

Fingrid Oyj

Fingrid Oyj’s ratings reflect good earnings and cash flow visibility until 2023 and the supportive features of the Finnish regulatory framework. The ratings further incorporate the group’s conservative financial structure, but also Fitch Ratings’ expectation of dividend distributions in excess of the stated dividend policy.

We forecast funds from operations (FFO) adjusted net leverage to increase through the rating horizon due to declining allowed return, and to breach our negative sensitivity of 5.7x in 2023. However, the interest coverage and net debt-to-regulatory asset base (RAB) ratios are comfortably positioned for the rating, at around 9x and in the range of 35%-43%, respectively.

Key Rating Drivers

Declining Allowed Returns: The pre-tax nominal weighted-average cost of capital (WACC) of around 5.2% for 2019 allows Fingrid to earn adequate returns on its RAB. However, we expect the WACC to decline to around 3.8% by 2023, as the key risk-free rate is defined as the higher of the 10-year Finnish government bond yield observed on average in April-September in the previous year or the average of the previous 10 years. This mechanism will reduce group earnings towards the end of the regulatory period, weakening leverage metrics.

Gradually Increasing Leverage: We expect leverage to increase due to higher capex and dividends, combined with declining returns. We have increased our capex assumption compared with our previous rating case based on an increasing number of renewable technologies coming online, which requires further investments in the grid. We continue to assume that Fingrid will distribute an additional dividend on top of the distribution based on policy; that is, substantially all of the parent’s net income based on Finnish GAAP.

We forecast leverage to increase to above 5.0x by 2021 and breach our negative guideline of 5.8x by 2023. However, strong net debt/RAB and interest cover ratios support the Stable Outlook.

Reliable and Favourable Regulatory Environment: The regulatory framework is among the most supportive in EMEA, with a long record of ex-ante regulation, regulatory models applied for long periods and cooperative interaction with the independent regulator, Finnish Energy Authority, Energiavirasto. Under Finnish law, the company can set its own tariffs within the limits of the maximum allowed profit defined by the authority for each period. This is unique for a European network.

The current regulatory period runs from 2016-2023 with all WACC components fixed, except for risk premium on debt, which recently was updated for 2020-2023. Fingrid lowered tariffs by -8% for 2019 following a large surplus on the allowed return in 2018, and for 2020 the tariffs will remain flat.

Congestion Income Treatment: Fingrid receives congestion income related to the price differential between Finland and other Nord Pool price areas (mostly Sweden). Cash received from congestion income is unrestricted, but under EU law, this income must be used for reducing cross-border congestion or it will be treated as regulated income. We exclude congestion income from our FFO calculations and only consider amounts that have already been clearly earmarked for specific investments.

However, we see congestion income as a positive factor, since it funds part of Fingrid’s planned capex. The price differential between Finland and other price zones might narrow in the short

Ratings

Rating Type	Rating	Outlook	Last Rating Action
Long-Term IDR	A	Stable	Affirmed 4 Dec 2019
Senior unsecured rating	A+		Affirmed 4 Dec 2019
Short-Term IDR	F1		Affirmed 4 Dec 2019

[Click here for full list of ratings](#)

Applicable Criteria and Related Research

- [Fitch Affirms Fingrid at 'A'; Stable Outlook \(December 2019\)](#)
- [Fitch Ratings 2020 Outlook: EMEA Utilities \(December 2019\)](#)
- [Western European Electricity Transmission Networks: Peer Review \(July 2019\)](#)
- [Corporate Rating Criteria \(February 2019\)](#)
- [Corporates Notching and Recovery Ratings Criteria \(October 2019\)](#)
- [Short-Term Ratings Criteria \(May 2019\)](#)
- [Government-Related Entities Rating Criteria \(November 2019\)](#)

Analysts

Antonio Totaro
+39 02 879087 297
antonio.totaro@fitchratings.com

Harry Monthen
+44 20 3530 1247
harry.monthen@fitchratings.com

term, when the new Olkiluoto 3 nuclear power plant comes online, and hence Finnish power imports should decline.

Consistently Strong Performance: Fingrid benefits from the ability to pass on its operational costs to tariffs, as the efficiency requirements embedded in the allowed profit have an only negligible financial impact. The company has consistently been ranked among the most efficient transmission system operators in global peer studies, demonstrating strong operational efficiency.

GRE Status Rating Neutral: The Finnish state (AA+/Positive) holds a controlling stake in Fingrid (53.1% of shares; 70.9% of voting rights) and in 2016 defined a minimum shareholding level of 50.1% in the company. Therefore, we apply our *Government-Related Entities Rating Criteria*. However, this has no rating impact and we rate Fingrid on a standalone basis, as we see a weak record of support, which has also never been needed by the company, and a weak financial implication of Fingrid’s default for Finland.

We assess ownership and control as strong, mainly due to the state’s commitment to retain control, and the socio-political impact of a default as moderate, as Fingrid’s financial default would be unlikely to materially affect its service provision.

Financial Summary

(EUR 000)	Dec 2017	Dec 2018	Dec 2019F	Dec 2020F
Gross Revenue	671,992	852,784	773,000	819,000
Operating EBITDAR Margin (%)	41.1	36.2	32.0	29.8
Free Cash Flow Margin (%)	4.0	1.7	-8.3	-1.8
FFO Fixed-Charge Coverage (x)	10.4	12.7	9.5	8.7
FFO Adjusted Net Leverage (x)	4.4	3.7	4.8	5.0

Source: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

Fingrid’s ‘A’ rating is the highest that Fitch assigns to a regulated network in Europe, reflecting a very strong business and financial profile. The company benefits from a benign regulatory framework, which includes the possibility of setting its own tariffs in the context of the allowed profits defined by the authority. Red Electrica Corporacion S.A. (A-/Stable) has similar leverage but is placed one notch below Fingrid due mainly to a less mature and benign regulatory framework. Fingrid’s financial leverage is lower than most of its peers, including Terna S.p.A. (BBB+/Stable) and National Grid Electricity Transmission plc (A-/Stable).

Navigator Peer Comparison

Issuer	Business profile										Financial profile									
	IDR/Outlook	Operating Environment		Management and Corporate Governance		Sector Positioning	Regulatory Environment		Asset Base	Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility							
Amprion GmbH	BBB+/Sta	aa	■	a-	■	a	■	a-	■	a-	■	a	■	bbb	■	bbb+	■	a-	■	
Fingrid Oyj	A/Sta	aa	■	a+	■	a	■	a	■	a-	■	a+	■	a	■	a-	■	a	■	
National Grid Electricity Transmission plc	A-/Sta	aa-	■	a-	■	a	■	a	■	bbb+	■	a	■	bbb	■	bbb	■	a-	■	
Red Electrica Corporacion S.A.	A-/Sta	a-	■	a-	■	a-	■	bbb+	■	a-	■	a	■	a-	■	a-	■	a	■	
REN	BBB/Sta	a-	■	a-	■	a	■	bbb+	■	bbb+	■	a-	■	bbb	■	bbb	■	bb+	■	a
Terna S.p.A.	BBB+/Sta	bbb+	■	a	■	a	■	a-	■	a-	■	a	■	bbb+	■	bbb+	■	bbb-	■	a

Source: Fitch Ratings.

Importance: ■ Higher ■ Moderate ■ Lower

Issuer		Business profile										Financial profile							
Name	IDR/Outlook	Operating Environment		Management and Corporate Governance		Sector Positioning		Regulatory Environment		Asset Base		Operations		Profitability and Cash Flow		Financial Structure		Financial Flexibility	
Amprion GmbH	BBB+/Sta	5.0		1.0		2.0		1.0		1.0		2.0		-1.0		0.0		1.0	
Fingrid Oyj	A/Sta	3.0		1.0		0.0		0.0		-1.0		1.0		0.0		-1.0		0.0	
National Grid Electricity Transmission plc	A-/Sta	3.0		0.0		1.0		1.0		-1.0		1.0		-2.0		-2.0		0.0	
Red Electrica Corporacion S.A.	A-/Sta	0.0		0.0		0.0		-1.0		0.0		1.0		0.0		0.0		1.0	
REN	BBB/Sta	2.0		2.0		3.0		1.0		1.0		2.0		0.0		-2.0		3.0	
Terna S.p.A.	BBB+/Sta	0.0		2.0		2.0		1.0		1.0		2.0		0.0		-2.0		2.0	

Source: Fitch Ratings. Worse positioned than IDR In line with IDR Better positioned than IDR

Rating Sensitivities

Developments that May, Individually or Collectively, Lead to Positive Rating Action

- FFO adjusted net leverage below 4.7x, net debt/RAB below 45%, or FFO interest coverage increasing above 6.5x on a sustained basis may lead to an upgrade
- Evidence of stronger links with the parent (i.e. tangible government support) may be positive for the rating

Developments that May, Individually or Collectively, Lead to Negative Rating Action

- FFO adjusted net leverage above 5.7x, net debt/RAB above 55%, or FFO interest coverage falling below 5.5x on a sustained basis may lead to a downgrade

Liquidity and Debt Structure

Adequate Liquidity: Fingrid’s funding position is adequate to cover operating requirements, capital expenditure and upcoming debt maturities. At end-June 2019, the company’s cash and short-term investments of EUR96.5 million (including 100% of commercial papers), together with a EUR300 million committed and undrawn revolving credit facility (due in 2022), resulted in total liquidity of EUR396.5 million. This compares with short-term debt of around EUR234.6 million, the majority of which comprises commercial paper, and which in the rating case we assume to be renewed. Fingrid has a financial policy in place to hold cash and undrawn credit facilities to cover a minimum of 110% of short-term debt.

The company’s liquidity profile is further supported by predictable operating cash flow and a well-diversified debt maturity profile (less than 30% any given year). We project Fingrid’s free cash flow to be slightly negative through the forecast horizon.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of ‘3’ – 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.

For more information on our ESG Relevance Scores, visit www.fitchratings.com/esg

Liquidity and Debt Maturity Scenario with No Refinancing

Fingrid Oyj – Liquidity Analysis

Available Liquidity (EUR Th.)	2019F	2020F	2021F	2022F
Beginning Cash Balance	83,953	-168,288	-250,739	-320,876
Rating Case FCF after Acquisitions and Divestitures	-64,149	-14,789	-52,475	-29,676
<i>New EUR100 million loan from NIB (October 2019)</i>	100,000			
Total Available Liquidity (A)	119,803	-183,077	-303,214	-350,551

Liquidity Uses				
Debt Maturities	-288,091	-67,662	-17,662	-47,662
Total Liquidity Uses (B)	-288,091	-67,662	-17,662	-47,662

Liquidity Calculation				
Ending Cash Balance (A+B)	-168,288	-250,739	-320,876	-398,213
Revolver Availability	300,000	300,000	300,000	0
Ending Liquidity	131,712	49,261	-20,876	-398,213
Liquidity Score	1.1	1.7	-0.2	-7.4

Scheduled Debt Maturities	Original
Statement Date	31/12/2018
2019	288,091
2020	67,662
2021	17,662
2022	47,662
2023	47,662
Thereafter	590,860
Total	1,059,599

Source: Fitch Ratings, Fitch Solutions, Fingrid

Key Assumptions

Fitch's Key Assumptions Within Our Rating Case for the Issuer

- Pre-tax WACC declining to around 3.8% by 2023
- Congestion income of EUR47 million, EUR43 million and EUR25 million for 2019, 2020 and 2021, respectively, although this is not included in EBITDA or FFO, since based on the regulatory framework it is excluded from allowed profits
- Fingrid to achieve maximum regulatory allowed profit over 2020-2023 with no sizeable under- or over-recoveries
- Average annual capex of EUR130 million in 2019-2023
- Dividends for FY20-FY23 according to policy (100% of parent company net income) with an additional distribution of EUR20 million a year

Financial Data

(EURm)	Historical			Forecast		
	Dec 2016	Dec 2017	Dec 2018	Dec 2019F	Dec 2020F	Dec 2021F
Summary Income Statement						
Gross Revenue	586	672	853	773	819	799
Revenue Growth (%)	-2.4	14.7	26.9	-9.4	6.0	-2.4
Operating EBITDA (Before Income from Associates)	256	273	304	243	240	240
Operating EBITDA Margin (%)	43.7	40.6	35.7	31.4	29.3	30.0
Operating EBITDAR	259	276	308	247	244	244
Operating EBITDAR Margin (%)	44.2	41.1	36.2	32.0	29.8	30.5
Operating EBIT	157	176	205	144	136	130
Operating EBIT Margin (%)	26.7	26.2	24.0	18.6	16.6	16.2
Gross Interest Expense	-22	-18	-17	-19	-21	-22
Pretax Income (Including Associate Income/Loss)	172	163	228	103	115	108
Summary Balance Sheet						
Readily Available Cash and Equivalents	76	82	84	80	83	66
Total Debt with Equity Credit	1,108	1,083	1,060	1,120	1,137	1,173
Total Adjusted Debt with Equity Credit	1,130	1,112	1,092	1,152	1,170	1,206
Net Debt	1,032	1,001	976	1,040	1,055	1,107
Summary Cash Flow Statement						
Operating EBITDA	256	273	304	243	240	240
Cash Interest Paid	-23	-19	-17	-19	-21	-22
Cash Tax	-34	-42	-37	-26	-27	-26
Dividends Received Less Dividends Paid to Minorities (Inflow/(Out)flow)	1	1	1	1	1	1
Other Items Before FFO	-4	0	-1	0	0	0
Funds Flow from Operations	197	213	250	198	192	193
FFO Margin (%)	33.6	31.7	29.3	25.6	23.5	24.1
Change in Working Capital	-5	-6	6	-10	-1	3
Cash Flow from Operations (Fitch Defined)	191	207	255	188	191	196
Total Non-Operating/Non-Recurring Cash Flow	40	26	30			
Capital Expenditure	-142	-107	-97			
Capital Intensity (Capex/Revenue) %	24.3	16.0	11.3			
Common Dividends	-90	-98	-174			
Free Cash Flow	-1	27	15			
Net Acquisitions and Divestitures	6	1	14			
Other Investing and Financing Cash Flow Items	-1	0	2	0	0	0
Net Debt Proceeds	-40	-24	-29	60	17	36
Net Equity Proceeds	0	0	0	0	0	0
Total Change in Cash	-37	4	2	-4	3	-16
Calculations for Forecast Publication						
Capex, Dividends, Acquisitions and Other Items Before FCF	-186	-179	-227	-252	-206	-248
Free Cash Flow After Acquisitions and Divestitures	5	28	29	-64	-15	-52
Free Cash Flow Margin (After Net Acquisitions) (%)	0.8	4.1	3.4	-8.3	-1.8	-6.6
Coverage Ratios						
FFO Interest Coverage (x)	9.7	12.2	15.5	11.2	10.2	9.9
FFO Fixed-Charge Coverage (x)	8.7	10.4	12.7	9.5	8.7	8.5
Operating EBITDAR/Interest Paid + Rents (x)	10.2	12.3	14.5	10.6	9.7	9.5
Operating EBITDA/Interest Paid (x)	11.4	14.4	17.7	12.6	11.5	11.1
Leverage Ratios						
Total Adjusted Debt/Operating EBITDAR (x)	4.4	4.0	3.5	4.7	4.8	4.9
Total Adjusted Net Debt/Operating EBITDAR (x)	4.1	3.7	3.3	4.3	4.5	4.7
Total Debt with Equity Credit/Operating EBITDA (x)	4.3	4.0	3.5	4.6	4.7	4.9
FFO Adjusted Leverage (x)	5.1	4.7	4.0	5.2	5.4	5.5
FFO Adjusted Net Leverage (x)	4.8	4.4	3.7	4.8	5.0	5.2

Source: Fitch Ratings, Fitch Solutions

How to Interpret the Forecast Presented

The forecast presented 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

FitchRatings

Fingrid Oyj

ESG Relevance:



Corporates Ratings Navigator
EMEA Regulated Networks

Factor Levels	Business Profile										Financial Profile		Issuer Default Rating	
	Sector Risk Profile	Operating Environment	Management and Corporate Governance	Sector Positioning	Regulatory Environment	Asset Base	Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility				
aaa													AAA	
aa+													AA+	
aa													AA	
aa-													AA-	
a+													A+	
a													A	Stable
a-													A-	
bbb+													BBB+	
bbb													BBB	
bbb-													BBB-	
bb+													BB+	
bb													BB	
bb-													BB-	
b+													B+	
b													B	
b-													B-	
ccc+													CCC+	
ccc													CCC	
ccc-													CCC-	
cc													CC	
c													C	
d or rd													D or RD	

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+			

Sector Positioning

aa-	Operation Type	a	National or regional monopolies, transmission or distribution asset owners.
a+	Non-Regulated Earnings (% of Total Earnings)	a	up to 10%
a			
a-			
bbb+			

Asset Base

a+	Diversification	bbb	Limited diversification by geography without regulatory diversification; regional utility.
a	Critical Mass	a	Critical mass in one regulated asset; does not affect efficiency of operations (cost base, customer base, key personnel).
a-	Asset Quality and Residual Life	a	High asset quality likely to benefit opex and capex requirements compared with peers. The residual life of regulatory assets is long.
bbb+			
bbb			

Profitability and Cash Flow

aa-	Return on Capital	bbb	Return on capital comparable with the regulatory benchmark.
a+	Volatility of Profitability	a	Higher stability and predictability of profit than utility peers.
a	Investment Cycle	a	Investment cycle position and dividend policy leading to broadly neutral free cash flow. High flexibility in smoothing capex plans.
a-			
bbb+			

Financial Flexibility

aa-	Financial Discipline	a	Clear commitment to maintain a conservative policy with only modest deviations allowed.
a+	Liquidity	a	Very comfortable liquidity. Well spread debt maturity schedule. Diversified sources of funding.
a	FFO Fixed-Charge Cover	a	4.5x
a-	FX Exposure	aa	No material FX mismatch.
bbb+	PMICR: (CFO - Maintenance Capex)/Interest		n.a.

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.

Management and Corporate Governance

aa	Management Strategy	a	Coherent strategy and good track record in implementation.
aa-	Governance Structure	a	Experienced board exercising effective checks and balances. Ownership can be concentrated among several shareholders.
a+	Group Structure	aa	Transparent group structure.
a	Financial Transparency	a	High-quality and timely financial reporting.
a-			

Regulatory Environment

aa-	Independence, Transparency, Predictability	a	Transparent frameworks with strong track record and multi-year predictable tariffs set by independent regulators; little political risk.
a+	Licensing, Ring-Fencing, Concessioning	bbb	Less demanding licensing and ring-fencing provisions; moderate concession renewal risk.
a	Cost and Investment Recovery	a	Tariff setting with challenge mechanisms that may marginally limit cost and investment recovery, with little regulatory lag.
a-	Volume and Price Risk	a	High insulation from price and volume risk, little revenue under-recovery.
bbb+			

Operations

aa	Performance Measures	a	Key performance measures in line with or above sector average and/or regulatory target.
aa-	Counterparty Risk	a	Low counterparty risk; high collection rates for water suppliers. Economy of area served provides structurally stable background.
a+			
a			
a-			

Financial Structure

a+	Lease-Adjusted FFO Gross Leverage	bbb	6.0x
a	Lease-Adjusted FFO Net Leverage	bbb	5.5x
a-	Net Debt/Asset Base	a	60%
bbb+			
bbb			

Credit-Relevant ESG Derivation

				Overall ESG
Fingrid Oyj has 9 ESG potential rating drivers				
key driver	0	issues	5	
Exposure to extreme weather events - negative (e.g. risk of drought and flooding) or positive (e.g. additional return on capex for network weather-resilience)				
driver	0	issues	4	
Product affordability and access				
potential driver	9	issues	3	
Quality and safety of products and services; data security				
Impact of labor negotiations and employee (dis)satisfaction				
not a rating driver	3	issues	2	
Social resistance to major projects that leads to delays and cost increases				
not a rating driver	2	issues	1	
Governance is minimally relevant to the rating and is not currently a driver.				

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

Credit-Relevant ESG Derivation

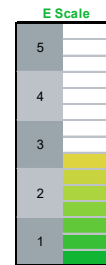
Fingrid Oyj has 9 ESG potential rating drivers

- ➔ Fingrid Oyj has exposure to extreme weather events but this has very low impact on the rating.
- ➔ Fingrid Oyj has exposure to access/affordability risk but this has very low impact on the rating.
- ➔ Fingrid Oyj has exposure to customer accountability risk but this has very low impact on the rating.
- ➔ Fingrid Oyj has exposure to labor relations & practices risk but this has very low impact on the rating.
- ➔ Fingrid Oyj has exposure to social resistance but this has very low impact on the rating.
- ➔ Governance is minimally relevant to the rating and is not currently a driver.

				Overall ESG Scale	
key driver	0	issues	5		
driver	0	issues	4		
potential driver	9	issues	3		
not a rating driver	3	issues	2		
	2	issues	1		

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	1	Emissions from operations	Profitability and Cash Flow
Energy Management	2	Energy and fuel use in operations; entities' financial targets for losses/shrinkage	Profitability and Cash Flow
Water & Wastewater Management	1	Water usage in operations; water utilities' financial targets for water quality, leakage and usage	Operations; Profitability and Cash Flow; Financial Structure; Financial Flexibility
Waste & Hazardous Materials Management; Ecological Impacts	2	Impact of waste including pollution incidents; discharge compliance; sludge disposal	Operations; Profitability and Cash Flow; Financial Flexibility
Exposure to Environmental Impacts	3	Exposure to extreme weather events - negative (e.g. risk of drought and flooding) or positive (e.g. additional return on capex for network weather-resilience)	Operations; Profitability and Cash Flow; Financial Flexibility



How to Read This Page

ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

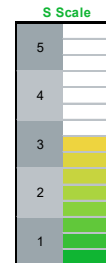
The **Environmental (E), Social (S) and Governance (G)** tables break out the individual components of the scale. The left-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The **Credit-Relevant ESG Derivation table** shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the [number of] general ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector and sub-sector ratings criteria and the General Issues and the Sector-Specific Issues have been informed with SASB's Materiality Map.

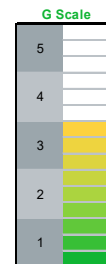
Social (S)

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



Governance (G)

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

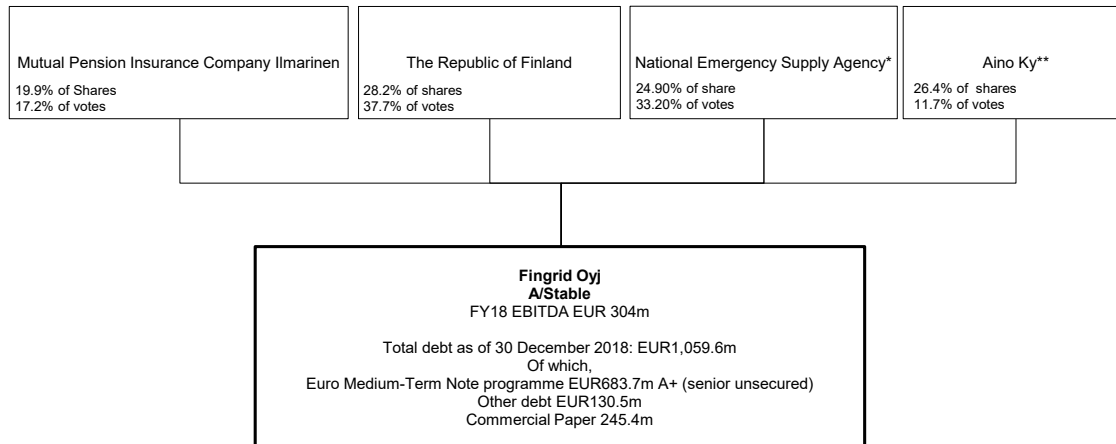


CREDIT-RELEVANT ESG SCALE

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 "low er" 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



*Government body tasked with planning and measures related to developing and maintaining security of supply.

**Holding company established solely for administrating shares in Fingrid Oyj. Owned by several Finnish financial institutions

Source: Fitch Ratings, Fitch Solutions, Fingrid, as at 31 December 2018

Peer Financial Summary

Company	IDR	Financial Statement Date	Gross Revenue (EURm)	Operating EBITDAR Margin (%)	Free Cash Flow Margin (%)	FFO Fixed-Charge Coverage (x)	FFO Adjusted Net Leverage (x)
Fingrid Oyj	A	2021F	799	30.5	-6.6	8.5	5.2
		2020F	819	29.8	-1.8	8.7	5.0
		2019F	773	32.0	-8.3	9.5	4.8
	A+	2018	853	36.2	1.7	12.7	3.7
Red Electrica Corporacion S.A.	A-	2021F	2,144	74.9	-19.3	6.4	4.8
		2020F	2,154	74.8	-14.9	6.7	4.6
		2019F	2,239	76.0	6.4	7.9	4.0
	A	2018	2,023	75.8	8.6	8.7	3.4
Terna S.p.A.	BBB+	2021F	2,458	73.3	-30.5	8.2	6.6
		2020F	2,352	74.2	-1.4	9.4	6.3
		2019F	2,320	74.5	-24.3	10.1	6.3
	BBB+	2018	2,315	71.8	-4.1	10.2	5.9
REN - Redes Energeticas Nacionais, SGPS, S.A.	BBB	2020F	553	82.3	10.9	7.1	6.7
		2019F	571	82.0	15.8	7.7	6.0
		BBB	2018	567	85.8	16.2	6.1
National Grid Electricity Transmission plc	A-	2021F	4,663	38.2	-18.0	6.9	5.9
		2020F	4,607	37.2	-18.2	7.4	5.8
	A-	2019	3,353	44.9	8.6	9.9	5.7
	A-	2018	4,158	36.4	-5.1	9.8	5.7

Source: Fitch Ratings, Fitch Solutions

Reconciliation of Key Financial Metrics

(EUR Thousand, As reported)	31 Dec 2018
Income Statement Summary	
Operating EBITDA	304,352
+ Recurring Dividends Paid to Non-controlling Interest	0
+ Recurring Dividends Received from Associates	645
+ Additional Analyst Adjustment for Recurring I/S Minorities and Associates	0
= Operating EBITDA After Associates and Minorities (k)	304,997
+ Operating Lease Expense Treated as Capitalised (h)	4,083
= Operating EBITDAR after Associates and Minorities (j)	309,080
Debt & Cash Summary	
Total Debt with Equity Credit (l)	1,059,599
+ Lease-Equivalent Debt	32,664
+ Other Off-Balance-Sheet Debt	0
= Total Adjusted Debt with Equity Credit (a)	1,092,263
Readily Available Cash [Fitch-Defined]	83,953
+ Readily Available Marketable Securities [Fitch-Defined]	0
= Readily Available Cash & Equivalents (o)	83,953
Total Adjusted Net Debt (b)	1,008,310
Cash-Flow Summary	
Preferred Dividends (Paid) (f)	0
Interest Received	306
+ Interest (Paid) (d)	-17,230
= Net Finance Charge (e)	-16,924
Funds From Operations [FFO] (c)	249,667
+ Change in Working Capital [Fitch-Defined]	5,795
= Cash Flow from Operations [CFO] (n)	255,462
Capital Expenditures (m)	-96,718
Multiple applied to Capitalised Leases	8.0
Gross Leverage	
Total Adjusted Debt / Op. EBITDAR* [x] (a/j)	3.5
FFO Adjusted Gross Leverage [x] (a/(c-e+h-f))	4.0
<i>Total Adjusted Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)</i>	
Total Debt With Equity Credit / Op. EBITDA* [x] (l/k)	3.5
Net Leverage	
Total Adjusted Net Debt / Op. EBITDAR* [x] (b/j)	3.3
FFO Adjusted Net Leverage [x] (b/(c-e+h-f))	3.7
<i>Total Adjusted Net Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)</i>	
Total Net Debt / (CFO - Capex) [x] ((l-o)/(n+m))	6.1
Coverage	
Op. EBITDAR / (Interest Paid + Lease Expense)* [x] (j/-d+h)	14.5
Op. EBITDA / Interest Paid* [x] (k/(-d))	17.7
FFO Fixed Charge Cover [x] ((c+e+h-f)/(-d+h-f))	12.7
<i>(FFO + Net Finance Charge + Capit. Leases - Pref. Div Paid) / (Gross Int. Paid + Capit. Leases - Pref. Div. Paid)</i>	
FFO Gross Interest Coverage [x] ((c+e-f)/(-d-f))	15.5
<i>(FFO + Net Finance Charge - Pref. Div Paid) / (Gross Int. Paid - Pref. Div. Paid)</i>	
* EBITDAR after Dividends to Associates and Minorities	
Source: Fitch Ratings, Fitch Solutions, Fingrid	

Fitch Adjustment Reconciliation

	Reported Values	Sum of Fitch Adjustments	Preferred Dividends, Associates and Minorities Cash Adjustments	Cash Adjustment	Lease Adjustment	Other Adjustment	Adjusted Values
31 Dec 18							
Income Statement Summary							
Revenue	852,784	0					852,784
Operating EBITDAR	341,310	-32,875			4,083	-36,958	308,435
Operating EBITDAR after Associates and Minorities	341,310	-32,230	645		4,083	-36,958	309,080
Operating Lease Expense	0	4,083			4,083		4,083
Operating EBITDA	341,310	-36,958				-36,958	304,352
Operating EBITDA after Associates and Minorities	341,310	-36,313	645			-36,958	304,997
Operating EBIT	241,649	-36,958				-36,958	204,691
Debt & Cash Summary							
Total Debt With Equity Credit	1,059,599	0					1,059,599
Total Adjusted Debt With Equity Credit	1,059,599	32,664			32,664		1,092,263
Lease-Equivalent Debt	0	32,664			32,664		32,664
Other Off-Balance Sheet Debt	0	0					0
Readily Available Cash & Equivalents	85,302	-1,349		-1,349			83,953
Not Readily Available Cash & Equivalents	0	1,349		1,349			1,349
Cash-Flow Summary							
Preferred Dividends (Paid)	0	0					0
Interest Received	306	0					306
Interest (Paid)	-16,188	-1,042				-1,042	-17,230
Funds From Operations [FFO]	250,064	-397	645			-1,042	249,667
Change in Working Capital [Fitch-Defined]	5,795	0					5,795
Cash Flow from Operations [CFO]	255,859	-397	645			-1,042	255,462
Non-Operating/Non-Recurring Cash Flow	29,632	0					29,632
Capital (Expenditures)	-96,718	0					-96,718
Common Dividends (Paid)	-173,518	0					-173,518
Free Cash Flow [FCF]	15,255	-397	645			-1,042	14,858
Gross Leverage							
Total Adjusted Debt / Op. EBITDAR* [x]	3.1						3.5
FFO Adjusted Leverage [x]	4.0						4.0
Total Debt With Equity Credit / Op. EBITDA* [x]	3.1						3.5
Net Leverage							
Total Adjusted Net Debt / Op. EBITDAR* [x]	2.9						3.3
FFO Adjusted Net Leverage [x]	3.7						3.7
Total Net Debt / (CFO - Capex) [x]	6.1						6.1
Coverage							
Op. EBITDAR / (Interest Paid + Lease Expense)* [x]	21.1						14.5
Op. EBITDA / Interest Paid* [x]	21.1						17.7
FFO Fixed Charge Coverage [x]	16.4						12.7
FFO Interest Coverage [x]	16.4						15.5

*EBITDA/R after Dividends to Associates and Minorities
Source: Fitch Ratings, Fitch Solutions, Fingrid

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: [HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://fitchratings.com/understandingcreditratings). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

Copyright © 2019 by Fitch, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, New York, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion is based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at anytime for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.