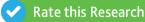


#### **CREDIT OPINION**

8 July 2019

# **Update**



#### RATINGS

#### **Elering AS**

Domicile	Estonia
Long Term Rating	A2
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

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

#### Contacts

Mark Remshardt +49.69.70730.808 VP-Senior Analyst

mark.remshardt@moodys.com

Nathaniel McNary +33.1.5330.1039 Associate Analyst

nathaniel.mcnary@moodys.com

Julien Paolantoni +44.20.7772.5587

Associate Analyst

julien.paolantoni@moodys.com

Paul Marty +44.20.7772.1036

Senior Vice President/Manager paul.marty@moodys.com

# **Elering AS**

Update to credit analysis - Grants mitigate impact of investment programme on leverage

#### **Summary**

Elering's credit profile is underpinned by (1) the low business risk profile of its regulated transmission network operations; (2) the generally supportive regulatory framework, which provides for visibility of cash flows, albeit under a less prescriptive system of tariff calculation and application than seen elsewhere in Europe (leaving year-on-year tariff application decision at Elering's sole discretion); and (3) a conservative financial risk profile.

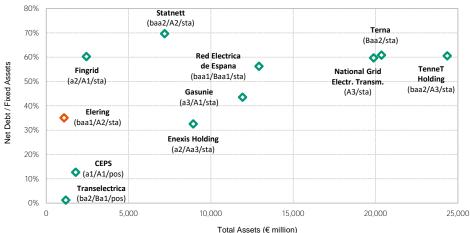
At the same time, Elering's credit quality is constrained by (1) the company's small scale with total reported assets of €948 million as of 31 December 2018; (2) the continued challenges of integrating Estonia into the wider European energy transmission system; and (3) the expected moderate deterioration in funds from operations (FFO)/net debt as a result of large investments over the medium term, mitigated by the use of EU grants and congestion revenues.

Elering's credit profile benefits from our assumption of potential support from its 100% owner, the <u>Government of Estonia (A1 stable</u>) which is underpinned by equity injections in 2015/16 and 2018.

Exhibit 1

Elering is small compared to European peers, but benefits from relatively low leverage

Total Assets (last reported, as adjusted) versus Net Debt / Fixed Assets (forward-looking, as adjusted)



Note: The ratio of net debt to fixed assets used represents the mid point of Moody's forward view estimates as published in latest credit opinions and ratings are expressed as Baseline Credit Assessments (BCA), if applicable and assigned final ratings. Source: Moody's Investors Service

# **Credit strengths**

- » The low-risk nature of monopoly electricity and gas transmission network operations, which are regulated under a fairly well-developed and transparent regime
- » Expectation of high likelihood of government support, given Elering's strategic importance to Estonia's economy

## **Credit challenges**

- » Execution risks related to a substantial investment programme, mitigated by risk sharing with partners, construction guarantees and EU funding support
- » Moderate decline in profits from electricity transmission activities, because new investments do not fully offset the depreciation of the regulatory asset base (RAB)

## **Rating outlook**

The outlook on Elering's rating is stable, reflecting our expectations that Elering will exhibit a financial profile commensurate with the guidelines for the current rating of FFO/net debt in the mid- to high teens in percentage terms and FFO interest cover of 3.5x-4.5x, and that the company will prudently manage its liquidity.

## Factors that could lead to an upgrade

Before we would consider any positive movement in the rating, we would expect Elering to consistently maintain FFO/net debt at least in the twenties in percentage terms and FFO interest cover above 4.5x.

# Factors that could lead to a downgrade

The rating could come under downward pressure if FFO/net debt were to decline to the low teens in percentage terms or if Elering's FFO interest cover were to fall below 3.5x for a sustained period. Downward pressure could also be exerted on the rating as a result of (1) a deterioration in the credit quality of the Government of Estonia; (2) a reduction in the government support assumptions currently incorporated into our credit assessment; or (3) a materially unfavourable change in the regulatory framework, leading to a significant increase in the company's business risk.

## **Key indicators**

Exhibit 2
Financial profile likely to weaken moderately as Elering engages in a large investment plan Elering's key adjusted indicators

	2014	2015	2016	2017	2018	2019P	2020P
FFO/Net Debt	22%	18%	18%	21%	18%	13% - 16%	13% - 16%
FFO interest Cover	6.7x	5.9x	5.7x	5.4x	7.8x	16x - 20x	22x - 27x
RCF/Net Debt	22%	12%	8%	13%	11%	5% - 7%	8% - 10%
Net debt / Fixed Assets	45%	42%	42%	32%	35%	35% - 39%	35% - 39%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. For definitions of Moody's common ratio terms, please see the accompanying <u>User's Guide</u>.

Source: Moody's Financial Metrics<sup>TM</sup>

#### **Profile**

Estonian-based Elering AS (Elering) is the owner and operator of Estonia's electricity and gas transmission networks, and provides balancing services for the power grid. The 5,403-kilometre (km)-long power transmission system is connected to Latvia and Russia, as well as to Finland through two submarine cables, Estlink 1 (350 megawatts [MW]) and Estlink 2 (650 MW). The gas transmission

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

network comprises 885 km of pipelines and is connected to Latvia and Russia. The company is 100% owned by the Government of Estonia. The electricity transmission segment is the main contributor to revenue and EBITDA, whereas the low share of gas transmission revenue and EBITDA reflects the minor role of this fuel in the Estonian economy. The company's balancing services are a zero-profit activity. Both its electricity and gas transmission activities are regulated by the Estonian Competition Authority (ECA).

Exhibit 3
Electricity transmission accounts for the bulk of Elering's earnings
Revenue and EBITDA breakdown

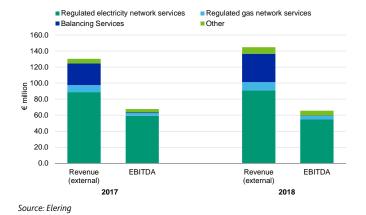
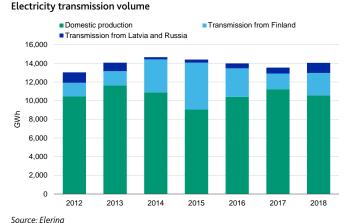


Exhibit 4

Around one-third of transported electricity comes from imports/
transit



#### **Detailed credit considerations**

# Low business risk profile, underpinned by good visibility of cash flows and supportive, albeit evolving, regulatory framework

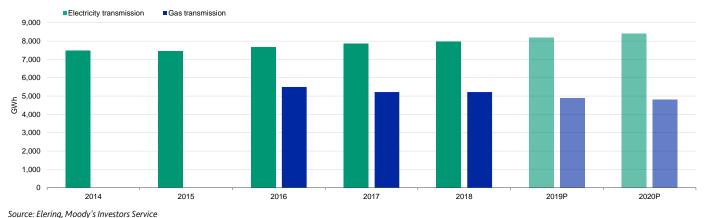
We consider electricity and gas network operations to be generally characterised by low business risk because of their regulated nature and cash flow visibility. Elering's credit profile is underpinned by the regulated income earned from its electricity and gas transmission assets. While electricity transmission operations are the principal source of earnings, gas transmission operations are expected to increase in importance.

We view the regulatory framework in Estonia as supportive of Elering's credit quality. Gas and electricity transmission network activities are subject to the same regulatory principles and oversight by ECA. While the regulatory framework is fairly well developed and based on generally used principles of a return on a regulatory asset base (RAB), we note that the ECA introduced a lighter-touch approach to regulation in 2013. As a result, the previous three-year regulatory periods no longer apply and tariffs are not subject to automatic annual adjustments. Instead, Elering approaches the regulator for a review of tariffs on an ad hoc basis when it thinks it is appropriate to do so. Such a form of regulation gives Elering more discretion in its approach to tariff changes, but it also reduces the overall transparency of the rate-setting process.

With respect to both electricity and gas transmission activities, Elering is allowed to cover its costs over time and realise a reasonable return based on the weighted average cost of capital (WACC) applied to the company's RAB. If the actual transmission volume is different from the assumptions embedded in the tariff calculations, Elering bears the relative loss or collects the relative gain in income because no ex-post tariff adjustments are made.

In the electricity segment, volume is on a growth trajectory, which we expect to continue in the coming years, driven by Estonia's forecast positive GDP development. In contrast, the gas volume transmitted through Elering's grid has slightly declined and we assume a further decline in the coming years. The underlying reason is that Estonia's subsidy regime for highly efficient cogeneration plants supports the substitution of gas as fuel with biomass.

Exhibit 5
Transmission volumes power and gas (domestic consumption)



The regulatory approach to operating costs is generally supportive. Operating costs have ceased to be subject to efficiency requirements when they were adjusted for inflation but decreased through the application of an efficiency factor. Network losses are permitted to be passed through to customers in tariffs.

Elering's allowed revenues in the regulated business depend in part on the evolution of the respective electricity and gas RAB and WACC. The latter has been on a decline as a result of the steady decrease in the risk-free reference rate, the 10-year German government bond yield. The ECA recently decided to dampen the impact on the WACC by moving from calculating the risk-free rate on the rolling five-year average to a rolling 10-year average. The change is planned for 2020.

Exhibit 6
Evolution of the WACC and risk-free rate for electricity transmission activities

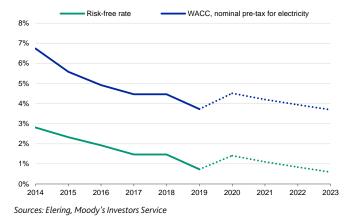
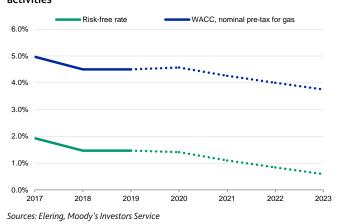


Exhibit 7
Evolution of the WACC and risk-free rate for gas transmission activities



The RAB development is determined by additions of eligible grid investments, divestments and by regulatory depreciation. For the electricity RAB valuation, the Estonian parliament passed an amendment to the Electricity Market Act in June 2018, introducing the principle that the value of the RAB should be set in accordance with the accounting value of the assets, excluding assets financed with investment grants or income from cross-border capacity auctions. This change will be effective from 2021. Since the current regulatory depreciation rates assume 40-year asset lives, which for most assets is longer than under accounting standards, we expect, after 2020, ECA to accept an increase in the depreciation component under new electricity tariffs.

#### Regulatory framework changes provide incentives for Elering to request a new electricity tariff

The current transmission tariffs have been applied since 1 July 2017 for electricity and since 1 January 2019 for gas. Notably, any of the changes laid out above will only become relevant for Elering if the company submits a new tariff application to ECA because there are no automatic adjustments of formula components, including the WACC.

For electricity, we view the changes in regulatory depreciation and in the WACC formula as incentives for Elering to request a new tariff, whereas the reset of transmission volume assumptions (ECA applies the average of the three years preceding the tariff change) would temporarily reduce the upside for the company which is derived from transmitted volumes above tariff assumptions. A further consideration are electricity costs stemming from grid losses that Elering had to cover by purchasing power on the spot market. The spot prices increased significantly in 2018 because the marginal costs of the price-setting thermal power generation include expenses for CO2 emission certificates whose prices rose markedly in the second half of 2018. Elering's electricity EBITDA thus fell to €55 million in 2018 from €59 million in 2017 because the existing tariff is based on lower power price assumptions. If within the next two years costs of network losses were to remain above the level incorporated in the current tariff and if volume growth were to slow down, we expect that Elering would request new tariffs from ECA to support its cash flow.

#### New gas tariff and revenue opportunities from the new trilateral gas market are positive drivers for cash flow

Earnings from gas transmission were boosted in 2018 as a result of new tariffs that took effect on 1 July 2018. An increase of 39.8% was approved by the regulator to compensate Elering for expected lower volume (compared with the previous regulatory assumptions) and higher operating spending. A further increase of around 10% took effect from 1 January 2019 and a further application has been made for 1 January 2020 to counter the downward volume trend.

From 2020, changes may be introduced to gas regulation to incorporate cross-border flow, which may fluctuate more than purely domestic volume. The driver is the trilateral gas market agreement that will become effective from 1 January 2020, under which Estonia, Finland and Latvia become one gas market region, with entry and exit points only in relation to other countries. Revenue will be shared among the gas transmission grid operators of the three countries, generating additional income for Elering, which is favourably located between its partners and, thus, should benefit from augmented transit flows.

Assuming no change in the electricity tariff, a moderately positive effect of the new gas tariff and additional earnings from the new trilateral gas market, we expect that Elering's FFO will grow moderately over the coming years.

#### Investments expected to remain high over the 2019-23 period, but funding by EU grants contains leverage

Elering's investments over the next five years amount to roughly €510 million, of which more than €360 million will be spent on cross-border projects. Two major projects that stand out will promote Estonia's energy integration with its neighbours and Western Europe.

- » First, the Baltic countries intend to synchronise their electricity systems with the continental European frequency area by year-end 2025. The aim of the project is the desynchronisation with Russia<sup>1</sup>. The first phase of the project started in 2018. Elering's share in the project includes the replacement of large parts of the electricity transmission network that was built as part of the northwestern common power system of the former Soviet Union. Therefore, the average age of the transmission assets is around 30 years. Thematically linked to the synchronisation project but financially separate is the company's ongoing construction of a third interconnection with Latvia (capacity of up to 600 MW), which will allow for a subsequent renovation of the existing two connections.
- » The second project is the trilateral gas market involving Estonia, Finland and Latvia. Estonia, as the country in the middle, has started interconnection projects with its Finish and Latvian counterparts. The "Balticconnector," a bidirectional 77 km gas subsea pipeline between Estonia and Finland was started in 2018 and should be completed by year-end 2019. The Estonian and Latvian connection also has to be enhanced (EstLat Gas).

These projects will be completed in conjunction with partners, and construction will be contracted out with technical guarantees in place to limit exposure to project execution risks.

Exhibit 8
Elering's investment plans are sizeable and cross-border projects will extend beyond 2024

€ million	2018	2019 - 2023	2024+	Total
Estonian-Latvian third electricity interconnector	29	51	0	80
Synchronisation	0	196	182	377
Estonian-Finnish gas interconnector	65	79	0	144
Estonian-Latvian gas interconnector	11	36	0	47
GIPL (Gas Interconnection Poland–Lithuania)	0	2	0	2
Total gross Cross Border investments	104	363	182	649
Total EU grants	30	215	117	362
Total net Cross Border investments (1)	75	148	65	287
Ordinary Investments (2)	30	150	30 per year	-
Total net investments	105	298	-	-

<sup>(1)</sup> In addition to EU grants, Elering benefits from congestion fees, which, in accordance with EU legislation, must be used primarily to increase cross-border transmission capacity. As of year-end 2018, Elering has accrued €75 million.

Funding for these cross-border investments comes from Elering's own cash flow and also to a significant degree (56%) from EU grants under the Connecting Europe Facility for Energy. The synchronisation project and the Balticconnector eligible project costs are each 75% covered by grants. The third power interconnector with Latvia has a commitment for 65% of eligible costs and 50% in the case of the Estonian/Latvian gas connection. In addition, for electricity interconnectors, the financing shortfall should be partially recovered by way of congestion revenue. Any amounts not covered by EU funding or congestion revenue will be added to the respective RAB.

#### Cash-flow based metrics expected to deteriorate modestly from the current levels

In light of the implementation of its sizeable investment programme, Elering's FFO/net debt is likely to deteriorate modestly from the current levels, but still generally stays within our expectations.

The company's FFO/interest coverage will improve, reflecting very low funding costs. A positive base effect of about €8.5 million will materialise in 2019 when the very favourable bond refinancing in 2018 will have a full-year effect. In May 2018, the company refinanced its seven-year €225 million bond due 2018 with a coupon rate of 4.625% through the issuance of a new five-year bond of the same size at a much lower rate of interest of 0.875%.

We expect the company's investments to be significantly concentrated in the 2018-20 period, with net capital spending (after EU grants and congestion fees), including regular maintenance and growth capital spending in the domestic grid, of nearly €90 million on average per year. As such, capital spending is likely to exceed operating cash flow. We note that EU grants awarded to support cross-border electricity and gas projects tend to be paid retrospectively, which could result in some annual volatility in Elering's net debt levels. Since the gas connection projects and the third interconnector with Latvia are scheduled to be completed by 2021, we expect net debt levels to decline after 2020 when final grant installments for these projects are paid.

We therefore expect Elering's metrics to deteriorate moderately from the strong 2018 levels and to be somewhat volatile. The effect of increased investments in 2019 and 2020 on the company's financial profile are mitigated by more than €60 million cash reserves at year-end 2018. These stem from the €40 million capital injection from the government paid in 2018 to support the large investment programme. This benefit was partially offset by dividend outflow (for example, €20 million was paid in the third quarter of 2018 on 2017 results).

The net debt-to-fixed assets ratio may increase modestly over the next couple of years. Elering's net debt/RAB (not published) is likely to be weaker than net debt/fixed assets as most of the interconnectors will not form part of the RAB, as described earlier. On the other hand, the company will not earn a return on investments financed by either EU funds or congestion income. Its leverage ratios will remain moderate compared with those of its other EU peers (see Exhibit 1).

<sup>(2)</sup> According to Elering, ordinary investments should amount to around €30 million per annum. Sources: Elering's 2018 annual report, Moody's Investors Service

Funds from operations, as adjusted (LHS) • • • • • • Minimum ratio guidance (RHS) FFO/Net Debt, as adjusted (RHS) 100 27% 90 80 22% 70 60 € million 50 17% 40 30 12% 20 10 2022P 2015

Exhibit 9

We expect FFO/net debt to remain within the rating guidance over the medium term FFO/net debt versus guidance

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations; [2] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Sources: Moody's Financial Metrics™, Moody's Investors Service forward view

#### Government support assumption results in rating uplift

Elering's A2 rating incorporates two notches of uplift from its standalone credit quality, which we express as a Baseline Credit Assessment (BCA) of baa1. The uplift to the BCA reflects the credit quality of its 100% owner, the Government of Estonia, and our assessment of the high probability of government support for the company in the event of financial distress, as well as our view of very high default dependence between Estonia and Elering.

As a fully state-owned company, Elering is subject to special governance rules stipulated in the State Assets Act, based on which shareholder rights are conferred to the Ministry of Economic Affairs and Communications. Although the Government of Estonia does not provide any explicit guarantees, Elering's operations are considered of vital importance to the Estonian economy. The government also has a strong track record of support to the company. It issued two comfort letters to the creditors of long-term loans and increased the company's share capital by  $\leqslant$ 5.8 million and  $\leqslant$ 9.9 million in 2010 and 2011, respectively. Also, to support the acquisition of gas transmission assets in 2015, the government contributed a total of  $\leqslant$ 40 million in equity, with the final tranche of  $\leqslant$ 32 million paid in June 2016. A further equity injection of  $\leqslant$ 40 million was provided in March 2018 ahead of forthcoming large investments.

We believe there to be a high probability of support for Elering if needed, which reflects the company's strategic importance to the economy and its status as a provider of vital services. Furthermore, we understand that there are currently no privatisation plans and the Government of Estonia will remain the sole shareholder of Elering.

#### Liquidity analysis

As of 31 December 2018, Elering's cash balance amounted to €62.7 million.

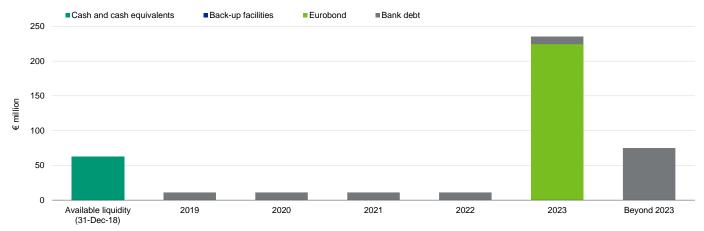
The company refinanced its seven-year €225 million bond due 2018 (with a coupon rate of 4.625%) through the issuance of a further five-year €225 million bond in May 2018 at a much lower rate of interest of 0.875%. Additionally, it funds itself through drawdowns under European Investment Bank and Nordic Investment Bank facilities, which have a scheduled amortisation profile (maturity dates between 2025 and 2033). Elering should also benefit from payouts from committed grants under the Connecting Europe Facility from the EU. The high level of investments in 2019 may lead to some moderate additional funding needs. We believe that these funding requirements can be addressed by the company's good access to debt funding as a fully state-owned operator and by making use of timing flexibility in its investment spending, if required.

We note that the European Investment Bank and Nordic Investment Bank facilities include the following financial covenants: equity/ assets of at least 30% and net debt/EBITDA of a maximum 7.0x. We expect the headroom under the covenants to remain adequate in the near-to-medium term.

Exhibit 10

Debt profile reflects the €225 million eurobond maturing in May 2023

Debt maturities and available liquidity



Source: Elering

# Rating methodology and scorecard factors

Elering is rated in accordance with the <u>Regulated Electric and Gas Networks</u> rating methodology, published in March 2017, and the <u>Government-Related Issuers</u> rating methodology, published in June 2018.

The scorecard-indicated outcome is A2, which is above the assigned BCA of baa1. Elering's BCA also reflects its relatively small size compared with that of its Western European peers, the concentration of its operations in a relatively small economy and the execution risks related to its substantial investment programme.

# Exhibit 11 Rating factors Elering AS

Regulated Electric and Gas Networks Industry Scorecard [1][2]	Curre FY 12/31		Moody's 12-1 Forward \ As of June 2	View
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	Measure	Score	Measure	Score
a) Stability and Predictability of Regulatory Regime	A	A	A	Α
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	А	Α
d) Revenue Risk	Α	A	Α	Α
Factor 2 : Scale and Complexity of Capital Program (10%)				
a) Scale and Complexity of Capital Program	Baa	Baa	Baa	Baa
Factor 3 : Financial Policy (10%)		_		
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) FFO Interest Coverage (3 Year Avg)	6.1x	Aa	22x - 27x	Aaa
b) Net Debt / Fixed Assets (3 Year Avg)	36.5%	Aa	35% - 39%	Aa
c) FFO / Net Debt (3 Year Avg)	18.6%	Α	13% - 16%	Baa
d) RCF / Net Debt (3 Year Avg)	10.3%	Baa	8% - 10%	Baa
Rating:				
Scorecard-indicated outcome from Grid Factors 1-4		A2		A2
Rating Lift	-	-	-	-
a) Scorecard-indicated outcome from Grid		A2		A2
b) Actual Baseline Credit Assessment				baa1
Government-Related Issuer	Factor			
a) Baseline Credit Assessment	baa1			
b) Government Local Currency Rating	A1			
c) Default Dependence	Very High		-	
d) Support	High			
e) Final Rating Outcome	A2			

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2018. [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

# **Ratings**

Exhibit 12

Category	Moody's Rating
ELERING AS	
Outlook	Stable
Issuer Rating -Dom Curr	A2
Senior Unsecured -Dom Curr	A2

# Appendix Exhibit 13

Estonia's electricity transmission system and location of the third Estonia-Latvia interconnection project





Sources: ENTSO-E, Elering

Exhibit 14 Gas transmission system in the Baltics and location of the Balticconnector project



Source: Baltic Connector Oy

Exhibit 15 **Elering AS** Select historical Moody's financial data

(in EUR Thousands)	2014	2015	2016	2017	2018
Income Statement					
Revenue	129,229	127,001	134,012	130,349	142,967
% Change In Sales (YoY)	-3.4%	-1.7%	5.5%	-2.7%	9.7%
EBITDA	82,163	77,080	76,551	68,265	65,947
EBITDA Margin %	63.6%	60.7%	57.1%	52.4%	46.1%
EBIT	50,766	39,749	37,895	33,216	31,021
EBIT Margin %	39.3%	31.3%	28.3%	25.5%	21.7%
Interest Expense	12,049	12,014	11,810	11,526	7,645
Net Income	39,140	22,480	18,411	16,776	18,428
Balance Sheet					
Cash & Cash Equivalents	31,869	60,489	52,997	121,997	62,716
Current Assets	74,272	91,349	105,001	153,439	101,925
Net Property Plant and Equipment	709	766	754	749	832
Non-Current Assets	714,349	771,614	800,823	758,433	847,319
Total Assets	788,621	862,963	905,824	911,872	949,244
Current Liabilities	30,285	29,117	33,668	268,824	39,563
Long-Term Debt-Gross	348,425	380,701	369,829	364,863	354,810
Non-Current Liabilities	445,094	504,877	523,354	297,156	525,033
Total Liabilities	475,379	533,994	557,022	565,980	564,596
Total Equity	313,242	328,969	348,802	345,892	384,648
Total Liabilities & Equity	788,621	862,963	905,824	911,872	949,244
Cash Flow					
Funds From Operations	69,029	58,898	55,826	50,569	52,117
Cash Flow From Operations	60,586	56,490	57,180	59,173	34,459
Capital Expenditures	64,849	-4,207	13,800	4,726	104,856
Dividend		20,000	31,000	20,000	20,000
RCF	69,029	38,898	24,826	30,569	32,117
FCF	-4,263	40,697	12,380	34,447	-90,397
FFO / Net Debt	21.8%	18.4%	17.6%	20.8%	17.8%
RCF/ Net Debt	21.8%	12.1%	7.8%	12.6%	11.0%
FCF / Net Debt	-1.3%	12.7%	3.9%	14.2%	-30.9%
Interest Coverage					
EBITDA / Interest Expense	6.8x	6.4x	6.5x	5.9x	8.6x
(FFO + Interest) / Interest Expense	6.7x	5.9x	5.7x	5.4x	7.8x
Leverage					
Debt / EBITDA	4.24x	4.94x	4.83x	5.34x	5.38x
Net debt / EBITDA	3.85x	4.15x	4.14x	3.56x	4.43x
Net Debt / Fixed Assets	44.6%	41.8%	42.0%	32.4%	35.1%

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

<sup>(\*)</sup> Capital expenditure is net of EU grants and cross-border congestion fees. Source: Moody's Financial Metrics™

Exhibit 16
Elering AS
Peer comparison

	Elering AS Fingrid Oyj			Statnett SF CEPS, a.s.					Eurogrid Gmb	Н					
		A2 Stable			A1 Stable			A2 Stable			A1 Positive			Baa1 Stable	
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE
(in USD million)	Dec-16	Dec-17	Dec-18	Dec-16	Dec-17	Dec-18	Dec-16	Dec-17	Dec-18	Dec-15	Dec-16	Dec-17	Dec-16	Dec-17	Dec-18
Revenue	148.3	147.3	168.8	648.5	759.3	1,007.1	767.5	859.8	1,063.8	507.4	516.9	608.2	10,438.0	11,402.8	12,176.7
EBITDA	84.7	77.1	77.9	281.1	303.9	354.6	408.5	475.6	653.7	148.8	165.1	236.5	402.6	865.8	778.2
EBITDA margin %	57.1%	52.4%	46.1%	43.3%	40.0%	35.2%	53.2%	55.3%	61.4%	29.3%	31.9%	38.9%	3.9%	7.6%	6.4%
Total Debt	390.1	438.1	405.6	1,196.5	1,333.0	1,240.5	3,518.7	4,450.7	4,902.9	255.7	233.5	261.4	3,037.9	3,450.1	3,287.6
Net Debt	334.2	291.6	333.9	1,112.4	1,232.4	1,143.0	3,180.5	4,186.3	4,501.6	154.2	203.6	212.4	1,748.4	1,761.1	1,484.1
(FFO + Interest Expense) / Interest Expense	5.7x	5.4x	7.8x	11.1x	13.2x	15.0x	6.3x	5.5x	6.5x	86.3x	77.5x	107.9x	5.8x	4.4x	6.0x
FFO / Net Debt	17.6%	20.8%	17.8%	19.9%	21.5%	24.2%	10.6%	8.4%	11.3%	87.5%	73.3%	106.6%	17.6%	15.9%	24.0%
RCF / Net Debt	7.8%	12.6%	11.0%	11.3%	11.9%	6.9%	9.3%	7.4%	10.5%	64.0%	61.8%	95.5%	11.6%	9.1%	15.7%
Net Debt / Fixed Assets	42.0%	32.4%	35.1%	61.5%	60.3%	60.3%	64.5%	69.7%	66.6%	11.7%	15.1%	12.7%	39.7%	32.6%	26.9%
Net Debt / EBITDA	3.9x	3.8x	4.3x	4.0x	4.1x	3.2x	7.8x	8.8x	6.9x	1.0x	1.2x	0.9x	4.3x	2.0x	1.9x

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. FYE = Financial Year-End Source: Moody's Financial Metrics  $^{\text{TM}}$ 

Exhibit 17
Elering AS
Adjusted net debt calculation

(in EUR Millions)	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018
As Reported Debt	312.4	347.9	379.2	367.4	322.3	353.7
Operating Leases	0.6	0.6	1.5	2.4	2.6	1.1
Moody's-Adjusted Debt	313.0	348.4	380.7	369.8	324.9	354.8
Cash & Cash Equivalents	1.1	31.9	60.5	53.0	82.0	62.7
Non-Standard Adjustments					-40.0	
Moody's-Net Debt	311.8	316.6	320.2	316.8	202.9	292.1

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Exhibit 18
Elering AS
Adjusted EBITDA calculation

(in EUR Millions)	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018
As Reported EBITDA	77.1	82.1	78.6	76.0	67.7	65.7
Operating Leases	0.1	0.1	0.4	0.6	0.7	0.3
Unusual	0.0	0.0	-1.9	0.0	-0.1	0.0
Moody's-Adjusted EBITDA	77.2	82.2	77.1	76.6	68.3	65.9

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

# Moody's related publications

#### **Rating Action**

» Moody's upgrades Elering's ratings to A2; stable outlook, 11 September 2015

#### **Outlook**

» Regulated electric & gas networks - EMEA: 2019 outlook stable reflecting predictable regulation, but low allowed returns persist, 21 November 2018

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.

#### **Endnotes**

1 Estonia's projects are part of a broader agreement signed in 2018 among Poland, Estonia, Lithuania and Latvia through which the Baltics will be connected to continental Europe through Poland by 2025. As part of the project, capacity on the LitPol interconnector between Lithuania and Poland will expand from the current 500 MW to 2 GW by 2025. These countries also plan to build a subsea cable to improve integration, as a single connection to the European grid could threaten Baltic security of supply if there were an outage.

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