

EDF DECARBONISATION STRATEGY

Quantification of major emission reduction actions as at December 2021

EDF has adopted in 2020 its 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".

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.

Having first committed in 2018 to reducing its scope 1 emissions by 40% by 2030 and contributing to carbon neutrality by 2050, EDF reinforced its commitment in 2020, with new greenhouse gas reduction targets for 2030, covering both its direct emissions (scope 1) and its indirect emissions (scopes 2 and 3). On December 7, 2020, these targets were validated as part of a "Well Below 2°C" trajectory by the Science Based Targets initiative.

Decarbonisation Strategy

The EDF Group is therefore committed to the following 2030 targets:

SBTi targets for 2030	50% reduction, compared to 2017, in Scope 1 and 2 emissions, including emissions from non-consolidated assets and emissions associated with electricity purchased (i.e. not produced) for sale to end customers.	
	28% reduction, compared to 2019, in emissions associated with the combustion of gas sold to end customers (scope 3).	

In line with these objectives validated by SBTi, the EDF Group has set the following additional 2030 objectives:

	25 MtCO2e for the Group's scope 1 emissions in 2030.	
Additional targets for 2030	35 gCO2/kWh for the carbon intensity of the electricity and heat produced by the Group in 2030.	
	28% reduction in scope 3 emissions by 2030 compared to 2019.	

With these objectives, the EDF Group aims to maintain its leadership position being in 2020 the largest electricity generator with zero direct carbon emissions worldwide (as per ENERDATA).

In order to achieve these objectives, a trajectory for reducing greenhouse gas emissions has been drawn up for the EDF Group's three scopes. This trajectory includes a milestone set for 2023, which translates into the following intermediate objectives:

Intermediate targets to 2023	28 to 30 MtCO2e for the Group's scope 1 emissions in 2023 (the range takes into account, in particular, the uncertainties on the post-health crisis scenarios).	
	23% reduction in Scope 1 and 2 emissions compared to 2017, also including emissions from non-consolidated assets and emissions associated with electricity purchased (i.e. not produced) for sale to end customers.	



10% reduction compared to 2019 in emissions associated with the combustion of gas sold to end customers, and 8% reduction in the Group's total Scope 3 emissions.

These 2023 and 2030 targets for the Group's direct and indirect emissions have been translated into emission trajectories for all the Group's businesses and entities.

The purpose of this document is to outline EDF's decarbonisation roadmap, with quantified contributions of its most signification actions towards the Group's GHG reduction targets. Further information will be disclosed in EDF's 2021URD published in 2022.

Roadmap to reduce the Group's direct GHG emissions (scope 1)

ROADMAP FOR REDUCING THE GROUP'S SCOPE 1 EMISSIONS			
Topic	Action	Impact on the decarbonisation trajectory*	
Coal closure	Achieving coal-based electricity production phase-out of by 2030.	c. 60%	
Substitution of fuel oil in island territories	Replacement of fuel oil in existing thermal installations with less carbon- intensive fuels (liquid biomass and possibly gas) as part of the multi- annual French energy programming (PPE)	c. 15%	
Greening of heating networks	Greening the heating networks managed by the Group: biomass, recovery of waste heat, geothermal and thalasso-thermal energy.	c. 10 to 15%	
Limitation of emissions from fossil-fired generation	Application of strict criteria on the development of any new combined cycle gas project, and reduction of dispatch levels due to injection of increased volumes of renewable electricity.	c. 5 to 10%	
Emissions of SF ₆ and HFC emissions	Actions to control and reduce diffuse SF6 emissions from electricity transmission and distribution equipment and diffuse HFC emissions from air conditioning systems.	< 1%	
Consumption of the Group facilities	Controlling over the energy consumption of the Group's facilities.	< 1%	
Vehicle fleet of the Group	Complete electrification of the EDF Group's fleet of light vehicles as part of the EV100 commitment.	< 1%	

^{*} Contribution to the 25 MtCO2e reduction between 2017 and 2030 (50% reduction in Scope 1 emissions).

Roadmap to reduce the Group's indirect GHG emissions (scope 3)

ROADMAP FOR REDUCING THE GROUP'S SCOPE 3 GHG EMISSIONS				
Topic	Action	Impact on the decarbonisation trajectory*		
Emissions from electricity purchases for resale to end customers – scope 3.3	Greening (use of renewable energy Power Purchase Agreements) of electricity purchases for resale to end customers in countries with high carbon intensity electricity.	c. 15%		
Investments – scope 3.15	Disinvestment from non-controlled coal-fired generation assets	c. 25%		
Emissions from the combustion of gas sold to end customers (use of products sold) – scope 3.11	Supporting gas customers in their efforts to reduce their energy consumption and emissions through the Group's commercial offers, expertise and Group specialised subsidiaries. Developing and promoting alternative solutions to fossil fuels when available (electricity, heat pumps, renewable gas, renewable heat, etc.).	c. 60%		
Employee business travel – scope 3.6	Reducing emissions associated with employee travel, in particular with the deployment of the EDF Group new travel policy.	< 1%		

^{*}Contribution to the 28% reduction target in Scope 3 emissions between 2019 and 2030.