FitchRatings

Corporates
Utilities - Non US
France

Electricite de France (EDF)

Fitch Ratings revised Electricite de France's (EDF) Outlook to Negative from Stable in October 2024. The Outlook revision is solely driven by the change in the Outlook on France's sovereign rating to Negative from Stable (Long-Term Issuer Default Rating (IDR) affirmed at AA-). The two-notch uplift to EDF's IDR from its 'bbb-' Standalone Credit Profile (SCP) would be reduced to one notch if the sovereign rating is downgraded to 'A+' based on our Government-Related Entities (GRE) Criteria, all else being equal.

EDF's SCP reflects our expectations that funds from operations (FFO) net leverage will be 3.5x from 2025, after a very strong 2023–2024, which is below its positive rating sensitivity of 4.0x. However, the SCP also considers the high likelihood of rising capex in 2025–2030 to support the development of new EPR2 reactors.

We assume that any final investment decision regarding the new nuclear reactors in France will hinge significant involvement from the French government. This involvement would help EDF maintain a sustainable financial structure. A credit-supportive financing framework for new nuclear could also strengthen EDF's ties with the state.

Key Rating Drivers

Outlook Change Mirrors Sovereign Action: EDF's Negative Outlook mirrors the Outlook revision on the French sovereign rating, as a sovereign rating downgrade to 'A+' from 'AA-') would also lead to a rating downgrade of EDF, all else being equal. This would reduce the notch difference between France's IDR and EDF's SCP to five notches, from six notches currently, and result in a single-notch uplift from EDF's SCP (versus the current two-notch uplift), assuming our GRE assessment remains unchanged.

UK Subsidiaries Ratings Not Affected: The UK subsidiaries EDF Energy Nuclear Generation Limited (BBB-/Stable), EDF Energy Holdings Limited (BBB-/Stable), EDF Energy Limited (BBB-/Stable) and EDF Energy Customers Limited (BBB-/Stable) are not affected by the rating action, as their ratings are aligned with EDF's 'bbb-' SCP.

Moderate Expectations of Support: EDF's IDR benefits from a two-notch uplift under Fitch's GRE Criteria. We assess decision-making and oversight as 'Very Strong', precedents of support as 'Strong', and preservation of government policy role and contagion risk as 'Not Strong Enough'. This results in 'Moderate Expectations' of support and a support score of 15, reflecting the historical support received by EDF but also the constraints on extraordinary support due to EU legislation.

Moderate Leverage in Medium Term: We expect EDF's FFO net leverage to rise towards 3.2x by 2025 from 1.5x in 2023, broadly in line with EDF's guidance of net financial debt/EBITDA of below 2.5x. While this is credit-positive, it is not sufficient for an improvement of the SCP, given uncertainty around the level of investment and financing of new nuclear plants in France.

French Nuclear Investment Cycle: EDF is likely to start a multi-decade investment cycle focused on renewing the French nuclear fleet, with a target of building six to 14 new reactors. We expect this to be a significant burden for EDF due to the amount of capex involved and in light of the material delays and cost overrun seen at recent nuclear projects across Europe. The impact on EDF's leverage in the medium term would largely depend on the financing and remuneration framework and its construction progress.

New Nuclear Financing Framework Key: Fitch expects some form of state support for EDF in its investments for new nuclear. The terms of the potential support will determine the impact of the final investment decision on EDF's SCP and its relationship with the government based on our GRE Rating Criteria. However, we expect this process to be lengthy and do not anticipate significant progress in the short term.

Ratings

Long-Term IDR	BBB+
Short-Term IDR	F2
Senior Unsecured Debt – Long-Term Rating	BBB+
Subordinated Long-Term Rating	BBB-
Outlook	
Long-Term Foreign-Currency IDR	Negative

Click here for the full list of ratings

ESG and Climate

Highest ESG Relevance Scores	
Environmental	3
Social	3
Governance	3

2035 Climate Vulnerability Signal: 31

Applicable Criteria

Corporate Recovery Ratings and Instrument Ratings Criteria (August 2024)

Sector Navigators – Addendum to the Corporate Rating Criteria (December 2024)

Corporate Hybrids Treatment and Notching Criteria (November 2020)

Government-Related Entities Rating Criteria (July 2024)

Corporate Rating Criteria (December 2024)

Parent and Subsidiary Linkage Rating Criteria (June 2023)

Related Research

Global Corporates Macro and Sector Forecasts

EMEA Utilities Outlook 2025 (December 2024)

EMEA Large Integrated Utilities – Relative Credit Analysis (December 2023)

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Aging Nuclear Fleet: A material portion of EDF's existing nuclear reactors will reach their permitted 50-year operational life limit in the next decade. Extending their lifespan to 60 years, subject to approval from the nuclear safety regulator, could help EDF sustain operating cash flows in the long term, but it could also involve increased capex. Fitch expects yearly capex to increase to about EUR25 billion to 2026. This amount does not include investments in new EPR2 reactors.

Favourable Post-ARENH Framework: Fitch views the proposed French energy market reforms as credit-positive. The new market design, which envisages sales of nuclear production at market terms, should provide material upside from 2026, versus the current ARENH framework.

The potential benefit is limited by progressive windfall taxes of 50% and 90% on nuclear generation sold above EUR78/MWh and EUR110/MWh (2022 real prices, pending parliamentary discussion), respectively. These proposed thresholds are set above the unitary nuclear costs of EUR57-EUR61/MWh (as estimated by the French energy regulator, including non-cash costs), thus allowing EDF to generate reasonable profits.

Improved Fleet Availability: At the beginning of 2024, 46 out of EDF's 56 reactors were online. Moreover, the 16 reactors most sensitive to stress corrosion issues have undergone preventive replacement of their sensitive sections. EDF's target of nuclear output of 335TWh–365TWh for 2025 and 2026 now looks achievable.

HPC Cost Overruns: HPC's total cost is now estimated at GBP31 billion–GBP35 billion (2015 real terms), while the commissioning of the first reactor is further postponed to 2029–2031, from 2027 previously. Cost overruns should be fully equity-funded by EDF, as partner China General Nuclear Power Corporation (A/Stable; holding a 32.3% stake in the project as of December 2023) is not obliged to provide additional funding. HPC will benefit from a contract-for-difference with the UK government, where it is entitled to GBP92.5/MWh (2012 amounts) for 35 years (for the units commissioned in 2029).

Financial Summary

(EURm)	2021	2022	2023	2024F	2025F	2026F
EBITDA	16,338	-13,613	42,994	27,787	23,913	24,213
FFO	12,218	-17,827	35,180	22,048	17,273	17,040
FCF after acquisitions and divestitures	-5,184	-26,876	7,369	-4,361	-12,461	-9,915
FFO net leverage (x)	3.6	-4.3	1.5	2.3	3.2	3.5
FFO interest coverage (x)	8.7	-8.0	10.0	6.3	4.8	4.5

Source: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

We estimate regulated and contracted EBITDA at around 30% of EDF's total, under normal business conditions, which is well below that of peers Engie S.A. (BBB+/Stable), Enel S.p.A. (BBB+/Stable) and Iberdrola, S.A. (BBB+/Stable).

EDF's weaker business profile, also due to higher operational risk in its investment plan and asset base, and large negative free cash flow (FCF) expected across its business plan, drive its lower debt capacity versus peers'. The FFO net leverage threshold between 'BBB+' and 'BBB' is 4.7x for Enel and Engie (nuclear-adjusted), and 5.1x for Iberdrola, while EDF has a threshold of 4.7x between its 'bbb-' and 'bb+' SCP.

Consequently, EDF's SCP is weaker than the ratings of Engie, Enel and Iberdrola. EDF's IDR has a two-notch uplift, due to the application of Fitch's GRE Criteria.

Navigator Peer Comparison

Issuer		Business profile						Financial profile		
	IDR/Outlook	Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility
Electricite de France (EDF)	BBB+/Negative	aa	a-	bbb	bbb	bbb	bbb-	bb	a-	bbb+
Enel S.p.A.	BBB+/Stable	bbb+	a-	a	bbb+	bbb	a	bbb	bbb	a-
Engie S.A.	BBB+/Stable	aa	a-	a-	a-	bbb+	a-	bbb	bbb	a
Iberdrola, S.A.	BBB+/Stable	a	a-	a	bbb	bbb	a	bbb	bbb	a-

Source: Fitch Ratings.

Relative Importance of Factor: Higher / Moderate / Lower

Issuer		Business profile						Financial profile		
Name	IDR/Outlook	Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility
Electricite de France (EDF)	BBB+/Negative	+5	+1	-1	-1	-1	-2	-4	+1	0
Enel S.p.A.	BBB+/Stable	0	+1	+2	0	-1	+2	-1	-1	+1
Engie S.A.	BBB+/Stable	+5	+1	+1	+1	0	+1	-1	-1	+2
Iberdrola, S.A.	BBB+/Stable	+2	+1	+2	-1	-1	+2	-1	-1	+1

Source: Fitch Ratings.

Factor Score Relative to IDR: Worse positioned than IDR / Within one notch of IDR / Better positioned than IDR

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- Due to the Negative Outlook, an upgrade of EDF is unlikely. However, a revision of France's sovereign rating Outlook to Stable would be mirrored in EDF's rating Outlook
- Stronger links with the state, for example, as a result of the implementation of a new nuclear funding framework supported by the government mitigating the negative impact of increased capex
- A clear investment plan covering French new nuclear reactors, including credit-mitigating measures, that would result in an FFO net leverage below 4.0x over the long term may be positive for the SCP

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- Downgrade of the French sovereign rating, with no changes to the GRE assessment
- Weaker links with the state as a result of unexpected political measures similar to those taken in 2022
- Long-term reduction of available generation capacity from the existing fleet in France and weaker assessment of EDF's asset base; or FFO net leverage above 4.7x on a sustained basis could be negative for the SCP

Liquidity and Debt Structure

Adequate Liquidity: At 30 June 2024 EDF had cash and cash equivalents of EUR9.2 billion, (Fitch-defined) liquid assets of EUR18.3 billion and committed undrawn facilities of EUR13.6 billion, including EUR1.6 billion that is maturing within a year. This results in sufficient liquidity to cover scheduled debt maturities of EUR20billion for July 2024 to December 2025, and expected negative Fitch-defined FCF of about EUR14.6 billion without resorting to additional debt issuance.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, click here.

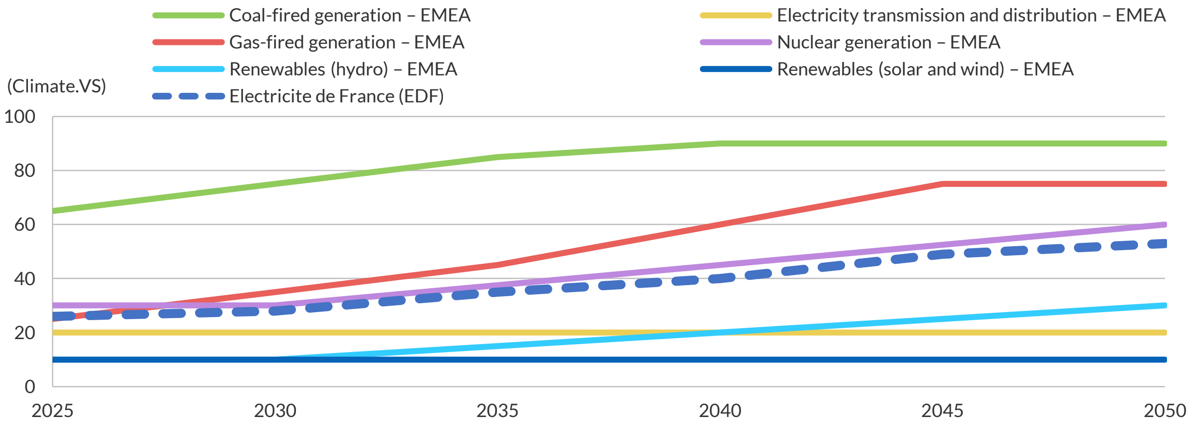
Climate Vulnerability Considerations

Fitch uses Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. Climate.VS range from 0 (lowest risk) to 100 (highest risk). For more information on Climate.VS, see Fitch's Corporate Rating Criteria. For more detailed, sector-specific information on how Fitch perceives climate-related transition risks, see Climate Vulnerability Signals for Non-Financial Corporate Sectors.

The 2023 revenue-weighted Climate Vulnerability Score (Climate.VS) for EDF for 2035 is 31 out of 100, suggesting low exposure to climate-related risks in that year.

Climate.VS Evolution

As of 31 Dec 2023



Source: Fitch Ratings

Liquidity and Debt Maturities

Liquidity Analysis

(EURm)	2024F	2025F	2026F
Available Liquidity			
Beginning cash balance	27,371	16,515	-8,663
Rating case FCF after acquisitions and divestitures, and other investing activities	-1,178	-9,179	-6,555
Debt issued since last balance sheet	*6,621*		
Total available liquidity (A)	**32,813**	**7,336**	**-15,218**
Liquidity Uses			
Debt maturities	-16,298	-15,999	-2,862
Total liquidity uses (B)	**-16,298**	**-15,999**	**-2,862**
Liquidity Calculation			
Ending cash balance (A+B)	16,515	-8,663	-18,081
Revolver availability	11,000	11,000	11,000
Ending liquidity	**27,515**	**2,337**	**-7,081**
Liquidity score (x)	2.7	1.1	-1.5

Source: Fitch Ratings, Fitch Solutions

Scheduled Debt Maturities

(EURm)	31 Dec 2023
2024	16,298
2025	15,999
2026	2,862
2027	3,900
2028	3,771
Thereafter	49,227
Total	**92,057**

Source: Fitch Ratings, Fitch Solutions

Key Assumptions

- Absence of state intervention on ARENH; no impact on supply margins from the regulated tariff cap in 2024, reflecting declining power prices
- Conservative assumptions on French nuclear output at 335TWh over 2024–2026. French hydro output at 44TWh for 2024–2026
- Market prices at EUR143/MWh in 2024, EUR92/MWh in 2025, and EUR65/MWh in 2026, which should not trigger the post-ARENH levy in nuclear generation in 2026, reflecting our conservative price assumptions
- Prices subject to the electricity generation levy of 50%, above the benchmark price of EUR94/MWh in 2024
- French regulated activities' EBITDA at EUR7.5 billion in 2026
- UK nuclear output declining to average 33TWh over 2024–2026
- Cash tax rate averaging 26% over 2024–2026
- No regulatory allocations to dedicated assets for 2024–2026
- Annual capex of about EUR25.5 billion for 2024–2026
- Dividends totalling EUR2 billion in 2025–2026
- Know-how payments of EUR1.6 billion in 2024 from Sizewell C to HPC

Financial Data

(EURm)	2021	2022	2023	2024F	2025F	2026F
Summary income statement						
Gross revenue	84,461	143,476	139,715	127,141	113,155	115,418
Revenue growth (%)	22.4	69.9	-2.6	-9.0	-11.0	2.0
EBITDA before income from associates	16,338	-13,613	42,994	27,787	23,913	24,213
EBITDA margin (%)	19.3	-9.5	30.8	21.9	21.1	21.0
EBITDA after associates and minorities	16,642	-13,430	43,214	27,121	23,414	23,846
EBIT	7,442	-16,142	28,666	16,126	11,752	11,552
EBIT margin (%)	8.8	-11.3	20.5	12.7	10.4	10.0
Gross interest expense	-2,055	-2,403	-4,746	-4,124	-4,432	-4,819
Pretax income including associate income/loss	6,229	-22,157	10,082	13,098	8,361	7,772
Summary balance sheet						
Readily available cash and equivalents	20,785	25,651	27,371	21,895	21,717	22,299
Debt	69,649	94,766	86,053	81,755	90,756	97,894
Net debt	48,864	69,115	58,681	59,860	69,039	75,594
Summary cash flow statement						
EBITDA	16,338	-13,613	42,994	27,787	23,913	24,213
Cash interest paid	-1,583	-1,995	-3,886	-4,124	-4,432	-4,819
Cash tax	-2,276	-1,282	-3,695	-2,620	-2,174	-2,445
Dividends received less dividends paid to minorities (inflow/outflow)	304	183	220	-666	-499	-367
Other items before FFO	-603	-1,220	-746	1,396	246	241
FFO	12,218	-17,827	35,180	22,048	17,273	17,040
FFO margin (%)	14.5	-12.4	25.2	17.3	15.3	14.8
Change in working capital	-1,526	8,301	-7,784	-1,772	-1,971	319
CFO (Fitch-defined)	10,692	-9,526	27,396	20,276	15,303	17,359
Total non-operating/nonrecurring cash flow	—	—	—	—	—	—
Capex	-17,045	-17,861	-20,199	—	—	—
Capital intensity (capex/revenue) (%)	20.2	12.4	14.5	—	—	—
Common dividends	-84	-72	—	—	—	—
FCF	-6,437	-27,459	7,197	—	—	—
FCF margin (%)	-7.6	-19.1	5.2	—	—	—
Net acquisitions and divestitures	1,253	583	172	—	—	—
Other investing and financing cash flow items	5,171	-5,282	-300	—	—	—
Net debt proceeds	3,740	30,008	-8,246	-4,298	9,001	7,138
Net equity proceeds	-3	3,256	—	—	—	—
Total change in cash	3,724	1,106	-1,177	-5,476	-178	583
Calculations for forecast publication						
Capex, dividends, acquisitions and other items before FCF	-15,876	-17,350	-20,027	-24,637	-27,764	-27,274
FCF after acquisitions and divestitures	-5,184	-26,876	7,369	-4,361	-12,461	-9,915
FCF margin after net acquisitions (%)	-6.1	-18.7	5.3	-3.4	-11.0	-8.6
Gross leverage ratios (x)						
EBITDA leverage	4.2	-7.1	2.0	3.0	3.9	4.1
FFO leverage	5.1	-5.9	2.2	3.2	4.2	4.5
CFO-capex/debt	-9.1	-28.9	8.4	-6.1	-12.3	-9.0
Net leverage ratios (x)						
EBITDA net leverage	2.9	-5.1	1.4	2.2	2.9	3.2
FFO net leverage	3.6	-4.3	1.5	2.3	3.2	3.5

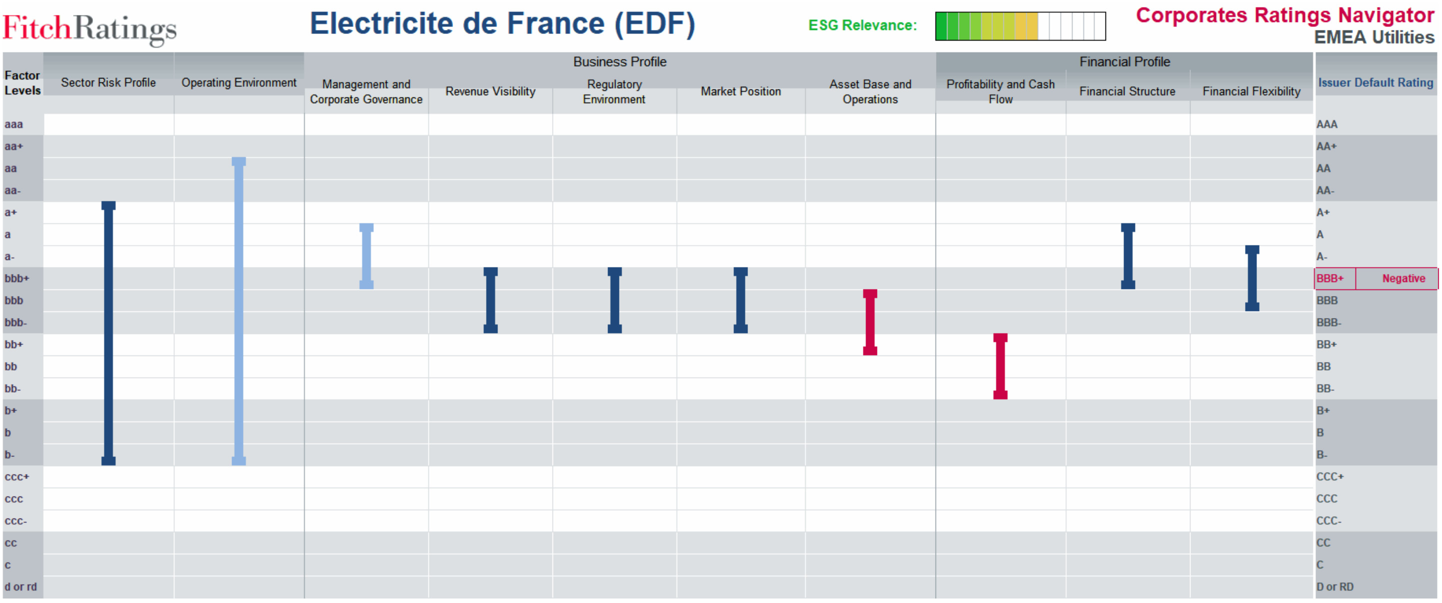
(EURm)	2021	2022	2023	2024F	2025F	2026F
CFO-capex/net debt	-13.0	-39.6	12.3	-8.3	-16.2	-11.7
Coverage ratios (x)						
EBITDA interest coverage	10.5	-6.7	11.1	6.6	5.3	4.9
FFO interest coverage	8.7	-8.0	10.0	6.3	4.8	4.5
FFO fixed-charge coverage	8.7	-8.0	10.0	6.3	4.8	4.5

CFO – Cash flow from operations.
Source: Fitch Ratings, Fitch Solutions

How to Interpret the Forecast Presented

The forecast presented above is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

Ratings Navigator



Bar Chart Legend:	
Vertical Bars = Range of Rating Factor	Bar Arrows = Rating Factor Outlook
Bar Colors = Relative Importance	⇧ Positive
Higher Importance	⇩ Negative
Average Importance	⇳ Evolving
Lower Importance	☐ Stable

FitchRatings

Electricite de France (EDF)

Corporates Ratings Navigator
EMEA Utilities

Operating Environment

aa+	Economic Environment	aa	Very strong combination of countries where economic value is created and where assets are located.
aa	Financial Access	aa	Very strong combination of issuer-specific funding characteristics and the strength of the relevant local financial market.
	Systemic Governance	aa	Systemic governance (eg rule of law, corruption, government effectiveness) of the issuer's country of incorporation consistent with 'aa'.
b-			
ccc+			

Management and Corporate Governance

a+	Management Strategy	a	Coherent strategy and good track record in implementation.
a	Governance Structure	a	Experienced board exercising effective checks and balances. Ownership can be concentrated among several shareholders.
a-	Group Structure	a	Group structure has some complexity but mitigated by transparent reporting.
bbb+	Financial Transparency	bbb	Good-quality reporting without significant failings. Consistent with the average of listed companies in major exchanges.
bbb			

Revenue Visibility

a-	Size and Integration	a	Top-tier position in more than one market. Vertically integrated (typically including generation, transmission, distribution and supply).
bbb+	Earnings from Regulated Network Assets	bbb	Less than 40% of EBITDA comes from high-quality regulated network assets.
bbb	Quasi-Regulated Earnings	bb	Less than 10% of EBITDA comes from quasi-regulated assets or from long-term contracted sales with creditworthy counterparties.
bbb-			
bb+			

Regulatory Environment

a-	Regulatory Framework and Policy Risk	bbb	Less transparent frameworks, with emerging track record and multi-year tariffs; exposed to political risk. Medium-term predictability.
bbb+	Cost Recovery and Risk Exposure	bbb	Tariff setting that may limit efficiently incurred cost and investment recovery, with moderate regulatory lag, price and volume risk.
bbb			
bbb-			
bb+			

Market Position

a-	Fundamental Market Trends	bb	Markets with structural challenges.
bbb+	Generation and Supply Positioning	a	Strong position in the merit order; effective hedging; flexible fuel procurement. Generation balanced with strong position in supply and services.
bbb	Customer Base and Counterparty Risk	bbb	Economy of area served provides structurally stable background; medium counterparty risk; fair collection rates for supply operations.
bbb-			
bb+			

Asset Base and Operations

bbb+	Asset Quality	bb	Low asset quality likely to affect opex and capex requirements. High, but diversified concession renewal risk.
bbb	Asset Diversity	bbb	Partial diversification by geography, generation source, supplied product.
bbb-	Carbon Exposure	a	Energy production mostly from clean sources and low carbon exposure (< 300gCO_2/kWh).
bb+			
bb			

Profitability and Cash Flow

bbb-	Free Cashflow	bb	Structurally negative FCF across the investment cycle.
bb+	Volatility of Profitability	b	Stability and predictability of profits negative outliers relative to utility peers.
bb			
bb-			
b+			

Financial Structure

a+	FFO Leverage	a	3.5x
a	FFO Net Leverage	a	3.0x
a-			
bbb+			
bbb			

Financial Flexibility

a	Financial Discipline	a	Clear commitment to maintain a conservative policy with only modest deviations allowed.
a-	Liquidity	a	No need for external funding beyond committed facilities in the next 12 months even under a severe stress scenario. Well-spread maturities. Diversified funding.
bbb+	FFO Interest Coverage	bbb	4.5x
bbb	FX Exposure	a	Profitability potentially exposed to FX but efficient hedging. Debt and cash flows well matched.
bbb-			

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Credit-Relevant ESG Derivation

Overall ESG

Electricite de France (EDF) has 13 ESG potential rating drivers				
Emissions from operations	key driver	0	issues	5
Fuel use to generate energy	driver	0	issues	4
Water used by hydro plants or by other generation plants; effluent management	potential driver	13	issues	3
Impact of waste from operations		1	issues	2
Plants' and networks' exposure to extreme weather	not a rating driver	0	issues	1
Product affordability and access				

Showing top 6 issues

For further details on Credit-Relevant ESG scoring, see page 3.

FitchRatings

Electricite de France (EDF)

Corporates Ratings Navigator
EMEA Utilities

Credit-Relevant ESG Derivation

Electricite de France (EDF) has 13 ESG potential rating drivers

- Electricite de France (EDF) has exposure to emissions regulatory risk but this has very low impact on the rating.
- Electricite de France (EDF) has exposure to energy productivity risk but this has very low impact on the rating.
- Electricite de France (EDF) has exposure to water management risk but this has very low impact on the rating.
- Electricite de France (EDF) has exposure to waste & impact management risk but this has very low impact on the rating.
- Electricite de France (EDF) has exposure to extreme weather events but this has very low impact on the rating.
- Electricite de France (EDF) has exposure to access/affordability risk but this has very low impact on the rating.

Showing top 6 issues

			ESG Relevance to Credit Rating
key driver	0	issues	5
driver	0	issues	4
potential driver	13	issues	3
not a rating driver	1	issues	2
	0	issues	1

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference	E Relevance
GHG Emissions & Air Quality	3	Emissions from operations	Asset Base and Operations; Profitability and Cash Flow	5
Energy Management	3	Fuel use to generate energy	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow	4
Water & Wastewater Management	3	Water used by hydro plants or by other generation plants; effluent management	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow	3
Waste & Hazardous Materials Management; Ecological Impacts	3	Impact of waste from operations	Asset Base and Operations; Profitability and Cash Flow	2
Exposure to Environmental Impacts	3	Plants' and networks' exposure to extreme weather	Asset Base and Operations; Profitability and Cash Flow	1

Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference	S Relevance
Human Rights, Community Relations, Access & Affordability	3	Product affordability and access	Profitability and Cash Flow; Regulation	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Quality and safety of products and services; data security	Profitability and Cash Flow	4
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Profitability and Cash Flow; Financial Structure; Financial Flexibility	3
Employee Wellbeing	2	Worker safety and accident prevention	Profitability and Cash Flow; Financial Structure; Financial Flexibility	2
Exposure to Social Impacts	3	Social resistance to major projects that leads to delays and cost increases	Asset Base and Operations; Profitability and Cash Flow	1

How to Read This Page
ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.
The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.
The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to reflect a negative impact unless indicated with a '+' sign for positive impact.
Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

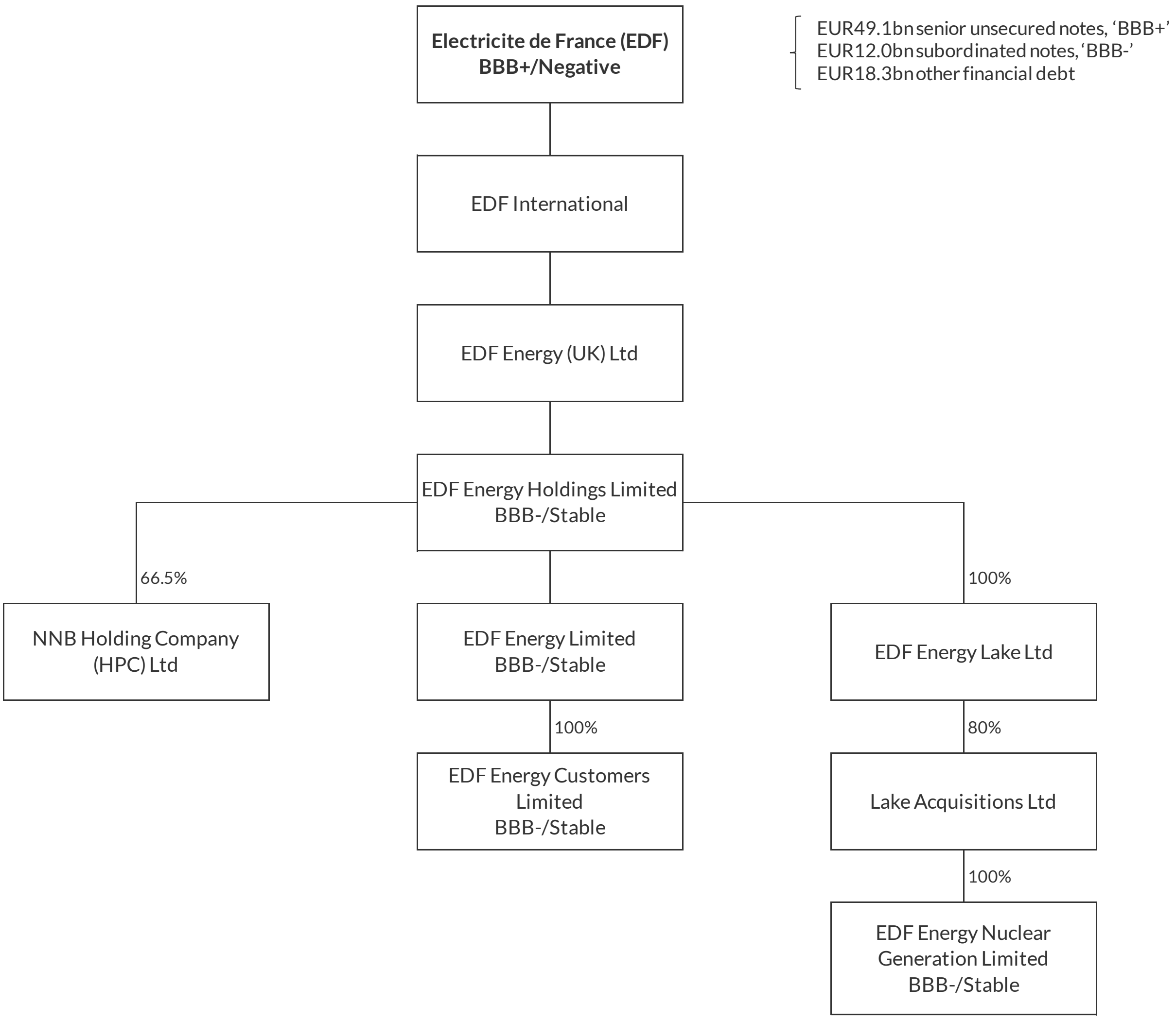
Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference	G Relevance
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance	5
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance	4
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance	3
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance	2
				1

CREDIT-RELEVANT ESG SCALE
How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

Simplified Group Structure Diagram



Source: Fitch Ratings, Fitch Solutions, Electricite de France (EDF). As of 31 December 2023

Peer Financial Summary

Company	Issuer Default Rating	Financial statement date	EBITDA (EURm)	FFO (EURm)	FCF after acquisitions and divestitures (EURm)	FFO net leverage (x)	FFO interest coverage (x)
Electricite de France (EDF)	BBB+						
	BBB+	2023	42,994	35,180	7,369	1.5	10.0
	BBB+	2022	-13,613	-17,827	-26,876	-4.3	-8.0
	A-	2021	16,338	12,218	-5,184	3.6	8.7
Engie S.A.	BBB+						
	A-	2023	13,335	10,678	-681	2.5	8.8
	A-	2022	12,122	8,955	-2,332	2.4	10.2
	A-	2021	9,413	7,400	-2,491	3.1	9.6
Iberdrola, S.A.	BBB+						
	BBB+	2023	14,166	9,271	-2,037	4.2	4.5
	BBB+	2022	12,983	9,251	-1,933	4.1	5.9
	BBB+	2021	11,795	9,465	-3,104	3.9	10.8
Enel S.p.A.	BBB+						
	BBB+	2023	21,504	13,528	-1,323	4.2	4.5
	BBB+	2022	19,260	11,248	-9,162	5.7	5.0
	A-	2021	18,834	9,459	-8,994	5.4	4.9

Source: Fitch Ratings, Fitch Solutions

Fitch Adjusted Financials

(EURm as of 31 Dec 2023)	Standardised values	Hybrid equity credit adjustment	Lease treatment	Other adjustments	Adjusted values
Income statement summary					
Revenue	139,715	—	—	—	139,715
EBITDA	39,927	—	-872	3,939	42,994
Depreciation and amortisation	-11,161	—	—	—	-11,161
EBIT	28,766	—	-100	—	28,666
Balance sheet summary					
Debt	86,647	-6,005	-4,318	9,728	86,053
Of which other off-balance-sheet debt	—	—	—	—	—
Lease-equivalent debt	—	—	—	—	—
Lease-adjusted debt	86,647	-6,005	-4,318	9,728	86,053
Readily available cash and equivalents	27,371	—	—	—	27,371
Not readily available cash and equivalents	3,481	—	—	—	3,481
Cash flow summary					
EBITDA	39,927	—	-872	3,939	42,994
Dividends received from associates less dividends paid to minorities	220	—	—	—	220
Interest paid	-2,534	—	100	-1,452	-3,886
Interest received	293	—	—	—	293
Preferred dividends paid	—	—	—	—	—
Cash tax paid	-3,695	—	—	—	-3,695
Other items before FFO	2,900	—	—	-3,646	-746
FFO	37,111	—	-772	-1,159	35,180
Change in working capital	-7,784	—	—	—	-7,784
CFO	29,327	—	-772	-1,159	27,396
Non-operating/nonrecurring cash flow	—	—	—	—	—
Capex	-21,021	—	—	822	-20,199
Common dividends paid	—	—	—	—	—
FCF	8,306	—	-772	-337	7,197
Gross leverage (x)					
FFO leverage	2.2	—	—	—	2.2
(CFO-capex)/debt (%)	9.6	—	—	—	8.4
Net leverage (x)					
FFO net leverage	1.5	—	—	—	1.5
(CFO-capex)/net debt (%)	14.0	—	—	—	12.3
Coverage (x)					
FFO interest coverage	15.5	—	—	—	10.0

CFO – Cash flow from operations.
Note: The standardised items presented above are based on Fitch's taxonomy for the given sector and region. Reported items may not match the Fitch taxonomy, but they are captured into corresponding lines accordingly.
Debt includes other off-balance-sheet debt.
Source: Fitch Ratings, Fitch Solutions, Electricite de France (EDF)

Government Related Entity Analysis

Electricite de France (EDF) Rating Derivation Summary

GRE Key Risk Factors and Support Score	
Responsibility to support	**15.0**
Decision-making and oversight	Very Strong
Precedents of support	Strong
Incentives to support	**0.0**
Preservation of provision of public service or sovereignty or strategic assets	Not Strong Enough
Contagion risk	Not Strong Enough
Support score	**15.0**
Summary	
Supporting government	**France**
Government LT IDR	**AA-**
GRE SCP	bbb-
Support category	Moderate Expectations
Notching expression	**+2**
Single equalisation factor	No
GRE LT IDR	BBB+

LT IDR – Long-Term Issuer Default Rating.
GRE – Government-related entity. SCP – Standalone Credit Profile.
n.a. – Not applicable.
Source: Fitch Ratings

Government LT IDR	GRE SCP	GRE LT IDR
AAA	aaa	AAA
AA+	aa+	AA+
AA	aa	AA
AA-	aa-	AA-
A+	a+	A+
A	a	A
A-	a-	A-
BBB+	bbb+	**BBB+**
BBB	bbb	BBB
BBB-	**bbb-**	BBB-
BB+	bb+	BB+
BB	bb	BB
BB-	bb-	BB-
B+	b+	B+
B	b	B
B-	b-	B-
CCC+	ccc+	CCC+
CCC	ccc	CCC
CCC-	ccc-	CCC-
CC	cc	CC
C	c	C
RD	rd	RD
D	d	D

Source: Fitch Ratings

Notching Guideline

	A	B	C	D	E	F	G
GRE's SCP – Government's IDR	**Equal to or more than 45.0**	**Between 42.5 and 35.0[a]**	**Between 32.5 and 30.0[a]**	**Between 25.0 and 20.0[a]**	**15.0[a]**	**12.5**	**Equal to or less than 10.0**
>0	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained
0	0	0	0	Standalone	Standalone	Standalone	Standalone
-1	0	0	0	+1[b]	Standalone	Standalone	Standalone
-2	0	0	0	+1	Standalone	Standalone	Standalone
-3	0	0	-1	+1	Standalone	Standalone	Standalone
-4	0	-1	-2	+1	Standalone	Standalone	Standalone
-5	0	-1	-2	+2	+1	Standalone	Standalone
-6	0	-1	-2	+3	+2	+1	Standalone
-7	0	-1	-2	+4	+2	+1	Standalone
-8	0	-1	-2	+4	+3	+1	Standalone
-9	0	-1	-2	+5	+3	+1	Standalone
-10	0	-2	-3	+5	+3	+1	Standalone
-11	-1	-2	-4	+5	+3	+1	Standalone
-12	-1	-3	-4	+5	+3	+1	Standalone
-13	-2	-3	-5	+5	+3	+1	Standalone
-14	-2	-3	-5	+5	+3	+1	Standalone
-15	-2	-3	-5	+5	+3	+1	Standalone
No SCP	0	-1	-2	-3	n.a	n.a	n.a

[a] Including those values.
[b] Capped at government IDR minus one if the credit drivers of the GRE are largely similar to or interrelated with those of the government (typical for policy GREs).
Note: Columns A to C refer to notching down from the government IDR and columns D to F refer to notching up from the Standalone Credit Profile. See Fitch's *Government-Related Entities Rating Criteria* for more information.
GRE – Government-related entity.
SCP – Standalone Credit Profile.
LT IDR – Long-Term Issuer Default Rating.
n.a. – Not applicable.
Source: Fitch Ratings

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