

## CREDIT OPINION

2 lune 2025

# **Update**



#### **RATINGS**

### Electricite de France

Domicile	Paris, France
Long Term Rating	Baa1
Туре	LT Issuer Rating
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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# Electricite de France

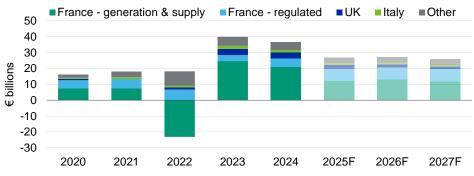
# Update to credit analysis

# **Summary**

Electricite de France's (EDF) credit quality is underpinned by the scale and breadth of its businesses across the energy value chain in France (Aa3 stable), which accounted for more than 72% of its EBITDA in 2024; the earnings contribution of its domestic regulated activities, which we expect to account for 25%-30% of the group's EBITDA over 2025-27; and its geographical diversification, given its sizeable market positions in <a href="Italy">Italy</a> (Baa3 positive) and the UK (Aa3 stable).

These positives are balanced against EDF's fixed-cost merchant power generation in France and the UK, which exposes it to volatile power prices; a significant capital spending programme; and the construction risk associated with the new Hinkley Point C (HPC) nuclear project in the UK.

Exhibit 1 Strong performance of generation and supply businesses in France in 2024



All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer. Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

The Baa1 rating incorporates three notches of uplift for potential extraordinary government support from the Baseline Credit Assessment (BCA) of ba1, given the company's full ownership by the Government of France. The uplift reflects our assessment of a high probability of extraordinary support from, and high default dependence with, the French government.

# **Credit strengths**

- » Leading electric utility in France
- » Regulated activities and geographical diversification, which support cash flow stability
- » Support from the French government, the sole shareholder after renationalisation

# **Credit challenges**

- » High volumes of fixed-cost merchant power generation in France and the UK, which expose EDF to power price volatility
- » Risks related to the French nuclear plants' availability in a context of an ageing fleet
- » Significant capital spending programme, which depresses free cash flow
- » Construction risk associated with the HPC nuclear power plant project in the UK, supplemented by the development of six (potentially 14) new European pressurised reactors (EPRs) by 2050
- » Regular political interventions because of affordability concerns, which could be detrimental to EDF's economic interests

# Rating outlook

The stable rating outlook reflects our expectation that EDF's credit metrics will remain strong in the next 18-24 months, on the back of favourable market conditions and the gradual recovery in the French nuclear output.

# Factors that could lead to upgrade

Upward rating pressure is unlikely in the near term, given EDF's business mix, earnings exposure to volatile power prices and the nuclear fleet's availability, as well as its commitment to nuclear projects in the long term. Nevertheless, upward rating pressure could develop over time if the availability of the existing French nuclear fleet continues to improve on a sustained basis; we perceive that EDF can develop new nuclear plants on time and within budget, and that the French government would support the financing of the forthcoming construction; and EDF manages to deliver at least neutral free cash flow on a sustained basis.

### Factors that could lead to downgrade

We could downgrade the ratings if EDF's credit metrics appear likely to remain persistently below the guidelines for a ba1 BCA, namely funds from operations (FFO)/net debt in the mid-to-high teens in percentage terms; a change in the group's relationship with the French government that were to cause us to remove the uplift for government support, or there were to be a significant downgrade of France's sovereign rating.

# **Key indicators**

Exhibit 2 **Electricite de France** 

	2020	2021	2022	2023	2024	2025-27F
(CFO Pre-W/C + Interest) / Interest Expense	7.0x	7.5x	-4.5x	8.2x	6.7x	5x - 6x
(CFO Pre-W/C) / Net Debt	22.4%	20.3%	-18.7%	47.2%	37.4%	24% - 29%
RCF / Net Debt	21.6%	19.5%	-19.6%	46.1%	36.1%	23% - 28%

These ratios do not take into account the fair value of EDF's stake in France's transmission network owner and operator RTE, which is included in the company's dedicated assets. All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Source: Moody's Financial Metrics™ and Moody's Ratings forecasts

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

### **Profile**

With net installed generation capacity of 125 gigawatts (GW) as of 31 December 2024, Electricite de France (EDF) is one of Europe's largest integrated utilities, providing electricity generation, distribution and supply services. The group is organised along the following business lines:

- » Generation and supply in France, where it is the dominant power generator and supplier
- » Regulated supply in France, which primarily includes electricity distribution through its subsidiary, Enedis
- » UK, through EDF Energy Holdings Ltd (EDF Energy, Baa3 stable), which is the country's largest generator operating the UK nuclear fleet
- » Italy, where it is the third-largest generator through Edison S.p.A. (Edison, Baa3 stable)
- » EDF Power Solutions, which regroups two former business lines: Other international, which mainly consists of operations in Belgium, where Luminus is the second-largest electricity group); and EDF Renouvelables (EDFR), the group's wholly owned investment vehicle for renewables, excluding hydro
- Other several activities, which include Framatome, EDF Trading Limited (Baa3 stable) and energy services through Dalkia

Following renationalisation, which closed in early June 2023, EDF is fully state-owned.

Exhibit 3
France accounts for 72% of EDF's EBITDA
EBITDA split by business segment in 2024

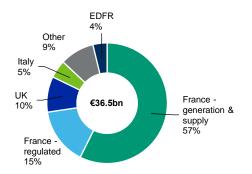
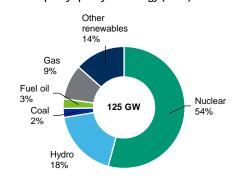


Exhibit 4
EDF's installed capacity includes mostly nuclear and hydro
Net consolidated capacity split by technology (2024)



Sources: Company and Moody's Ratings

Sources: Company and Moody's Ratings

### **Detailed credit considerations**

After a strong performance in 2024, we expect credit metrics to decline over 2025-27 on the back of lower power prices and increasing capital spending

In 2024, EDF reported strong performance with €36.5 billion of EBITDA, an 8.5% year-on-year decline from its exceptionally strong performance in 2023. In 2024, the company's performance was bolstered by a 41.3 terawatt-hour (TWh) increase in the nuclear output in France to 361.7 TWh, helped by optimisation of reactor outages and management of stress corrosion repairs. Additionally, hydropower output rose by 12.7 TWh to 55.5 TWh, aided by favourable hydraulic conditions. Regulated networks benefited from reduced costs associated with energy purchases to cover network losses, because of lower power prices. This partially offset the impact of decreased power prices on generation activities compared with 2023, as well as the reduced contribution from EDF Trading resulting from lower market volatility. Moody's-adjusted Net Debt remained somewhat stable at €79.3 billion. As a result, Moody's-adjusted FFO/net debt decreased to 37.4% in 2024 from 47.2% in 2023.

Exhibit 5
EDF's 2024 credit metrics remained strong, but are likely to deteriorate in 2025-27 as EDF faces lower power prices amid increasing capital spending



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Sources: Moody's Financial Metrics™ and Moody's Ratings forecast

Over 2025-27, we expect EDF's credit metrics to decline from 2024 levels because of power prices decreasing from their historical highs, increasing capital spending and, to a lesser extent, a €2 billion dividend payment in 2025. However, this should be balanced by a further increase in nuclear production, with nuclear output targets of 350-370 TWh over 2025-27. The increase in nuclear output will largely be driven by the company's ongoing plan to improve the existing fleet's availability and the contribution from the newly commissioned Flamanville 3 nuclear power plant.

Despite EDF's plan to maintain nuclear production at approximately current levels in the coming years, unexpected defects in the safety injection system circuit pipes of several French nuclear power plants — particularly corrosion issues that affected performance in 2022 — highlight the vulnerability of EDF's earnings to potential production shortfalls, given the significant role of nuclear energy in the company's generation mix. Because of the difficulties in predicting the availability of French nuclear assets over time, the likelihood of unexpected new defaults requiring immediate fixes and consequently affecting the fleet's availability is relatively high. the This is particularly relevant in a context where EDF's nuclear output gradually declined over 2012-22 by around 100 TWh, or one quarter of the early 2010 levels, as Exhibit 6 illustrates, although the size of its fleet remained broadly unchanged over that period, excluding the Fessenheim nuclear plant's shutdown completed in 2020 (1.8 GW). This decline in output had resulted from gradually longer planned outages, including for 10-year inspections; staff protection measures during the coronavirus pandemic; regular strikes; detection of corrosion defects; and weather constraints during drought periods and heatwaves, although the related impact on output is limited.

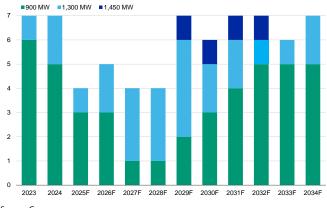
Exhibit 6
Net output of pressurised water reactor fleet in France in TWh



Exhibit 7

Current high levels of maintenance will weigh on the output

Number of 10-year inspections by reactor type (as of December 2024)



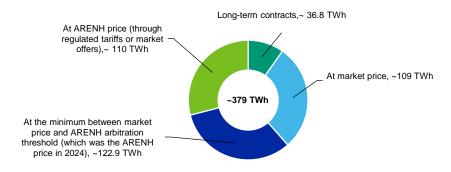
### Fixed-cost generation fleet is exposed to volatile power prices

We estimate that commodity-exposed activities accounted for around 65% of EDF's EBITDA in 2024. Around 109 TWh of EDF's domestic electricity sales were directly exposed to market prices in 2024 (see Exhibit 8), which is 15 TWh lower than in 2023. In addition, power generation in the UK and Italy is mostly exposed to wholesale prices. Although EDF typically hedges by selling forward a substantial proportion of its outright power generation one to two years ahead of delivery, the company retains exposure to market prices as hedges roll off. Capacity payments mitigate only a part of EDF's commodity price exposure.

Exhibit 8

Breakdown of electricity sales\* in France according to their market exposure in 2024

In TWh



<sup>\*</sup>Sales excluding purchase obligation volumes and volumes under long-term supply contracts. Source: Company and Moody's Ratings

EDF is particularly exposed to movements in wholesale power prices because its generation fleet is predominantly fixed-cost. In 2024, 94% of its 520 TWh output was generated by nuclear and renewable assets. Because the group's strategy is focused on new nuclear and renewable capacity, aligned with the French national energy policy, we expect this share to further grow over time.

Like other large European markets, including the UK, forward baseload power prices in France have been extremely volatile since 2021. Corrosion related French nuclear unavailability heightened volatility and upward pressure on French power prices compared with those in other nearby European electricity market over 2022-2024. However, market expectations for baseload power prices in France have shifted lower than those for Germany from 2024 onwards, indicating growing confidence in EDF's ability to steadily increase French nuclear output.

The ARENH mechanism, which has forced EDF to make available 100 TWh of French nuclear output to alternative suppliers per year, will expire at year-end 2025. In November 2023, the French government and EDF reached an agreement to replace the ARENH mechanism. The new system will allow EDF to generate higher operating cash flow from French nuclear plants than under the ARENH mechanism, if French wholesale power prices remain above the ARENH price level of €42/megawatt-hour. However, the agreement leaves EDF exposed to power price fluctuations and introduces an asymmetric risk from 2026 onwards, by implementing a progressive clawback on revenue in case of high prices, without introducing any support during low prices. These measures have been included in the Finance Law for 2025. An asymmetric risk is already present under the ARENH mechanism. EDF aims to enter medium- and long-term contracts with customers, which, if successful, would provide a degree of revenue visibility (see <u>Electricite de France: French government proposal leaves EDF exposed to merchant power prices after 2025</u>, published on 28 November 2023).

Exhibit 9
Most of EDF's generation output ...
Output by technology

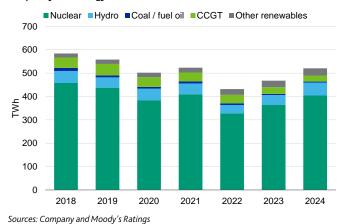


Exhibit 10 ... is exposed to volatile power prices 2026 forward baseload power price (as of May 2025)



Source: FactSet

# Leading electric utility in France in a competitive operating environment

EDF is the leading electricity generator in France, with 86.5 GW of installed capacity as of the end of December 2024. The company's annual domestic generation, which represents on average 70%-80% of the national power output and is mostly generated by nuclear and hydropower plants, historically matched its downstream position.

This balanced market position, combined with the predominantly regulated nature of electricity tariffs until 2015, historically underpinned the predictability of EDF's cash flow. However, growing competition in the supply market resulted in higher churn rates, leaving EDF "long generation", that is, having an excess of generated power compared with the demand from its customer base. However, this trend temporarily reversed in 2022 and 2023 when rising procurement costs for alternative suppliers encouraged consumers to return to EDF's regulated tariffs.

Exhibit 11
EDF has been gradually losing market share in both residential ...
Incumbent share of the residential electricity supply market in France

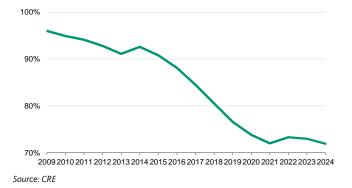
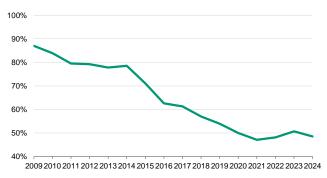


Exhibit 12
... and nonresidential power supply markets in France
Incumbent share of the nonresidential electricity supply market in France



Source: CRE

### Regulated activities and geographical diversification help cash flow stability

EDF's credit profile is supported by its regulated activities in France, which we expect to account for 25%-30% of the group's EBITDA over 2025-27. These activities include, in addition to domestic electricity distribution through its subsidiary Enedis, regulated generation, and network and supply businesses in the French islands. These activities exclude EDF's 50.1% interest in France's transmission network owner and operator RTE, which is equity-accounted.

Enedis' revenue benefits from a high degree of visibility under a regulatory framework that will enter its seventh four-year regulatory period in August 2025 (TURPE 7). The return on regulated equity will rise from 2.3% (nominal, pretax) under TURPE 6 to 2.9% under TURPE 7, reflecting increases in the French risk-free rate and corporate tax. Out of the €66.1 billion of regulated asset base, €48.2 billion are remunerated at 2.5%, €14.1 billion at 5.4%, and €3.8 billion at 4.6%.

Exhibit 13

Regulatory framework TURPE 6 and TURPE 7

A remuneration mechanism based on a guaranteed return

Parameter	Turpe 6 (August 2021-July 2025)	Turpe 7 (August 2025-July 2029)
Method	Margin on RAB, return on regulatory equity and allowance for cost of debt, revenue cap with incentives	No change
Length of the regulatory period	4 Years	No change
RAB calculation	Net accounting value of in-use assets	No change
Allowed returns	2.5% margin on RAB, 2.3% return on regulatory equity on top of the 2.5% margin (which means regulated equity has a global 4.8% return)	2.5% margin on RAB, 2.9% return on regulatory equity on top of the 2.5% margin (which means regulated equity has a global 5.4% return)
Incentive regulation	Productivity gains, quality of service and continuity of supply, R&D and smart grids	Targets raised, notably quality of service
Annual tariff indexation	Annual tariff indexation includes 0.31% remuneration above inflation.	Annual tariff indexation includes 0.35% remuneration above inflation.

Sources: EDF and CRE

EDF's activities outside France account for roughly a quarter of EBITDA, with a large portion of it generated by nuclear plants in the UK and the growing non-domestic renewables business of the group (16.3 GW of net installed renewable capacity as of the end of December 2024, excluding hydro), which should provide some support to the group's earnings outside France. Around 90% of EDFR's revenue comes from long-term contracts, with an average remaining life of 14 years.

In 2024, EDF's performance outside France was strong, supported by high power prices and stable output from nuclear plants in the UK, along with favourable hydrological conditions that boosted hydroelectric generation in Italy. However, its performance deteriorated from that in 2023, as EDF Energy's customer segments faced lower margins and Edison's gas business experienced reduced profitability. Additionally, EDF Trading's EBITDA dropped to €1.6 billion in 2024 from €3.2 billion in 2023 because of lower power prices and reduced energy market volatility.

# Significant capital spending programme leads to execution risk and negative free cash flow

EDF faces a substantial capital investment programme, which we estimate at €22 billion-€27 billion annually through 2027, with significant and largely non-discretionary spending required to maintain and upgrade its distribution network and nuclear fleet in France. The sole 10-year inspection programme is estimated at around €36.1 billion over 2022-28, reflecting the age of the fleet, which is more than 39 years on average, and EDF's strategy to extend its life span to 50 years; the group's ongoing programme to reduce unplanned outages; more stringent nuclear safety requirements after the Fukushima incident in 2011; as well as expenses related to the stress corrosion repairs, which are estimated at €1.3 billion over 2022-25.

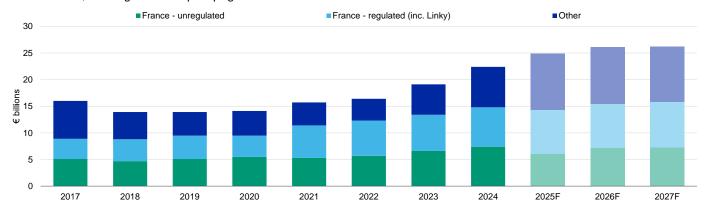
Other significant projects (excluding the new nuclear reactor construction discussed below) include the accelerated expansion of renewable capacity. The group aims to commission 8 GW of gross renewable capacity per year from 2024 to 2035, as part of its Ambitions 2035 strategy. We believe the company will remain heavily involved in the deployment of new renewables assets.

Since Q4 2019 and at the request of the French government, EDF has been assessing the feasibility of constructing new EPRs in the country by 2040. The government confirmed in February 2022, ahead of the Flamanville nuclear power plant's commissioning, the plan to build six (potentially 14) new EPRs by 2050. A final investment decision is likely to be taken by the end of 2026. The first commissioning could take place in 2038. In February 2022, the French Government estimated the construction costs for the first six units at €51.7 billion (in 2020 euros), excluding financing costs; additionally, there could be an extra €4.6 billion for schedule overruns. At a Senate hearing in April 2025, the CEO of EDF mentioned an estimated figure of €100 billion in current euros.

As a result, the government plans to amend the Programmation pluriannuelle de l'energie (PPE) published in February 2019, which will, however, continue to set out its aim to drive France's planned transformation into a carbon-neutral economy. The publication of the PPE has been delayed, and is now expected by the end of the summer of 2025.

Implications for EDF's credit profile will depend on the arrangements, including the support from the French government, for, among other things, exposure to nuclear construction risk, tariff regime, financing structure and financial costs, given the company's constrained financial flexibility. In March 2025, some indications were shared by the French Nuclear Policy Council and subsequently by the Minister of Finance during a Senate hearing. In particular, more than half of construction costs would be covered by a subsidized loan, for which the interest rate could be 0% during the construction phase; a risk sharing mechanism would be implemented, in case of cost overruns beyond the first €15 billion of cost overrun which would be borne by EDF; and, once commissioned, the plants could benefit from a contract-for-difference at a maximum price of €100 per MWh (in 2024 euros). The Minister indicated that the negotiation with EDF was not yet finalized.

Exhibit 14
EDF's capital spending is likely to remain high
Net investments, excluding the asset disposal programme



The 2025-27 estimates represent our forward view, not the view of the issuer. Source: Company and Moody's Ratings

### Ongoing new nuclear projects raise construction risk and cost

In France, EDF began the construction of the 1.6 GW Flamanville 3 nuclear plant in 2007, with commercial operations scheduled at the time for 2012 for an estimated total cost of €3.3 billion. However, there have been a series of cost overruns and delays throughout the construction of the first EPR project in France. The estimated cost at completion is now €13.2 billion (in 2015 prices), excluding interim interest.

In December 2024, Flammanville 3 was first connected to the grid, and following this initial coupling, the reactor has been going through series of testing under the supervision of the ASN. Nominal availability is likely to be reached only in 2027. This is because of a planned extended outage, which is scheduled to take place in 2026 and last for several months. From 2027, the power plant is expected to generate around 11 TWh annually.

EDF also began construction of the 3.2 GW HPC plant in the UK in early 2017. HPC will be the fifth plant in the world that will use the EPR technology. The total construction cost of the HPC project was revised upwards for the fourth time in January 2024 to £31 billion-£34 billion (in 2015 prices) from the previous estimate of £25 billion-£26 billion in May 2022; the initial construction cost estimate was £18.1 billion. Meanwhile, commissioning is now likely to occur in 2030 according to EDF's base case from previously in June 2027.

The project is owned 72.6% by EDF, with the remaining 27.4% owned by its partner <u>China General Nuclear Power Corporation</u> (CGN, A1 negative). The total financing needs for the project have exceeded the shareholders' contractual commitment, prompting a request for additional voluntary equity from Q3 2023. Since then, funding for HPC has relied solely on EDF's voluntary equity contributions, adding a financial burden on EDF as it seeks alternative financing options. Cost increases reflect difficult ground conditions, extra costs to implement the completed functional design, and a slowdown in work because of the pandemic and staff protection measures. These

rising cost estimates highlight the execution risks EDF faces in constructing the power station. Additionally, EDF's balance sheet will endure the financial strain of a very long construction phase, as costs must be debt-funded. The company has a fixed-price contract-for-differences agreement with the UK government for 35 years at £92/MWh, preventing recovery of higher costs from customers, and the investment will not generate cash flow until the power plant becomes operational.

### The French government recognises EDF's need for further support

Given the full ownership by the French government, we consider EDF a government-related issuer under our methodology. Accordingly and, based on our expectation of a high probability of support in case of financial distress, the Baa1 rating factors in three notches of uplift from the company's BCA of ba1.

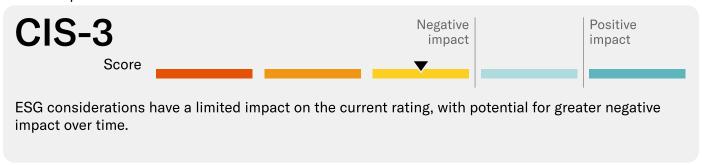
Our government support expectation reflects the strategic importance of EDF to the French government as the owner and operator of France's nuclear power plants; the company's highly unionised and politically influential workforce, as reflected in the numerous strikes conducted in 2023 against the national pension reform; and the French government's track record of supporting strategically important entities, illustrated by its subscription to €3 billion of EDF's capital increase in March 2017 and €3.15 billion in April 2022, and conversion of the Oceane bonds into shares.

Because of the political endorsement of EDF's capital spending programme (notably with respect to the development of renewable and nuclear capacities), and the large scale of that programme compared with EDF's cash flow generation capacity, we expect the French government to continue to provide financial relief, with the company's renationalisation in 2023 confirming EDF's importance to France.

### **ESG** considerations

## Electricite de France's ESG credit impact score is CIS-3

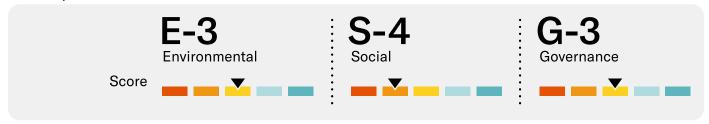
Exhibit 15
ESG credit impact score



Source: Moody's Ratings

EDF's **CIS-3** indicates that ESG considerations have a limited impact on the current rating with potential for greater negative impact over time. This reflects highly negative social risks, following measures endorsed by the government to protect end-customers at the detriment of EDF's economic interests. EDF's **CIS-3** also captures a moderately negative exposure to environmental and governance risks.

# Exhibit 16 ESG issuer profile scores



Source: Moody's Ratings

### **Environmental**

EDF's **E-3** score reflects moderate exposure to Physical Climate risks associated with the group's French electricity distribution assets, and to Waste and Pollution risks given the material costs associated with nuclear decommissioning and nuclear waste treatment, albeit more than 100% covered by a sizeable dedicated asset portfolio. It also captures the exposure of the group's sizeable nuclear fleet to moderate risks of water management, in the event of restricted access to water induced by regular heat waves over summers. The profile also incorporates a large investment programme to increase the share of power output from renewables (excluding hydro).

### **Social**

EDF's **S-4** score reflects the risks of political intervention because of public concerns over affordability. This was evidenced by the decision of the French government to protect end-customers at the expense of EDF's financial flexibility in an electoral context, which resulted in a €8.1bn impact on 2022 EBITDA. This also includes nuclear exposures and associated risks to public health

### Governance

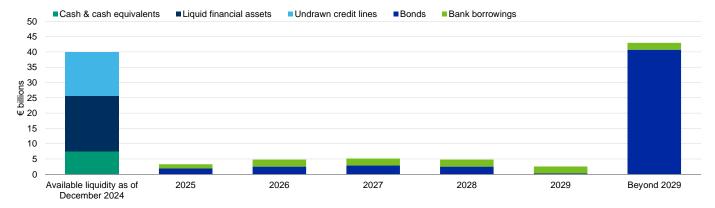
EDF's **G-3** score takes into account neutral to low scores on financial strategy and risk management, management credibility and track record, organizational structure, compliance and reporting, which counterbalance the moderate risk associated with board structure policies and procedures, resulting from having a majority owner. EDF's board has implemented measures to bolster its balance sheet including the €4 billion capital increase in 2016 and scrip dividend over the last six years. At the same time, the company has also acted to support other parts of the nuclear industry to the detriment of its credit quality.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <a href="here">here</a> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

# **Liquidity analysis**

EDF's liquidity is very good, underpinned by large holdings of cash and cash equivalents, and committed bank facilities. As of 31 December 2024, the group had €7.2 billion of cash and cash equivalents and €18 billion of liquid financial assets. In addition, unused committed credit facilities amounted to €14.3 billion, of which €3 billion mature within one year. These sources are sufficient to cover the group's debt maturities, dividend payment and capital spending over the next 18 months.

Exhibit 17
EDF has a well-spread debt maturity profile
Debt maturity profile and available liquidity as of December 2024



Source: EDF and Moody's Ratings

# Methodology and scorecard

EDF is rated in accordance with the rating methodologies for Unregulated Utilities and Unregulated Power Companies, and Government-Related Issuers.

The scorecard-indicated outcome is Baa1 based on historical metrics and A3 on a forward-looking basis, which is three and four notches higher, respectively, than the assigned BCA of ba1. This difference notably reflects risks related to the French nuclear plants' availability in a context of an ageing fleet, the potential for negative free cash flow amid rising capital spending, and construction risks associated with the HPC project in the UK.

Exhibit 18 Rating factors Electricite de France

Unregulated Utilities and Unregulated Power Companies Industry Grid [1]	FY ending 31, Do	Moody's 12-18 M View [2		
Factor 1 : Scale (10%)	Measure	Score	Measure	Score
a) Scale (USD Billion)	Aaa	Aaa	Aaa	Aaa
Factor 2 : Business Profile (40%)				
a) Market Diversification	A	А	A	Α
b) Hedging and Integration Impact on Cash Flow Predictability	Baa	Baa	Baa	Baa
c) Market Framework & Positioning	Baa	Baa	Baa	Baa
d) Capital Requirements and Operational Performance	В	В	В	В
e) Business Mix Impact on Cash Flow Predictability	Aa	Aa	Aa	Aa
Factor 3 : Financial Policy (10%)	•			
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) (CFO Pre-W/C + Interest) / Interest (3 Year Avg)	4.7x	Baa	5x-6x	Baa
b) (CFO Pre-W/C) / Net Debt (3 Year Avg)	20.0%	Baa	24%-29%	Baa
c) RCF / Net Debt (3 Year Avg)	19.0%	Baa	23%-28%	Α
Rating:				
a) Scorecard indicated outcome	<del></del>	Baa1		A3
b) Actual Baseline Credit Assessment		-		ba1
Government-Related Issuer				
a) Baseline Credit Assessment				ba1
b) Government Local Currency Rating		-		Aa3
c) Default Dependence	<del></del>	-		High
d) Support			-	High
e) Final Rating Outcome		=======================================		Baa1

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This represents our forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures. Source: Moody's Ratings and Moody's Financial Metrics™

# **Appendix**

Exhibit 19

### Peer comparison Electricite de France

	Elec	tricite de Fran	ce	ENEL S.p.A.		ENGIE SA		E.ON SE			RWE AG				
		Baa1 Stable			Baa1 Stable			Baa1 Stable			Baa2 Stable			Baa2 Stable	
	FY	FY	FY	FY	FY	LTM	FY	FY	FY	FY	FY	FY	FY	FY	FY
(in € millions)	Dec-22	Dec-23	Dec-24	Dec-22	Dec-23	Jun-24	Dec-22	Dec-23	Dec-24	Dec-22	Dec-23	Dec-24	Dec-22	Dec-23	Dec-24
Revenue	143,476	139,715	118,690	135,653	92,882	83,162	93,865	82,565	73,812	115,660	93,686	80,119	38,415	28,521	24,224
EBITDA	(4,246)	36,374	30,940	17,154	18,594	20,242	8,549	17,618	15,500	8,603	9,781	9,230	5,736	7,624	8,291
Total Assets	390,139	365,754	365,213	222,168	196,854	193,074	237,719	195,672	189,736	134,009	113,506	111,361	138,502	106,512	98,223
Total Debt	119,004	108,674	104,407	96,181	82,241	81,899	57,623	64,779	66,661	44,689	46,978	50,148	25,392	22,035	23,987
Net Debt	90,115	78,191	79,248	85,140	75,440	71,596	42,065	48,201	49,733	34,769	38,874	42,260	4,936	7,394	12,046
FFO / Net Debt	-18.7%	47.2%	37.4%	13.0%	20.1%	19.0%	23.2%	25.6%	22.6%	18.7%	19.2%	17.4%	133.3%	108.4%	49.7%
RCF / Net Debt	-19.6%	46.1%	36.1%	7.1%	13.2%	11.4%	16.9%	17.2%	14.4%	14.2%	15.0%	13.4%	114.5%	95.4%	41.3%
(FFO + Interest Expense) / Interest Expense	-4.5x	8.2x	6.7x	5.0x	5.1x	4.7x	6.3x	5.8x	5.3x	4.1x	4.1x	4.1x	6.6x	6.1x	5.0x
Debt / Book Capitalization	74.0%	65.1%	60.3%	65.9%	62.2%	60.7%	56.8%	62.2%	59.7%	64.4%	67.9%	65.6%	44.8%	36.2%	39.6%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Source: Moody's Financial Metrics<sup>TM</sup>

Exhibit 20

# Moody's-adjusted debt reconciliation

## Electricite de France

(in € millions)	2020	2021	2022	2023	2024
As reported debt	65,591.0	69,406.0	96,053.0	86,647.0	81,802.0
Pensions	14,270.0	14,059.0	11,102.0	10,674.0	11,164.0
Hybrid Securities	5,645.0	6,132.0	5,861.0	6,004.5	5,023.5
Securitization	792.0	1,456.0	2,470.0	1,764.0	1,323.0
Non-Standard Adjustments	(552.0)	92.0	3,518.0	3,584.0	5,094.0
Moody's-adjusted debt	85,746.0	91,145.0	119,004.0	108,673.5	104,406.5

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. Source: Moody's Financial Metrics™

Exhibit 21

# Moody's-adjusted EBITDA reconciliation

### Electricite de France

(in € millions)	2020	2021	2022	2023	2024
As reported EBITDA	18,216.0	21,242.0	(7,265.0)	41,378.0	36,390.0
Unusual Items	(1,253.0)	(2,683.0)	3,272.0	(2,286.0)	(3,280.0)
Pensions	(232.0)	(225.0)	(548.0)	(355.0)	(562.0)
Securitization	17.0	25.4	105.6	107.0	82.6
Interest Expense - Discounting	(3,096.0)	(2,172.0)	-	(2,651.0)	(1,963.0)
Non-Standard Adjustments	58.9	73.3	189.2	181.1	272.5
Moody's-adjusted EBITDA	13,710.9	16,260.8	(4,246.3)	36,374.1	30,940.0

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. Source: Moody's Financial Metrics™

Exhibit 22 Overview on selected historical Moody's-adjusted financial data Electricite de France

(in € millions)	2020	2021	2022	2023	2024
INCOME STATEMENT	2020	2021	2022	2023	2024
Revenue	69,031	84,461	143,476	139,715	118,690
EBITDA	13,711	16,261	(4,246)	36,374	30,940
EBIT	2,757	5,531	(15,325)	25,213	18,970
Interest Expense	2,392	2,134	3,080	5,132	5,233
Net income	(350)	3,007	(14,931)	17,812	9,163
BALANCE SHEET					
Net Property Plant and Equipment	159,231	166,689	171,445	172,437	182,064
Total Assets	302,380	358,713	390,139	365,754	365,213
Total Debt	85,746	91,145	119,004	108,674	104,407
Cash & Cash Equivalents	21,056	22,458	28,889	30,483	25,159
Net Debt	64,690	68,687	90,115	78,191	79,248
Total Liabilities	262,786	315,036	362,003	320,200	308,357
CASH FLOW					
Funds from Operations (FFO)	14,461	13,911	(16,858)	36,876	29,599
Cash Flow From Operations (CFO)	12,960	11,736	(8,669)	30,591	28,092
Dividends	518	521	782	797	961
Retained Cash Flow (RCF)	13,943	13,390	(17,640)	36,079	28,638
Capital Expenditures	(15,473)	(17,658)	(18,332)	(21,277)	(24,873)
Free Cash Flow (FCF)	(3,031)	(6,443)	(27,783)	8,517	2,258
INTEREST COVERAGE					
(FFO + Interest Expense) / Interest Expense	7.0x	7.5x	-4.5x	8.2x	6.7x
LEVERAGE					
FFO / Debt	16.9%	15.3%	-14.2%	33.9%	28.3%
RCF / Debt	16.3%	14.7%	-14.8%	33.2%	27.4%
Debt / EBITDA	6.3x	5.6x	-28.0x	3.0x	3.4x
Net Debt / EBITDA	4.7x	4.2x	-21.2x	2.1x	2.6x

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. Source: Moody's Financial Metrics  $^{\text{TM}}$ 

# **Ratings**

### Exhibit 23

Category	Moody's Rating
ELECTRICITE DE FRANCE	
Outlook	Stable
Issuer Rating	Baa1
Senior Unsecured	Baa1
Jr Subordinate	Ba2
Commercial Paper	P-2
EDF TRADING LIMITED	
Outlook	Stable
Issuer Rating	Baa3
EDISON S.P.A.	
Outlook	Stable
Issuer Rating	Baa3
EDF ENERGY HOLDINGS LTD	
Outlook	Stable
Issuer Rating -Dom Curr	Baa3
Source: Moody's Ratings	

# Moody's related publications

### **Press Releases:**

- » Moody's affirms EDF's issuer rating; downgrades EDF's BCA to ba1 from baa3; changes the outlook to stable, published on 1 June 2023
- Moody's downgrades EDF's issuer rating to Baa1; negative outlook, published on 21 February 2022
- Moody's reviews EDF's A3 ratings for downgrade, published on 17 January 2022

### **Issuer Comments:**

- Electricite de France: EDF's credit profile unaffected by France downgrade, published on 16 December 2024
- Electricite de France: Moody's says EDF's ratings and outlook unaffected following change of France outlook to negative from stable, published on 28 October 2024
- Electricite de France: French government proposal leaves EDF exposed to merchant power prices after 2025, published on 28 November 2023
- Electricite de France: Renationalisation would be credit positive, subject to the scale of additional financial support, published on 7 July 2022
- » Electricite de France: Further cut in anticipated nuclear output is credit negative, published on 20 May 2022

# **Credit Opinions:**

- Edison S.p.A.: Update to credit analysis, published on 22 May 2025
- EDF Energy Holdings Ltd: Update to credit analysis, published on 21 June 2024
- EDF Trading Limited: Update to credit analysis, published on 7 June 2024

### **Sector Comments:**

» Unregulated Electric and Gas Utilities – Europe: EU electricity market reform proposal credit positive for European unregulated utilities, published on 16 March 2023

### **Industry Outlook:**

- » Unregulated Electric & Gas Utilities Europe: 2025 Outlook Stable as energy transition challenges offset power price benefits, published on 19 November 2024
- » Regulated Electric & Gas Networks Europe: 2025 Outlook changed to negative as large investments for energy transition weigh on key credit metrics, published on 10 April 2025

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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