusion of the electricity sector in CBAM as early as 2026. EDF is calling for the implementation of a CBAM that helps European industry to decarbonise while preserving its competitiveness in global markets.

Promote electrification by revising the energy taxation directive

As part of the ‘Fit for 55 package’, the Commission has also proposed an overhaul of the energy taxation directive considering that the current version, dating from 2003, is no longer compatible with the European Union’s climate objectives. The revised text notably proposes to link tax rates to the energy content and environmental performance of different fuels and electricity. EDF supports the proposed revision of rebalancing taxes between the different energy carriers and removing exemptions favouring gas supply, thereby sending a clear message in favour of electrification. Taxation has a major role to play in decarbonisation by encouraging consumers to switch to low carbon and efficient technologies, particularly in the building and transport sectors.

2022 Outlook

Long negotiations will now start between the Parliament and the European Council on the different texts of the ‘Fit For 55 package’. EDF will notably be working on drafting amendments to get its main messages across, while ensuring that the positive points in the Commission’s initial proposal are maintained, particularly with regard to strengthening the ETS. The current price crisis in the energy sector should in no way lead Europe to renounce its ambition. Quite the contrary, it is necessary to accelerate the transition to decarbonised energies in order to protect ourselves from the volatility of fossil fuels and reduce our energy dependence. Finally, particular attention must be paid to the pace of the negotiations to ensure that the many links between proposals including the existing ETS, the new ETS and CBAM do not slow down the overall adoption process.
PROMOTING A LOW-CARBON ENERGY MI
Support for European ambitions to accelerate renewables deployment

As part of the ‘Fit for 55 package’, the Commission is also proposing to revise the directive on renewable energies to accelerate their development, in addition to the texts directly related to climate ambition. The Commission proposes to increase the binding target for renewable energy to 40% - as opposed to 32% today - to be achieved at EU level by 2030, while continuing to rely on governmental regulation to monitor the contributions of the various Member States. The Commission also proposes to strengthen or introduce sectoral targets for the integration of renewable energies, particularly in the building and industry sectors where progress has been slowest. The proposal also encourages the development of alternative fuels and, in particular, of renewable hydrogen and its derivatives, with ambitious and binding sectoral targets at national level in transport and industry.

EDF confirms its willingness to continue to invest heavily in renewable energies in the coming years and therefore supports the 40% target, while calling for a certain amount of flexibility to be maintained between the different sectors and the different Member States in order to recognise national specificities. In the case of France, in particular, achieving carbon neutrality will require a synergy of different sources of decarbonised production.

Beyond the discussions on the ambition of the different targets, EDF recalls that there are currently many bottlenecks that slow down the development of renewable energies, in particular the complexity and length of the permitting procedures. Sharing best practices between the different Member States as well as a specific follow-up of this issue by the Commission in the framework of the Climate Energy Plans is essential to accelerate the pace of development.
Nuclear: wind has turned...

For nuclear, 2021 will have been a changeover. From now on, an indisputable place is granted to nuclear power in the European mix. In Brussels, where anti-nuclear arguments have long prevailed, awareness has been raised. An essential tool for resolving the climate crisis, the role of nuclear power is recognised as key in support of renewable energies.

One of the lessons of the pandemic is that the availability and controllability of nuclear energy are at the heart of security of electricity supply in Europe.

The latest Intergovernmental Panel on Climate Change (IPCC) reports stresses that our window of action to reach 1.5°C target is closing.

Climate change is an issue, but the need for a secure, stable and affordable energy source is also of the utmost importance namely in nowadays context of skyrocketing energy prices and increased risk of dependence from third countries.

Faced with this more open integration of nuclear energy into European debates, opposition to this source of energy has also become more fierce than in previous years. This did not facilitate the Commission’s decisions on the “Sustainable Finance” file as one of the most fundamental aspects of the Green Deal. It remained a subject of intense debate throughout the year. The Commission waited until December 31, 2021 to publish the leaked text of the delegated act which sees the integration of nuclear power in the taxonomy. This integration is major point to highlight for 2021. Throughout 2021, EDF has adopted a responsible attitude and explained the challenges of this key dossier to European stakeholders.

EDF supported the emergence of a European SMR industry

SMRs (Small Modular Reactors) constitute one of the possible futures of the European nuclear industry. Small Modular Reactors can contribute to EU’s 2050 climate targets, decarbonised energy sector, and the European economic recovery and industrial resilience. Current prospects in several EU Member States show that SMRs could contribute to the replacement of retired electricity generation capacity or be used for other applications such as industrial co-generation (industrial heat), district heating, and hydrogen production.

With unique experience and expertise in nuclear technology (including significant research and development capabilities), EDF is going to play a key role in developing safe and competitive SMRs in Europe. With its partners EDF is developing NUWARD™ a 2x170 MW SMR reactor. In 2021, EDF called on the European Commission to set up an industry round table on SMRs to address topics such as regulatory frameworks, financing tools, R&D challenges to be overcome, industrial value chain consolidation, and the need for a minimum potential market size for SMR equipment manufacturing factories to be available and then profitable through the deployment of SMRs within Europe and abroad.

As an answer, the first EU SMR workshop was organised by the European Commission in June 2021. The Partnership creates enabling conditions for the first EU SMRs starting operation in the initial years of the next decade. It co-ordinates strategies and enhances collaboration towards an integrated supply chain in Europe and a coherent set of complementary projects.
ACCELERATING ELECTRIFICATION
Accelerating electrification and the smart use of hydrogen

Introduction

EDF strongly believes that electrification is the most cost-effective and efficient way to fight climate change in many sectors such as road transport, domestic and industrial heating and other specific industrial processes. Electrification will foster Energy System Integration through the interaction of electric vehicles with the electricity grid, smart heat pumps and connected homes unlocking a substantial flexibility potential and facilitating higher shares of renewables.

But in 2021, electricity still represented only 22% of final energy consumption in the EU, while the latest European Commission impact assessment showed that a share of around 50-60% will be needed by 2050 to achieve full decarbonisation of the European economy. In this context, EDF continued to strengthen its advocacy to explain the benefits of electrification. In particular EDF participated in a communication campaign from the Electrification Alliance and strongly supported key proposals from the European Commission in favor of electrification in the context of the ‘Fit for 55 package’.

The EU regulatory framework for hydrogen must support \( \text{H}_2 \) produced with low carbon electricity

EDF considers that electrification is the most energy-efficient and cost-effective way to decarbonise many sectors of the economy. But in hard-to-abate industrial sectors, as well as in aviation and maritime, renewable and low carbon electrolytic hydrogen will be needed to achieve carbon neutrality.

EDF’s subsidiary Hynamics was launched in 2019 to develop renewable and low carbon electrolytic on-site hydrogen solutions. It is submitting several projects aiming for the hydrogen IPCEI (Important Project of Common European interest) launched in 2020, primarily in France and in Germany. In 2021, EDF’s CEO Jean-Bernard Lévy was appointed as co-chair of the production roundtable of the EU Clean Hydrogen Alliance and actively contributed to shaping the debate with EU institutions.

In 2021, EDF called in a joint industry letter for hydrogen produced with low carbon electricity, including hydro power and nuclear, to be properly defined in the EU taxonomy. EDF also supported the eligibility of such projects in the new State Aid Guidelines and the final version was published in December.

2021 was also supposed to be the year when the European Commission publishes its delegated acts finalizing the definition of renewable hydrogen and the establishment of the renewable additionality principle. EDF voiced its views on this important topic, including in a letter from its CEO to EU Commissioners, calling for a framework which avoids greenwashing while enabling early projects to come off the ground. At the time of writing EU industry is still waiting for the delegated act on Renewable Fuels of Non-Biological Origin.

Finally, on 15th December, the Commission published its long-awaited gas and hydrogen markets decarbonisation package which aims to promote the shift from fossil gas towards renewable and low carbon gases, including hydrogen. Ahead of the release, EDF sponsored a EURACTIV event to promote its views and discuss with policy makers.

Energy efficiency: reducing GHG emissions with low carbon energy

In 2021, the European Commission published two legislative revision proposals on energy efficiency: the Energy Efficiency Directive (EED), and the Energy Performance of Buildings Directive (EPBD). EDF answered several consultations from the European Commission, connected to these two texts.

EDF fully supports the EED and EPBD revisions as part of the ‘Fit for 55 package’. This is an opportunity to ensure that these texts are fully aligned with Green Deal climate objectives and coherent with other strategies or legislations. Taking into account the target of at least -55% of GHG emission reduction by 2030, quick and deep changes are needed to speed up the emissions reduction, particularly in the building sector: a full decarbonised building stock has to be the primary target.
Nevertheless, these legislative works have to be done with a focus on affordability, taking into account the most cost-effective way to reach the climate targets. In that way, EDF supports measures to ensure an inclusive transition and welcomes energy efficiency measures targeted to low-income households financed via dedicated instruments.

**Carbon non-regression principle**

EDF believes that carbon content should be our compass while fighting EU emissions. Buildings electrification reduces CO₂ emissions, as a substitute to fossil fuels and as a way to reduce total energy consumption thanks to high energy efficiency. In that way the EED revision proposal is still not enough focus on GHG emissions reduction: the energy efficiency first principle should be transformed into a carbon efficiency first principle, with a carbon non-regression principle as a sort of “climate safeguard”, to ensure that any energy efficiency solutions shall lead to GHG emissions reduction per unit of consumption.

**Decarbonisation in buildings**

In the EPBD revision proposal, EDF welcomes an ambitious text which is a first step for a decarbonised landscape in buildings, with the goal to have a zero-emission building stock in 2050. It creates good conditions to push forward electrification, coupled with full decarbonisation of power sector. In particular, with their high efficiency rate, heat pumps will considerably reduce CO₂ emissions for heating and cooling buildings, the same as electrification of transportation with the creation of favorable conditions for EV charging infrastructure roll out in buildings. Nevertheless, all renewable energy sources must be taken into account, including those coming from networks (especially electricity grid and district heating and cooling networks).

**Electric mobility**

In terms of sustainable mobility, the year 2021 was notable for the publication of an ambitious legislative proposal for the deployment of an alternative fuel infrastructure on July 14. This long-awaited revision of the 2016 directive was proposed by the Commission in the form of a regulation, setting binding targets for Member States to ensure the installation of sufficient alternative fuel infrastructure and in particular electric charging stations. EDF warmly welcomed this draft regulation, which prioritises direct and indirect electrification to decarbonise most modes of transport, including heavy goods transport, ports and airports.

EDF had exchanges with the Commission, the Parliament and the Council to put forward these positions. Communication events were also organised to promote electric mobility. These operations will be renewed in 2022 in a context of accelerated legislative work in the Parliament and the Council.

**2022 Outlook**

The legislative process on the revision of the EED, EPBD, AFID, RED II and the gas package will continue in 2022 with the positioning of the European Parliament and the Council. We may expect some of the trilogues to start before year-end.

On the hydrogen front, 2022 should see the publication of important delegated acts stemming from the Renewable Directive, which will be a make or break for many renewable hydrogen projects. EDF will therefore continue its advocacy to promote and defend provisions which are conducive for direct electrification especially in transport. It will also aim at introducing better references to CO₂ as the compass in energy efficiency texts.
SUSTAINABLE FINANCE
The year 2021, like the previous one, saw a number of achievements in the area of sustainable finance, for each of its three main components: reporting tools, taxonomy and financial tools. Firstly, discussions on the revision of the non-financial reporting directive have started. Secondly, several delegated acts were definitively approved and published, in particular that listing the activities providing a substantial contribution to the climate objectives. Thirdly, the directive launched discussions concerning the European standard for green bonds.

The year 2022 will be devoted to the continuation of legislative discussions on components 1 and 3 and the finalisation of several delegated acts, in particular that concerning gas and nuclear power and that involving environmental objectives. Operationally, a first taxonomy reporting exercise will take place in 2022 as part of the Universal Registration Document (URD).
Sustainable finance is deployed through multiple European mechanisms

Sustainable finance is one of the pillars of the Green Deal and promotes the inclusion of environmental, social and governance (ESG) considerations in the investment decisions of the financial sector, ensuring investments in sustainable economic projects over the long term that will help meet the 2030 and 2050 climate goals.

EDF fully supports this policy, which brings the financial sector in line with the Paris Agreement. Among the actions undertaken and presented in the Commission’s communication of 6 July 2021 “Strategy for financing the transition to a sustainable economy”, EDF supports the proposed regulation defining a European standard for green bonds as long as it is based on a taxonomy that is itself based on objective and scientifically founded criteria. Similarly, through the proposed CSRD directive, the enactment of common reporting rules will allow for transparency and comparability of actions undertaken by economic actors, thus contributing to the fight against greenwashing.

A proposal for a text on sustainable corporate governance may be presented by the Commission in 2022. EDF supports the inclusion of ESG factors in the value chain and the governance bodies. However, the proportionality and applicability of the measures must be ensured.

Taxonomy is at the heart of the European strategy and a central issue for EDF

2021 saw the completion of several components of the taxonomy: the final adoption and publication of both the delegated act on the reporting requirements as well as the technical criteria applicable to activities that make a significant contribution to climate objectives. The principal issues for the EDF Group - hydraulics, hydrogen and networks - were maintained.

EDF obviously remains particularly committed to the inclusion of nuclear activities in a complementary delegated act. The release of the JRC report on nuclear safety compatibility (DNSH) in March 2021 constituted a major milestone. EDF continues to strive for non-discriminatory treatment between technologies in line with the recommendations of all major international organisations such as IEA, IPCC etc.

2022 will also be decisive for three projects initiated by the European Commission. Firstly, the delegated act defining the technical criteria applicable to the activities contributing to the four environmental objectives pursued by the taxonomy. EDF will be particularly attentive to its link with the delegated Climate Act, particularly in view of the potential impact on hydroelectric activity. Subsequently, work to examine opportunities to expand the taxonomy framework in ways that recognise transition efforts. The aim would be to recognise economic activities with an intermediate level of performance to increase transparency and mobilise financing for those economic activities following a credible path to sustainability. Finally, the continuation of work on the extension of the environmental taxonomy to transitional activities and further considerations for building a social taxonomy.

Complementary initiatives to provide a predictable investment framework

In addition to the section on sustainable finance, the Commission worked hard in 2021 to update its state aid instruments in line with the climate objectives of the Green Deal. The guidelines for climate, energy and the environment were thus extensively revised to come into force on the 1st January 2022. Throughout the process of developing this communication, EDF has been careful to preserve the place of all low carbon technologies, particularly electrolytic hydrogen. To a greater extent, the aim has been to consolidate an effective investment framework for upstream and downstream activities that can provide investors with the visibility they need to manage risks and control costs.

Similarly, in 2021, the Commission adopted the renewed framework of the IPCEIs (important projects of common European interest), which is aimed at facilitating the emergence of large-scale projects that bring benefits to the economy and citizens of the Union by addressing market failures in strategic value chains. Serving the Union’s industrial sovereignty, this tool is envisaged for several projects led by the Group (hydrogen and SMR in particular).
JUST TRANSITION
The Energy Transition must be just
The decarbonisation of the EU implies profound economic changes. This is not without social consequences: knowing how to anticipate and deal with them is a condition sine qua non of the success of energy transition.

First and foremost, domestic consumers must be able to access electric mobility and equip their homes with heat pumps in the coming decades. These same consumers must then be able to control the cost of their electricity supply, which must be predictable. This anticipation implies the right to access electricity supply offers that give them the benefit of low costs of renewable and nuclear energy and level out price volatility. This entire transformation can only be carried out at a reasonable cost with regard to the purchasing power of consumers, lest we take the risk of seeing a decline in citizens’ support for the fight against climate change.

Just Transition in action for customers
EDF helps customers navigate their choices in the transition to a net-zero living. “Mes Eco et Moi” is a digital solution available to help French customers track, understand and therefore better control their energy use. An internal study shows that customers who check their energy monitoring tools two to three times a month and who change their consumption behaviors, save up to 12% on their energy bills.

Subsequently, whether industrial or tertiary, all production processes, must be adapted in order to render their carbon footprint zero. This radical transformation disrupts and will disrupt skill requirements and will involve adapting workers to new jobs while guiding those whose jobs are disappearing towards new activities.

These principles are already a reality within the EDF Group:
• EDF advocates a transition to a fair and inclusive low carbon business model and initiates a dialogue with its employees to assess and anticipate social impacts. The Group accompanies plant closures with measures to redeploys and re-employ people within the Group.
• The Global Framework Agreement On The EDF Group’s Corporate Social Responsibility was prolonged in 2021 with two international trade union federations (IndustriAll and ISP) and all of the group’s own trade unions. All Group employees and subcontractors worldwide are covered by the provisions of this agreement, which the Group’s subsidiaries apply by including it in their strategic action plans. This agreement includes a “Supporting a Just Transition” clause: “the Group undertakes to provide adequate training for its employees, endeavoring to protect their rights, interests and to develop their skills in cooperation with workers’ representatives”.

Just transition
Our definition of the just transition is about placing people at the center stage and focusing on the wellbeing of all our stakeholders.

EDF believes that low carbon energy must be accessible to everyone in all regions, therefore will always invest to support the most fragile customers whether in developed or emerging countries.

Jean-Bernard Lévy, EDF’s Chairman and Chief Executive Officer
EDF’s contribution to the transition to a low carbon economy builds on the know-how and expertise of its R&D department. The R&D laboratories of the EDF Group are at the heart of the company’s major challenges. They cover all trades and activities of the energy sector. They provide day-to-day support to EDF’s business lines and subsidiaries. EDF researchers are driven by two missions: improving performance in all current activities and preparing for the future by working on innovative technologies, whether it is developing new energy and electricity services, supporting competitive and decarbonised production mixes or supporting the digital and societal transition.

Besides, EDF relies on the knowledge and expertise of its European Financing Team (ENFIN), working closely with EDF R&D, and in charge of supporting the implementation of innovative projects, especially in the fields of renewable energy, smart cities, energy efficiency, storage, hydrogen, alternative fuels for mobility, flexibility... ENFIN supports EDF’s efforts by identifying funding programmes: Horizon Europe, ERDF, INTERREG, Connecting Europe Facility, Innovation Fund and LIFE, that provide the financial support needed to design, develop and test solutions and technologies that will play a key role in the achievement of EU’s climate and energy objectives. ENFIN has been contributing to the financing and implementation of many projects in the field of V2G (vehicle to Grid), photovoltaic (PV) self-consumption, heat recovery, positive energy blocks, fast charging stations for electric vehicles (EV), heating networks, hydrogen infrastructures for mobility purposes, aligned with EDF’s raison d’être and objectives focusing on building a net zero energy future with electricity and innovative solutions and services.

EDF welcomes the launch by the European Commission of Next Generation EU, as instruments such as the Recovery and Resilience Facility, the Just Transition Fund and REACT-EU will support EU economic recovery and strongly contribute to investments in the green transition, creating jobs and generating value for the EU. EDF aims to play a major role in this process through the implementation of projects in the field of renewable energy, hydrogen, clean transport and energy efficiency.

The ENFIN team is actively contributing to the EDF Group’s involvement in many collaborative projects.

Below are some examples of Horizon Europe projects awarded in 2021 in which EDF is involved, from sustainable farming to cyber security to district-heating and cooling and energy storage:

- **CLIENFARMS**: demonstrate, evaluate and improve technical, organisational and financial solutions at farm level that will contribute to achieving climate neutrality in European agriculture by 2050.
- **PRAETORIAN**: tools that will help critical infrastructure security managers taking decisions to anticipate and withstand potential cyber, physical or combined security threats to their own and other interdependent critical infrastructures.
- **REWARDHEAT**: develop a new generation of innovative, high-efficiency district heating and cooling networks, enabling the operation of an available and sustainable urban energy mix (waste heat and renewable).
- **STORIES**: foster the emergence of a European ecosystem of companies and research organisations on innovative energy storage technologies, by providing access to world-class infrastructure and research services.

Following its successful participations in the Horizon 2020 program, EDF is intending to contribute very actively to Horizon Europe, the new framework Programme of the European Commission. In line with its collaborative R&D strategy, EDF already is and will be part of numerous projects addressing the Green Deal targets, e.g. biodiversity, green urban districts, circular economy, green ports and airports, offshore wind, hydrogen, CCUS (Carbon Capture, Usage and Storage) and several others.

Finally, EDF actively contributes to the activities of the European Technology and Innovation Platforms (ETIP) and Public Private Partnerships (PPP) at European level, collaborating with academic and industrial organisations to define the R&I priorities and objectives to be met to achieve EU's energy and climate goals.
Digital strategy

Making Europe “fit for the digital age”

Digital transformation is one of the two main political priorities of the current mandate of the European Commission, with the objective of creating a “Europe fit for the digital age”.

After the 2020 publication of three strategies on data, artificial intelligence and cyber security, the Commission published its initial legislative proposals between late 2020 and the first half of 2021. With EDF making the digital transition one of its levers of transformation, the European Affairs Division has closely followed these initiatives and has positioned the Group in the debates, particularly on cyber security and artificial intelligence.

A flagship measure of the EU’s new cyber security strategy, the Commission proposed a revision of the 2016 Network and Information Security Directive (NIS) on 16 December 2020. This proposal expands its scope by including new participants among the “essential and significant entities”, notably in the energy sector. The Commission also proposes to increase the cyber security requirements that these entities will have to implement to secure supply chains, or further strengthen coordination and information sharing between participants at the European level.

Considering that the many participants in the electricity sector must implement harmonised cyber security rules to secure the system as a whole, EDF welcomed the draft directive. In addition, the Group emphasised the need to propose requirements proportionate to the risk and improve information sharing between public and private entities. In order to put forward these positions, EDF multiplied its contacts with the co-legislators.

Another highlight of the year was the publication on April 21 of a proposal for a regulation establishing harmonised rules on artificial intelligence (Artificial Intelligence Act). This project is a world first in terms of AI regulation. The Commission wants to regulate the most risky AI applications with respect to human safety and human rights in order to develop “trustworthy” technology. To do this, it classifies cases of AI usage according to their level of risk: those incorporating “unacceptable” risk will be prohibited, while “high-risk” AI applications will have to comply with a series of regulatory requirements. Included in this second category are the AI applications within the electrify sector.

EDF welcomed the Commission’s project as the Group is committed to developing “trustworthy” and “human-centric” technology in line with its AI strategy. In addition, EDF stressed the need to limit the scope to the riskiest use cases, in order not to create disproportionate requirements that could have an impact on the innovative capacity of companies. EDF had several exchanges with European institutions on the subject of AI, in order to assert its position and share the Group’s expertise.

2022 Outlook

2022 will be notable for the publication of an Action Plan for the digitalisation of the energy sector. This publication should summarise and announce measures to develop a European data-sharing infrastructure, mobilise research and innovation to accelerate the adoption of technologies in the sector, increase cyber security and promote environmentally friendly information technologies.

Another highly anticipated initiative is the European Data Act, published in February 2022. This will cover data-sharing between companies and governments, portability and contractualisation of cloud services, the intellectual property rights applied to data and the protection of European data with regard to access requests from third countries. EDF has begun to consider these issues and has responded to the Commission’s consultations.

In parallel, the trilogues on NIS will take place in the first half of the year as well the work of the European Parliament and the Council on the AI Act.
STAKEHOLDERS
EDF relations with trade associations and lobbying process review

EDF has adopted in 2020 its Raison d’être which is “to build a net zero energy future with the electricity and innovative solutions and services, to help save the planet and drive wellbeing and economic development”.

EDF’s Raison d’être is enshrined in the Company’s bylaws, it is at the heart of its business model, its CAP 2030 strategy, and is reflected in its Corporate Social Responsibility commitments.

EDF’s EU lobbying refers to the promotion or the defence of the company’s interests by its representatives towards the European institutions, in line with EDF’s Raison d’être and with the aim of influencing proposals or decisions which are likely to have an effect on the EU’s climate and energy framework and on the company’s activities. EDF is committed to transparent and responsible lobbying.

EDF is committed to conduct all of its lobbying in line with its Raison d’être and the goals of the Paris Agreement. Over the past year, EDF has continued to advocate our climate-related positions in support of the Paris Agreement and the EU climate neutrality target in all the trade associations to which we belong.

More specifically, EDF, through UFE, strongly supported an ‘at least 55%’ GHG emissions target in the internal discussions within Eurelectric.

All the following associations have also publicly stated their support for the -55% target by 2030 with the full backing of EDF’s membership.

- BioEnergy Europe,
- SGI Europe,
- IETA,
- EHPA,
- Euroheat and Power,
- Hydrogen Europe,
- Wind Europe,

These associations, such as EASE, SmartEN and FORATOM, do not currently have such specific messages but are fully committed to the climate neutrality target. EDF will continue to actively engage in discussions on an enabling policy framework to achieve net zero emissions in the EU by 2050.

EDF pays specific attention to its trade associations’ climate positions towards Paris Agreement.

Associations and lobbying process review

EDF’s European Affairs Division animates closely all engagement of EDF’s entities with trade associations and think tanks including their alignment with EDF’s “raison d’être”.

All lobbying activities are therefore conducted in line with the principles of the Just Transition as well as the goals of the Paris Agreement, and EDF also monitors partner associations to align their actions with these.

A review process has been put in place which triggers – when needed – follow-up actions. It notably consists in yearly reviews and assessments of EDF’s partner associations, on the basis of their alignment with the Paris Agreement and with Just Transition principles. Each entity puts into question EDF’s role in the association and the alignment of the latter with the Group’s Raison d’être.

In the case where a gap is identified between the association’s principles and what the Group promotes via its raison d’être and its commitment to the Paris Agreement, EDF provides analysis on the way in which, while remaining a member of the association, it can still promote its values. Each entity/business line is responsible for the associations whom it is a member of.

Once complete, if this review process sheds light on material misalignment, EDF’s stance is to encourage the associations to take a more proactive approach to climate advocacy. EDF is convinced that it can more efficiently bring change from within, rather than from outside.

However, if we notice little possibility for change, our review process may result in an arbitrage to reassess our membership of some organizations and consider joining in new ones.

As a concrete example of these assessments in 2020 EDF has notified the end of its membership to Business Europe and is no longer a member in 2021.
The so-called ‘Brussels bubble’ is made of a myriad of professional associations and partnerships as well as a number of think tanks. In conjunction with the European institutions, this wide range of participants taking part in the democratic debate constitutes an environment that helps build a consensus that is key to European legislative and regulatory decision-making.

The diversity of the Group’s businesses means that EDF has a strong presence in a number of professional associations, from general bodies such as Eurelectric via the Union Française de l’Electricité, to much more specialised organisations such as ECSO, the European Cyber Security Organisation. EDF’s European Affairs Division leads the network of EDF Group members that are active in these various associations, sharing the Group’s positions and regularly reminding them of the ethical rules that must be respected in responsible lobbying.

The think tanks of which EDF is a member, CERRE, CEPS, Bruegel (EDF joined in May 2021), ERCST, FSR and EPC, largely cover the spectrum of the Group’s activities and are the ideal place for debates that help to build constructive arguments for the European Union’s regulatory choices. For example, the CEPS (Centre for European Policy Studies) was able to question the real role that hydrogen could play in the European energy future and the EPC (European Policy Centre), with the support of EDF, questioned the energy efficiency of buildings in relation to a real decarbonisation objective.

If only one event of 2021 were to be remembered, it would be the election of the Chairman and CEO of EDF as President of Eurelectric for a period of 2 years. This election demonstrates, at a key moment of the energy transition, the recognition of EDF’s role in the EU energy sector decarbonisation.

Additionally, at the very end of 2021, Jean-Michel Quilichini, Director of the ‘Grand Carénage’ program of EDF’s nuclear fleet, was appointed Chairman of the Foratom Board from 1st January 2022.

ERCST is a major think tank focusing on EU and international climate change developments and policies, with a great degree of expertise on carbon markets. In 2021, while producing in-depth reports, ERCST also held an impressive number of high-quality seminars gathering policymakers and stakeholders, both in EU and non-EU countries on a large spectrum, EU ETS and Cross Border Adjustment Mechanism (CBAM) at first, but also hydrogen, taxonomy, Just Transition, debates around COP26 and on electricity prices. EDF actively engaged in these discussions being invited to speak several times in the different workshops on hydrogen, CBAM and on the decarbonisation of the industry.

The University of Philadelphia’s international ranking of think tanks gives Bruegel second place in 2021, I have been devoting my time and my energy to develop a comprehensive and shared view around all subjects dealing with decarbonisation keeping an eye on carbon markets and arrangements engaging dialog with a large range of stakeholders, including EDF that has been a solid ERCST member for many years.

Andrei Marcu – Founder & Executive Director of ERCST

Stakeholders
in the world behind the American Carnegie. The scope of the subjects dealt with is very broad and covers the entire economy, with one area more specifically of interest to EDF being the green economy. In practical terms, in 2021 Bruegel took a position on the role of hydrogen, the price crisis in the second half of the year, the security of gas supply, etc. and wrote an interesting report on the decarbonisation of the energy mix by 2050 for the European Parliament. In 2021, EDF decided to join Bruegel, which led Jean-Bernard Lévy, EDF’s Chairman and CEO, to speak at the think tank’s annual conference in September.

Focus on EFIEES
(European Federation of Intelligent Energy Efficiency Services)

EFIEES represents the interests of energy efficiency service providers at a European level from 12 Member States. The association is currently chaired by Pascal Guillaume of Dalkia, a subsidiary of EDF and a key player in energy services, with a presence throughout France and internationally. In 2021, EFIEES expressed its opinion on numerous texts of the ‘Fit for 55 package’, the association has taken firm positions on measures to tax utilities in certain countries (Spain and Romania).

EDF’s engagement with trade associations and think tanks on climate action

EDF is committed to deploying its lobbying fully in line with its ‘Raison d’Etre’, at the heart of which is not only respecting the Paris Agreement but also the concern for a fair transition for the general population.

EDF’s European Affairs Division conducts an annual review of each of the European associations. In 2021, EDF’s representatives were asked to check whether the associations promoted respect of the Paris Agreement and a just transition and, if not, to measure the extent of deviation from this course of action and then to see, if necessary, what measures should be taken.

The review shows that almost all of the associations of which EDF is a member promote both respect of the Paris Agreement and concern for a just transition. For instance, Eurelectric, Foratom, Wind Europe, SGI Europe, SNETP, Hydrogen Europe, EFIEES, EHPA, SmartEN, etc. Where this is not the case, it is because the purpose of the association does not cover these topics such as for example of ECSO (European Cyber Security Organisation).

2022 Outlook

The main focus of the trade associations’ work in 2022 will be the ‘Fit for 55 package’. Through its network, EDF intends to contribute actively to the discussions in order to obtain texts that confirm the path of a prosperous Europe towards climate neutrality. Beyond this horizon, debates are already taking place in anticipation of reforms to the electricity market model as a consequence of the energy price crisis, so that the energy transition can bear fruit for all consumers, both domestic and industrial.

"2021 and 2022 are crucial years for the success of ‘Fit for 55’ which should pave the way for carbon neutrality in 2050. Eurelectric is fully aligned with this objective, our sector is already committed to be net zero before the date. I am happy to be able to count on the leadership of the presidency of EDF, and in particular its Chairman and CEO Jean-Bernard Lévy, to promote electrification. Reducing CO₂ emissions is the main ambition of this decade."

Kristian Ruby – Eurelectric General Secretary
COMMUNICATION

Communication

Despite the challenges posed by the pandemic in 2021, we endeavoured to create opportunities for exchange and enrichment with our European stakeholders and the media. Events, round-tables and a wide range of interactions with key European media have contributed to foster the awareness around decarbonising the European economy.

OUR KEY EVENTS OF THE YEAR

23 March

EBS Clean Energy Summit 2021
“Clean energy transition, the cornerstone of the European Green Deal”

The fight against climate change and the achievement of a clean and fair energy transition are the greatest challenges of the 21st century. These objectives coincide with the European Green Deal, the aim of which is to reduce CO₂ emissions by at least 55% compared to 1990 levels to 2030 and achieve climate neutrality by 2050.

This is why EDF decided to support one of the most important events of the Brussels bubble, with more than 2,000 participants and representatives of the European institutions such as Frans Timmermans, Executive Vice-President of the European Commission in charge of the Green Deal, Kadri Simson, European Commissioner for Energy, Virginijus Sinkevicius, European Commissioner for the Environment, Oceans and Fisheries, as well as other senior officials and representatives of the political and civil world of the European Union.

EDF stressed that the EU’s leadership in climate neutrality is a historic opportunity and that direct electrification, a sustained carbon price and sustainable financing will play a major role in achieving Europe’s ambitious goals. (Investment 15k€)

Carine de Boissezon, EDF’s Chief Sustainability Officer
27 September

**EHPA Heat Pumps Forum**

“Green heat recovery: Reinforcing Europe’s industrial and energy transition leadership”

On 27 September 2021, the European Heat Pump Association (EHPA), with the support of a few sponsors including EDF, organised the HPForum with the aim of promoting the role of heat pumps as a means of consolidating Europe’s leadership in energy transition.

The seminar brought together more than 50 high-level speakers from the industrial and institutional world and 300 participants. EDF underlined the correlation between high carbon pricing and emission reduction and committed to a strong development of the electrification of heating, highlighting the high efficiency of heat pumps, their sustainability as well as the absence of energy supply risks when electrifying heating. *(Investment 8k€)*

Marc Benayoun, EDF Group Senior Executive Vice President, Customers & Energy Services

26 October

**Friends of Europe Climate & Energy Summit**

“Financing the green recovery”

The Climate and Energy Summit, organised by the Friends of Europe think tank, is one of the key events in the area of energy and climate in Brussels. A highly regarded annual summit that has for years brought together high-level speakers and several hundred participants, including policy makers, academics, business leaders, civil society representatives and members of the international press, from Europe and beyond.

The main theme of the 2021 edition was the importance of aligning financial sector objectives with climate needs to achieve the goals of the 2030 Agenda for Sustainable Development and Climate Change.

In the presence of Deputy Director of DG ENERGY Mechthild Wörsdörfer, EDF emphasised that in order to make a successful transition to the green economy, it will be crucial to receive clear long-term signals to secure investments and reduce the cost of capital. *(Investment 15k€)*

Alexandre Marty, EDF’s Head of Climate and Natural Resources
A group of European trade associations including Eurelectric, Renewables Grid Initiative, smartEn, SolarPower Europe and WindEurope came together in 2021 to launch the Electrification Alliance with the objective of demanding that electricity be recognised as the primary energy conduit for an efficient, decarbonised European future.

As part of this initiative, EDF, through Eurelectric and WindEurope, participated in the organisation and launch of the #ElectrifyNow campaign, which resulted in the event of the same name.

On this occasion, Jean-Bernard Lévy, Chairman and CEO of EDF and President of Eurelectric, underlined how direct electrification is the most cost-effective and reliable way to decarbonise the EU in less than three decades. Electrification will reduce carbon emissions and protect our environment, while stimulating European economies and creating millions of new sustainable jobs.
Presse

26/01/2021 – POLITICO
“A dam(n) obstacle for biodiversity”

“Hydropower, the first of the renewable energies, is essential to the energy transition,” said a press officer for French energy major EDF, which operates a large number of dams across the bloc. “The flexibility, the storage capacity and the fact that we can easily steer hydropower make it a fundamental energy source to allow the integration of other renewable energies [in the mix] such as wind and solar power.”

EDF Hydro Press office

09/02/2021 – European Files: Unlocking the full potential of hydrogen in Europe

“Low carbon electrolytic hydrogen: a win-win for climate and energy system integration. I am truly convinced that it is possible to bring industrial partners around the table to identify barriers and solutions, to kick off projects in the field of hydrogen, with an open discussion with policy makers. This is the reason why EDF actively participates in the industrial committee of the European Hydrogen Council and in the new European Clean Hydrogen Alliance which is currently being launched by the European Commission”.

Jean-Bernard Lévy,
Chairman and CEO of EDF

09/07/2021 - Background: The difficult beginnings of the European Alliance for “Clean” Hydrogen

“For many members, the footprint of the fossil gas industry is clearly evident in the choice of some of the round-table topics. Those dedicated to hydrogen in the heating of buildings diffuse this type of tension. It is considered that this sector - easily electrifiable - should not be a priority for the deployment of hydrogen. The existence of such a round-table raises questions in view of the low energy efficiency of hydrogen heating systems”.

Marion Labatut,
Deputy Director EU Affairs

03/18/2021 - Background: Taxonomy of Green Investment: when Brussels loses control

“At the heart of these politico-energy debates is nuclear power. The Commission has not yet decided on its inclusion among “green” activities. But isn’t the atom, which is mostly publicly funded, immune to this taxonomy of private investment? »

“There is also private capital” says Erkki Maillard, head of European Affairs at EDF. “And then the taxonomy could become a standard for state funding”.

Erkki Maillard,
Sr VP EU Affairs

Social Media figures
@EDF_EUAffairs

1560 followers
(+16% vs 2020)
More than 862K impressions in 2021

34 676 followers
(+7% vs 2020)
356.5K impressions in 2021

25/03/2021 – “Artificial intelligence, a key enabler for energy system and utilities”
“EDF’s strategy regarding Artificial Intelligence encompasses two dimensions: an “ambition”, that is to say “why” and “for what purpose” we want to develop AI, and an “identity”, meaning “how” we want to do it.
We believe in the concept of “AI for Greening”, which means that AI can contribute to the shift towards a climate-neutral economy. What EDF experienced when developing and implementing AI solutions is that this technology is particularly useful to make processes more efficient. When we use AI to optimize our maintenance, we avoid useless operations with environmental costs while increasing the efficiency of our machinery.”

**Aude Vinzerich**, EDF Group Innovation Strategy Director, former Artificial Intelligence Program Director
(Investment 4k€)

27/06/2021 – “How an ambitious and rapid reform of the EU ETS is essential to achieve the new climate objectives”
“The impact of higher carbon prices on consumers and industries in the different Member States must be taken very seriously. Future reform will need to address the difficult issue of redistribution of ETS revenues and implement adequate measures to ensure a fair transition, particularly in countries with high carbon economies. This transition could be supported by strengthening the tools already provided for in the ETS Directive, in particular the Modernisation Fund and the Innovation Fund.
It is therefore fundamental that all revenues generated by the EU ETS are reinvested in low carbon technologies in line with the climate neutrality objective.”

**Alexandre Perrin**, EDF Group Senior Executive Vice President in charge of Innovation, Corporate Social Responsibility and Strategy
(Investment 4k€)

22/10/2021 – “Climate and energy: How to escape a double crisis?”
Q&A with Jean-Bernard Lévy, Chairman and Chief Executive Officer, EDF
“EDF is a leader in the fight against climate change, and you are correct in saying that what we do will have a tangible impact on the green transition. Our raison d’être, enshrined in our statutes, is to build a carbon neutral future. We are the continent’s leading producer of renewable electricity, with the foremost hydropower capacity in the European Union. And we are also the largest generator of nuclear electricity in the world. Our strategy: renewables and nuclear power. That’s how we achieve a 97 percent decarbonized electricity mix in France. We already produce 25 percent of the bloc’s low carbon electricity.”

Jean-Bernard Lévy,
Chairman and CEO of EDF
(Investment 25k€)

17/11/2021 – “Electrification, the Net-Zero pathway away from fossil fuels”
“We need to act now, and action starts with open, transparent, and fact-based debates on how to ensure Europeans have safe, clean, smart energy, supplied by European companies, and reliant on a European supply chain. This is the best way to lay the foundation for a sustainable and prosperous European economy. Together with the EU we are committed to it.”

Jean-Bernard Lévy,
Chairman and CEO of EDF, Francesco Starace, CEO of Enel, Ignacio Galán, Chairman and CEO of Iberdrola
(Investment 25k€)
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Design:
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Photographic credit: © Shutterstock: p. 6 - © EDF: p. 2, 5, 11, 12, 14, 15, 18, 20, 21, 23