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CREDIT OPINION
3 May 2023

Update

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RATINGS

EPSO-G UAB

Domicile	Vilnius, Lithuania
Long Term Rating	Baa1
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

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

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EPSO-G UAB

Update to credit analysis

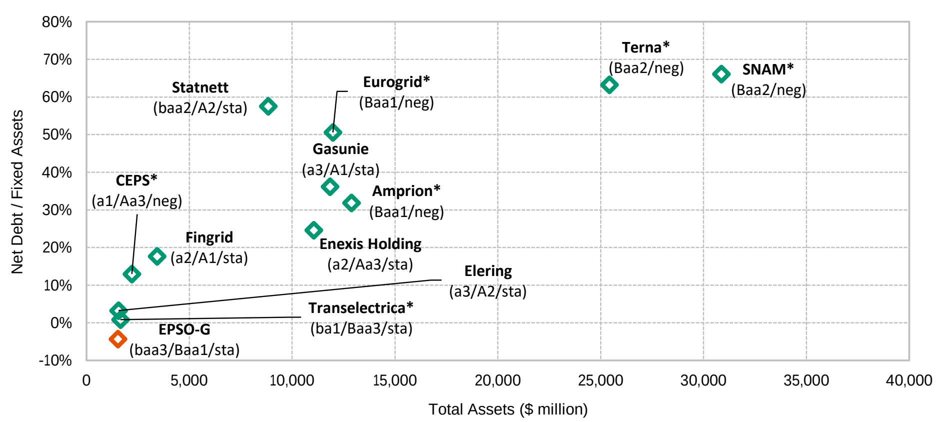
Summary

EPSO-G UAB's (EPSO-G, Baa1 stable) credit profile is underpinned by the low business risk profile of its monopoly transmission network operations; a supportive, well-developed yet evolving regulatory framework in Lithuania; and a solid financial profile, reflected in strong funds from operations (FFO)/net debt that was negative in 2022 because of excess cash over debt. However, credit metrics will likely weaken over the coming years because of the partly debt-funded planned large investment programme.

At the same time, EPSO-G's credit quality is constrained by the group's small size, compared with its Western European peers (see Exhibit 1), with total reported assets of €1,426 million as of 31 December 2022; some execution risks related to the planned significant capital spending programme, which focuses on the synchronisation of the country's electricity grid with the Continental European Network (CEN synchronisation); and the structural subordination of EPSO-G's creditors because the company primarily relies on its operating, debt-bearing subsidiaries Litgrid AB (Litgrid) and AB Amber Grid (Amber Grid) for its cash flow.

EPSO-G's credit profile benefits from our expectation of a strong probability of support from its 100% ultimate owner, the Government of Lithuania (A2 stable).

Exhibit 1
EPSO-G is small compared with its European peers, but benefits from relatively low leverage
Total assets versus net debt/fixed assets, both Moody's-adjusted



[1] Ratings are expressed as the Baseline Credit Assessment (BCA), if applicable, and assigned final ratings. [2] Asterisk indicates the use of 2021 numbers where 2022 accounts or Moody's-adjusted metrics are not yet available.
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
- Our expectation of a strong likelihood of government support because of EPSO-G's strategic importance to Lithuania's economy

Credit challenges

- Large planned capital spending, which weigh on key credit metrics, mitigated by partial funding from EU grants and congestion income
- Execution risks related to capital spending, mitigated by the company's successful track record of completing larger projects, risk sharing with partners and performance guarantees from contractors and suppliers

Rating outlook

The stable rating outlook reflects our expectation that the company will be able to maintain FFO/net debt sustainably above 12%.

Factors that could lead to an upgrade

The rating could be upgraded if EPSO-G were to consistently maintain FFO/net debt of at least 15% and maintain net debt/fixed assets below 60%, further underpinned by the absence of significantly adverse changes in the regulatory framework.

Factors that could lead to a downgrade

The rating could be downgraded if FFO/net debt were to decline below 12% on a sustained basis. Downward pressure could also be exerted on the rating as a result of a deterioration in the credit quality of the Government of Lithuania; a reduction in the government support assumptions currently incorporated into our assessment; or a significantly unfavourable change in the regulatory framework, leading to a significant increase in the company's business risk.

Key indicators

Exhibit 2
EPSO-G UAB

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	12 - 18 month Forward View
(FFO + Interest Expense) / Interest Expense	19.4x	16.5x	29.6x	36.2x	1.7x	6x - 18x
Net Debt / Fixed Assets	67.4%	59.2%	62.8%	35.9%	-4.3%	27% - 36%
FFO / Net Debt	14.7%	12.6%	17.3%	30.8%	-7.4%	13% - 46%
RCF / Net Debt	14.3%	12.3%	17.0%	30.3%	-2.9%	13% - 46%

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 User's Guide.
Source: Moody's Financial Metrics™

Profile

Lithuania-based, fully state-owned EPSO-G UAB (EPSO-G) was established in 2012 and is the holding company for Lithuania's transmission system operators (TSOs) Litgrid for electricity and Amber Grid for gas. The company holds majority stakes in Litgrid (97.5%) and Amber Grid (96.6%), while both companies remain listed on the Nasdaq Baltic stock exchange. As of 02 May 2023, the market capitalisation of Litgrid was around €360 million and that of Amber Grid was about €220 million.

Other subsidiaries include Tetas UAB (100%), a provider of grid development and maintenance services; Baltpool UAB (67%), an exchange for timber and biomass and administrator of Lithuania's renewables support scheme; and Energy Cells UAB (100%), a company setting up a 200 megawatt (MW) battery energy storage facility. In 2022, EPSO-G further acquired for around €14 million a 39.6% stake in TSO Holding AS, which owns a 34% stake in Nord Pool Holding AS, the 100% owner of the electricity exchange

Nord Pool AS, from Litgrid, following Litgrid's purchase of a 37.6% stake from the Danish and Finish TSOs Energinet and Fingrid Oyj (A1 stable).

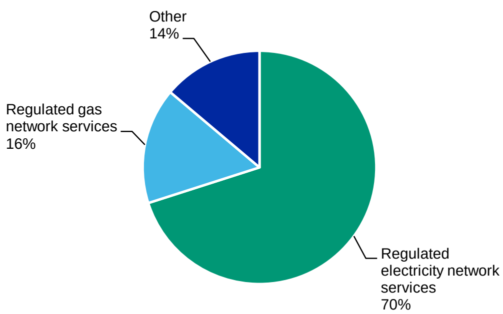
In April 2023, the shareholder meeting of Amber Grid approved the sale of 66% of the shares in GET Baltic UAB, an electronic natural gas exchange, to the European Energy Exchange (EEX) as a strategic partner for €6.5 million. A put option enables Amber Grid to sell the remaining shares to EEX at a later stage.

The TSOs among them account for nearly all of the group's adjusted EBITDA[1] (see Exhibit 5). EPSO-G's role is to supervise the implementation of Lithuania's energy policy, which comprises the development of the transmission infrastructure by the TSOs and their management on behalf of the government, in order to achieve the overarching goals of security of supply, market integration and transformation of the domestic energy sector.

Exhibit 3

Electricity transmission accounts for the bulk of EPSO-G's earnings...

Revenue/other income breakdown



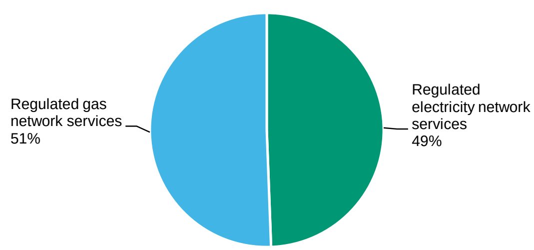
Gross presentation of revenue before elimination of inter-segment transactions

Source: EPSO-G annual reports

Exhibit 4

...and a substantial part of EBITDA

Adjusted EBITDA breakdown



Aggregate EBITDA shown (around €69 million) does not include results from other activities and consolidation effects (total around -€6 million)

Source: EPSO-G annual reports

Given Lithuania's location as the southernmost Baltic country, its energy transmission infrastructure connects the region with Continental Europe through electricity and gas interconnection points with Poland — namely the 500 MW LitPol link for electricity and the bidirectional Gas Interconnector Poland-Lithuania (GIPL), with an annual capacity of 2.4 billion cubic meters (bcm) to Lithuania and 1.9 bcm to Poland — as well as with the Nordic countries, through the 700 MW NordBalt power interconnector to Sweden.

Detailed credit considerations

Low business risk profile, underpinned by a supportive regulatory framework

EPSO-G's credit profile is underpinned by the regulated income earned by Litgrid's and Amber Grid's electricity and gas transmission assets. Both companies own their respective assets and the operational licences are granted in perpetuity. Electricity and gas network operations are generally characterised by low business risk because of their monopoly nature and the cash flow visibility stemming from regulated tariffs.

Litgrid's and Amber Grid's tariffs are regulated by the National Energy Regulatory Council (NERC), the independent national regulator in Lithuania, under an incentive-based hybrid price-cap regime for electricity transmission and under an incentive-based revenue-cap regime for gas transmission. The regime is relatively transparent as the NERC publishes the applied methodologies, revenue components of the tariff decisions, as well as the return calculation and the regulatory asset base (RAB), and also employs public consultations when methodology or tariff changes are planned. While the framework keeps evolving, network regulation is independent and well developed.

Exhibit 5
Stability and predictability of regulatory regime by country
Lithuania scores A

Aaa	Aa	A	Baa
Great Britain[1]	Czech Republic	Belgium - Flanders	Belgium - Wallonia
Ireland (RoI & NI)	Finland	Estonia	Poland
Norway	France	Germany	Slovakia
	Italy	Portugal	Spain
	Netherlands[2]	**Lithuania**	

[1] Only onshore incumbent network operators, excludes Offshore Transmission Operators (OFTOs) (Aa). [2] Excludes N.V. Nederlandse Gasunie (A1 stable) and TenneT Holding B.V. (A3 stable).
Source: Moody's Investors Service

Regulatory principles and rules for both TSOs are generally fairly similar, and for both, Litgrid and Amber Grid, five-year regulatory periods apply. In 2022, Litgrid entered the first year of the regulatory period through 2026 while Amber Grid's current period will be completed at the end of the current year, having started in 2019.

The NERC applies a building block approach with a timely, inflation-adjusted recovery of operating expenses, which are subject to moderate efficiency adjustments (up to 1.5% per annum). True-ups occur with a two-year time lag as is common in other European regulatory regimes. Expected grid losses are included in tariffs based on market prices, with any price and volume deviations offset in future tariff decisions and thus can be considered pass-through costs.

Volume risk for Litgrid as an electricity TSO is limited despite a flow-based share of more than 80% of tariffs in allowed revenue in 2023 because a true-up occurs in the next tariff period (calendar year) unless the adjustment is deemed so significant by the NERC that it is spread over several years. By contrast, Amber Grid's tariffs are largely (90% in 2023) capacity based and thus have low volume exposure. For further detailed information on the Lithuanian regulatory framework please refer to EPSO-G's Credit Opinion published 10 May 2022.

Higher cost of debt will drive up returns on transmission assets

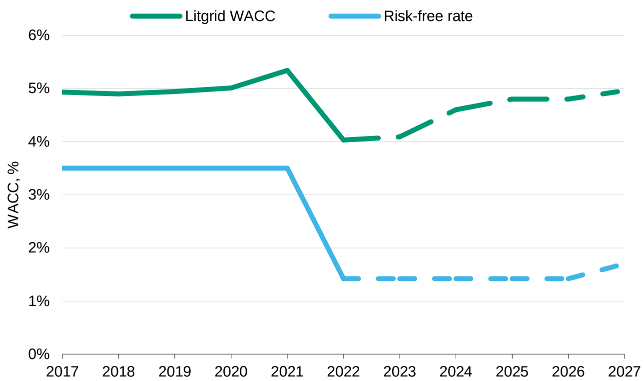
As part of their allowed revenue, the TSOs are allowed to realise a reasonable return, measured as pretax, nominal weighted average cost of capital (WACC) on the RAB. The returns that are actually incorporated into the tariff calculation are calculated on the basis of the RAB at the beginning of a given tariff period (calendar year). The WACC is fixed for the entire five-year regulatory period and only adjusted annually for costs of debt. It is set at 4.09% for Litgrid and 3.96% for Amber Grid in 2023.

A key component of the WACC is the risk-free rate, which in Lithuania is based on the average weighted yields of long-term[2] government bonds, auctioned over the past 10-year period. With the country's adoption of the euro as currency in 2015, the risk-free rate decreased significantly. Since the risk-free rate is kept constant over the regulatory period, the lower rate only was only incorporated into the WACC calculation for the period following the currency switch, which for Litgrid started in 2016 and for Amber Grid in 2019. Given the rise in yields since late 2021, we expect Amber Grid to benefit from this development from the next period starting in 2024.

Another significant methodology change was the introduction in 2020 of a new gearing ratio of 50% (previously 60%) and a fixed 5% equity-risk premium, replacing a reference to US premium levels, and a slight adjustment to the benchmarking of cost of debt. Because these changes are effective only for periods that started in 2021 or later, Litgrid has been affected earlier than Amber Grid where the new parameters will only feature in the applicable WACC from 2024.

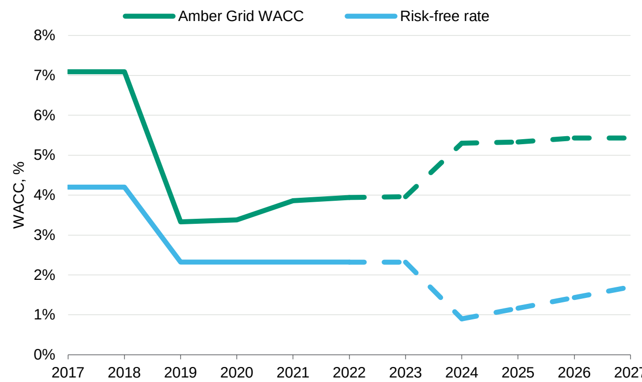
In 2021, the NERC adopted provisions to assign on a discretionary basis an additional 1% premium to certain investment projects if these are deemed innovative; contributing to climate change mitigation; or very risky. The practical relevance of the premium incentive will be seen over the coming years, but we expect the impact on EPSO-G's earnings to be limited because most of the capital spending is spent on the synchronisation with the Western European electricity system or on relatively low-risk, general modernisation and maintenance projects, which are difficult to link specifically to climate change mitigation.

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



Sources: NERC, EPSO-G and Moody's Investors Service

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



Sources: NERC, EPSO-G and Moody's Investors Service

Growth in the asset base will be driven by investments in electricity transmission

The RAB is adjusted annually by additions of eligible grid investments, divestments and depreciation. As a rule, assets accrue to the RAB upon commissioning, although in the case of strategic investments that for example contribute to the achievement of domestic or EU energy objectives, the NERC may allow to include such assets already in the construction phase. Generally, investments require the NERC's approval based on yearly investment plans, which are complemented by a biannually updated 10-year development plan.

For Litgrid, investments in certain lines and transformers are further incentivised using the long-run average incremental cost (LRAIC) approach. The LRAIC scheme is based on the notion of an optimised domestic electricity grid architecture, a theoretical construct with roots in telecommunication grid design, and rewards investments in grid assets that align with this approach. The eligible investment expenditure is determined ex-ante for the entire regulatory period and features on a pro rata basis in the tariff calculation, which amounts to a pre-funding at current cost in contrast to ex-post compensation through depreciation of historical values as part of the tariffs.

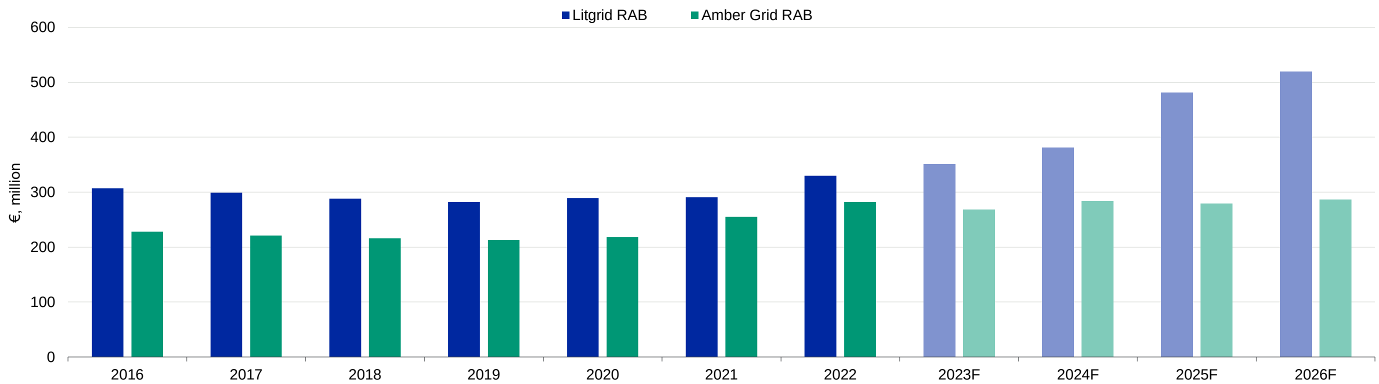
The latter is the approach for Litgrid's non-LRAIC capital spending and all capital spending of Amber Grid. Depreciation applied to the electricity and the gas RAB is straight-line and based on regulatory values, mostly aligning with accounting depreciation. Assets financed with investment grants or, in the case of Litgrid, income from cross-border capacity auctions (congestion management revenues or congestion fees) do not accrue to the RAB.

We expect the group's consolidated RAB over the coming years to grow mostly as a result of investments into the power transmission grid, which are needed for the integration with the Western European networks and to accommodate renewable capacities that are necessary to achieve a higher share of domestically produced electricity and of renewables within final electricity consumption by 2030. Seeking to contribute to EU targets, the Lithuanian government has committed to raise the share of renewables in final electricity and final energy consumption in 2030 to 45% in both cases, up from 20% respectively 27% in 2020. Investment in the gas transmission grid over the next few years will likely be on a similar level to depreciation and focus on maintenance and modernisation measures, which is reflected in our expectation of a relatively stable gas RAB.

Exhibit 8

EPSO-G group's consolidated regulated asset base will primarily grow through investments in the electricity grid

Litgrid and Amber Grid RAB development



RAB values are as of beginning of the year; values for 2022 and 2023 are not final values but those used for tariff calculations.
Sources: NERC, EPSO-G and Moody's Investors Service

Sizeable investment programme through 2030 brings some execution risk; funding by EU grants and congestion fees will contain leverage

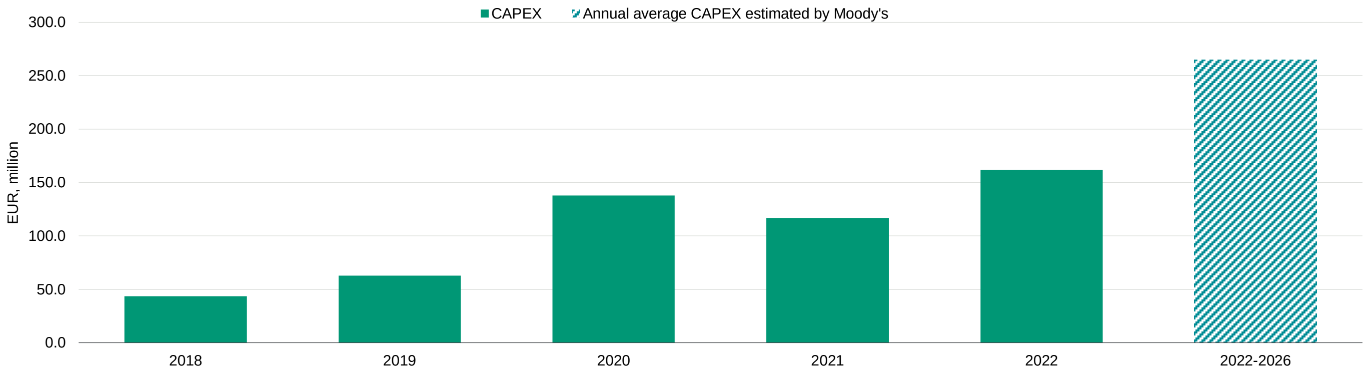
EPSO-G forecasts investments for the group of €2.2 billion between 2023 and 2030, up significantly from last year's projection of around €1.6 billion for 2022-30[3]. The increase is almost completely driven by higher investments at Litgrid, bringing the overall share of capital spending for electricity-related projects to more than 85% of the forecast capital spending through 2030.

Lithuania's renewables ambitions that require modernised and expanded grid capacities account for around 45% of the increased investment budget 2023-30, while the CEN synchronisation (see the next paragraph) takes up around 40%. Grid modernisation will require additional connections and grid reinforcements, which in conjunction with higher material costs, have added around €250 million of incremental capital spending compared with the 2022 forecast. The grid investments are complemented by battery storage to ensure grid stability. For that purpose, a 200 MW battery at a cost of some €100 million will be completed by mid-2023; the project is housed in EPSO-G's Energy Cells UAB subsidiary and at least temporarily benefits from regulated remuneration based on a RAB approach.

The major investment undertaking over the period to 2025 will be the CEN synchronisation, also called the Baltic Synchronisation project, which will promote Lithuania's electricity integration with its EU neighbours and Western Europe. As of today, Lithuania and its Baltic peers Estonia (A1 stable) and Latvia (A3 stable) are still part of the unified energy system of Russia, Belarus (Ca negative), Estonia, Lithuania and Latvia (BRELL). The aim of the Baltic Synchronisation project is the synchronisation of the Baltic countries' electricity systems with the CEN, the continental European frequency area, by year-end 2025 and the complete desynchronisation from the IPS/UPS system controlled by Russia[4].

For Litgrid, estimates of total capital spending for this project have been raised from some €580 million between 2022 and 2026 to potentially around €850 million-€900 million from 2023 through 2030. The main reason are high cost expectations, following procurement tenders, in particular for the single largest undertaking, the Harmony Link. Litgrid and its Polish TSO counterpart are discussing ways to reduce spending, which may lead to an implementation of this subsea cable link only after 2025.

Exhibit 9
Synchronisation with the CEN is the main driver of the high level of EPSO-G's investments until 2026



Sources: EPSO-G and Moody's Investors Service

Amber Grid's investments in gas assets are unlikely to include significant expansions of the natural gas infrastructure since the commissioning of the GIPL connector in 2022 has completed Lithuania's regional gas integration and the company has started to focus on green hydrogen projects, aligned with its renewable expansion targets.

Funding for these investments comes from the TSOs' own cash flow, congestion fees, external debt and, to a significant degree, from EU grants. EPSO-G estimates its own financing needs at 60% of capital spending because some 20% would be paid from EU grants and the remainder (around 20%) from congestion fees, which result from cross-border electricity trading. The outlays for the Baltic Synchronisation project are covered at around 75% by the Connecting Europe Facility (CEF) for energy, with all necessary approvals for the CEF grants in place, based on original costs assessments. Against the backdrop of higher cost expectations, it should be noted that substantial deviations of capital spending budgets require the EU's approval to retain the same proportion of funding from grants. Any amount of capital spending not covered by EU funding or congestion revenue will be added to the respective RAB.

Given the significant volume of expenditure spread across a multitude of projects, we see some execution risks for EPSO-G and the TSOs because those are relatively small companies; however, this is mitigated by a track record of successfully completed larger projects over the past decade, the absence of technologically complex projects and the risk sharing with suppliers and contractors through performance bonds. In addition, the high share of non-recourse, non-debt funding from grants and congestion fees underpins a solid financial risk profile.

Leverage likely to remain within the guidance

In 2022, based on our adjustments, EPSO-G's key credit metrics were mainly influenced by a negative net debt position, or, in other words, a €30 million surplus of cash over debt, as cash amounted to around €250 million compared with adjusted gross debt of around €220 million as of year-end 2022. The surplus was mainly driven by record aggregate inflows from grants and congestion revenue of €380 million against €102 million in 2021.

The inflow of congestion revenue of more than €270 million, after €45 million in 2021, resulted from high power prices and cross-border price differentials to neighbouring price zones over 2022 in conjunction with scarce interconnection capacity. EPSO-G's improved cash position is only temporary because these income streams are subject to EU regulation and have to be used to reduce physical capacity constraints or need to be returned to end-users over time. The high prices for energy in 2022 were also the main reason for a steep decline in EPSO-G's FFO, which dropped to €2 million from €68 million in 2021, as high energy prices led to costs for grid losses and system services above the levels assumed in tariffs for 2022. In addition, regulatory true-ups for excess revenue, which occurred in both electricity and gas transmission and system services since 2018, weighed on earnings.

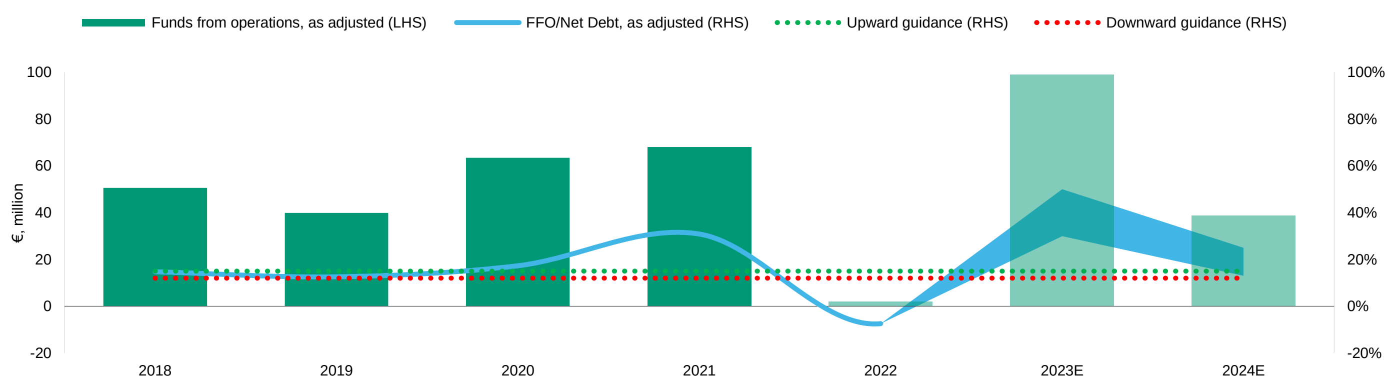
Given the substantial cash from congestion revenue and grants, EPSO-G's outflows for gross capital spending of €113 million (2021: €115 million) and gross debt reduction to €220 million from €262 million were comfortably covered despite low FFO, further underpinned by negligible dividend payouts remaining around €1 million, guided by government policy of capping distributions from net profits achieved through 2026 to the owner at 0.5%.

In 2023, FFO will improve above 2021 levels, driven mostly by an increase in the energy component in the TSOs' tariffs for 2023, which was determined in summer 2022 when energy prices were around their peak, while wholesale prices for electricity and gas have decreased since the start of 2023. However, the growth of FFO year over year will be dampened by further true-ups for excess revenue, which have occurred in both electricity and gas transmission and system services since 2018.

Given the significant accumulation of cash from congestion revenue, the NERC agreed with Litgrid to use €142 million in 2023 to replace regulated revenue that would otherwise have necessitated significant tariff hikes. This will lead to a significant reduction in the cash position because we expect flows from congestion income in the current year to be much lower than in 2022, against the backdrop of much lower electricity prices. In conjunction with an increase in capital spending, which may be ramped up to €250 million-€300 million annually in 2023 and 2024 to achieve the synchronisation with the CEN, which has a high political priority in Lithuania after Russia's invasion of Ukraine[5], leverage, measured as FFO/net debt, will return to historical levels. A large part of this expenditure is likely to be offset by inflows from grants and congestion fees, so we expect leverage, expressed as FFO/net debt, to remain above our guidance, noting that the exact timing of the flow of grants and the completion of capital spending projects is subject to some uncertainty.

Given the significant investment programme through 2025-26; the high share of funding through investment grants, which are mostly paid out ex post; the low predictability of congestion fee flows; and tariff true-ups, leverage is likely to fluctuate through 2025, when the Baltic Synchronisation project is planned to be completed. However, the approvals of the EU grants are now in place, reducing funding uncertainty, which is credit positive. We expect EPSO-G and the TSOs to use available flexibility in the timing of expenditure and drawdowns of grants to maintain a robust credit profile, which is further underpinned by continued dividend restraint from EPSO-G's state owner through at least 2026.

Exhibit 10
We expect FFO/net debt to remain above guidance through 2024



All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. 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. Net debt was negative in 2022.
Sources: Moody's Financial Metrics™ and Moody's Investors Service forward view

Net debt/fixed assets should increase gradually to around 50% through 2025, driven by a significant increase in debt, combined with the growth in fixed assets, which are recorded net of grants, resulting from the investment projects. The netting of grants will lead to a similar expected evolution of EPSO-G's net debt/RAB.

Government support considerations

EPSO-G's rating incorporates two notches of uplift from its standalone credit quality, expressed as a BCA of baa3. The uplift to the BCA reflects the combination of the credit quality of EPSO-G's 100% owner, the Government of Lithuania; the very high default dependence, resulting from the group's preponderance of domestic earnings and the exposure of the government and the company to common risks; and a strong likelihood of extraordinary support being provided by the Lithuanian government in case of financial distress, given the company's strategic importance to the domestic economy as the responsible party for energy infrastructure.

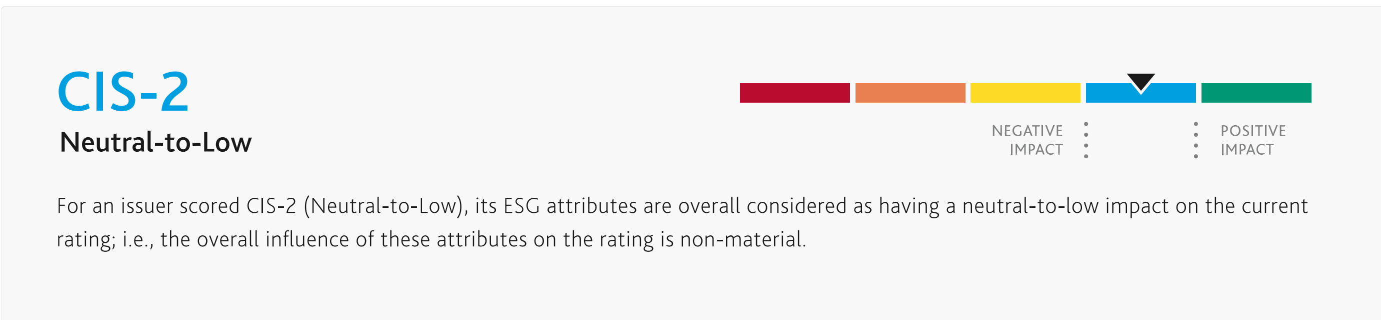
EPSO-G and its subsidiaries Litgrid, Amber Grid and Energy Cells are on a government list of strategically important companies for the security of energy supply but also for national security. The role of the company for the country is defined in a so-called "letter of expectations", issued by the government, which is reviewed annually and may be updated from time to time. The focus areas are Lithuania's energy independence from Russia and Belarus and integration with EU energy infrastructure, as well as the promotion of the energy transition in the country, in line with the EU's decarbonisation targets.

The main support for the company on an ongoing basis is the government's policy, enshrined in law, to extract barely any dividends through at least 2026. Furthermore, there are currently no privatisation plans, and we therefore expect the Government of Lithuania to remain the sole shareholder of EPSO-G.

ESG considerations

EPSO-G UAB's ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 11
ESG Credit Impact Score



Source: Moody's Investors Service

EPSO-G's ESG Credit Impact Score is low/neutral (**CIS-2**), indicating that its ESG attributes are not material for its credit rating. Its score reflects moderate environmental and social risk as well as low governance risks. The effect of ESG risks to the rating is mitigated by the expectation that its government shareholder would support the company, if this were to become necessary.

Exhibit 12
ESG Issuer Profile Scores

Source: Moody's Investors Service

Environmental

EPSO-G's moderately negative environmental risk (**E-3** issuer profile score) reflects the company's exposure to physical climate risk, as its electricity transmission grid assets are predominantly overground and thus may be affected by storms.

Social

EPSO-G's moderately negative social risk (**S-3** issuer profile score) reflects risks related to demographic & social trends, which include potential adverse regulatory decisions or government intervention in regulatory affairs. Lithuania's regulatory framework has allowed the company to recover its costs in a timely manner and also allowed the TSOs to earn adequate returns and displays a high degree of transparency, underpinned by the independence of the regulator.

Governance

EPSO-G's low/neutral governance risk (**G-2** issuer profile score) reflects our view of the company's solid governance structures, underpinned by a track record of noninterference by the shareholder and an independent regulatory regime. EPSO-G's financial policy is sound, with an adequate balance of shareholder and creditor interests. While EPSO-G has a status as a fully state-owned company, the company's boards have sufficient independence while the strategy is tightly linked to the domestic energy policy.

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

Liquidity analysis

EPSO-G's cash balance amounted to around €248 million as of 31 December 2022, driven largely by significant proceeds from congestion fees. The company, which is also managing the group cash pool, can also resort to committed, undrawn and freely available bilateral bank facilities in an aggregate amount of €90 million, which fall due in mid-2023 or beyond.

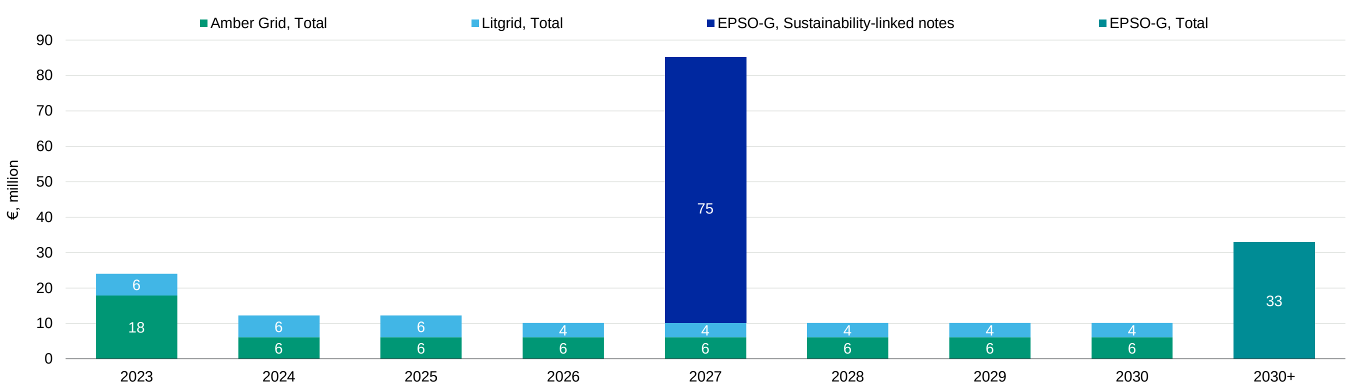
Over the next 12-18 months, we expect the company to be able fund its consolidated investments and scheduled debt repayments, which include around €12 million per year under various long-term loans granted by the European Investment Bank (Aaa stable) and the Nordic Investment Bank (Aaa stable) to the TSOs, as well as a €14 million bank loan due at Amber Grid in June 2023, from the existing cash position and bank lines in conjunction with the cash flow from regulated earnings, income from European grants and congestion fees. Given the time lag to receive the larger share of approved grants only upon project completion and the uncertainty of the size of congestion revenue, the exposure to funding risks is greater for EPSO-G and its subsidiaries than other European network operators where a larger share of investments is incorporated in tariffs.

With the exception of a €75 million sustainability-linked bond issued in May last year, EPSO-G has no external debt obligations. The bond carries a coupon of 3.117% and falls due in June 2027. Otherwise, the debt maturity profile of the group is rather balanced.

Exhibit 13

EPSO-G's bond maturity in 2027 is the only peak in an otherwise well-balanced debt maturity profile

Debt maturities as of 31 December 2022



Sources: EPSO-G and Moody's Investors Service

Structural considerations

Except for the aforementioned €75 million bond, EPSO-G has no outstanding external debt at the parent company level because all investments are funded at the operating company level and thus sit with the TSOs Litgrid and Amber Grid. Therefore, the creditors of EPSO-G are structurally subordinated to those of the operating companies.

While we acknowledge EPSO-G's control over the operating companies and the low-risk nature of their regulated monopoly businesses, the company's reliance on cash flow from the operating subsidiaries and the priority claim of lenders to their cash flow constitute an element of significant structural subordination, which is reflected in EPSO-G's BCA through downward notching.

Methodology and scorecard

EPSO-G is rated in accordance with the Regulated Electric and Gas Networks rating methodology, published in April 2022, and the Government-Related Issuers Methodology, published in February 2020.

The scorecard-indicated outcome is A3 (forward view), which is above the assigned BCA of baa3. EPSO-G's BCA also reflects its relatively small size compared with that of its continental European peers, the execution risks related to its substantial investment programme and the notching for structural subordination.

Exhibit 14

Rating factors

EPSO-G UAB

Regulated Electric and Gas Networks Industry [1][2]	Current FY 12/31/2022		Moody's 12-18 Month Forward View As of May 2023 [3]	
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	**Measure**	**Score**	**Measure**	**Score**
a) Stability and Predictability of Regulatory Regime	A	A	A	A
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	A	A
d) Revenue Risk	A	A	A	A
Factor 2 : Scale and Complexity of Capital Program (10%)				
a) Scale and Complexity of Capital Program	B	B	B	B
Factor 3 : Financial Policy (10%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) FFO Interest Coverage	19.1x	Aaa	6x - 18x	Aaa
b) Net Debt / Fixed Assets	30.0%	Aaa	27% - 36%	Aa
c) FFO / Net Debt	23.9%	A	13% - 46%	Aa
d) RCF / Net Debt	23.3%	Aa	13% - 46%	Aa
Rating:				
a) Scorecard-Indicated Outcome		A3		A3
b) Actual Rating Assigned				Baa1
Government-Related Issuer	**Factor**			
a) Baseline Credit Assessment	baa3			
b) Government Local Currency Rating	A2			
c) Default Dependence	Very High			
d) Support	Strong			
e) Actual Rating Assigned	Baa1			

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2022. [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 15

Category	Moody's Rating
EPSO-G UAB	
Outlook	Stable
Issuer Rating -Dom Curr	Baa1

Source: Moody's Investors Service

Appendix

Exhibit 16
EPSO-G UAB
Select historical Moody's financial data

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-22
INCOME STATEMENT					
Revenue	246	239	269	359	588
EBITDA	69	48	75	80	(11)
EBITDA margin %	28.2%	20.0%	27.9%	22.2%	-1.9%
EBIT	31	16	42	45	(46)
EBIT margin %	12.5%	6.7%	15.7%	12.5%	-7.9%
Interest Expense	3	3	2	2	3
Net income	30	11	39	38	(42)
BALANCE SHEET					
Cash & Cash Equivalents	10	13	5	41	248
Current Assets	144	154	152	311	515
Net Property Plant and Equipment	510	535	584	614	667
Non-Current Assets	541	565	635	652	706
Total Assets	685	719	787	962	1,426
Current Liabilities	176	193	181	445	700
Long-term Debt - Gross	347	330	352	262	220
Non-Current Liabilities	335	342	384	257	306
Total Liabilities	510	535	565	703	1,209
Total Equity	174	184	222	260	217
CASH FLOW					
Funds from Operations (FFO)	51	40	63	68	2
Cash Flow From Operations (CFO)	59	48	31	163	1
Dividends	2	1	1	1	1
Retained Cash Flow (RCF)	49	39	63	67	1
Capital Expenditures	(11)	(42)	(113)	(59)	(7)
Free Cash Flow (FCF)	47	5	(83)	103	(7)
FFO / Net Debt	14.7%	12.6%	17.3%	30.8%	-7.4%
RCF / Net Debt	14.3%	12.3%	17.0%	30.3%	-2.9%
FCF / Net Debt	13.6%	1.6%	-22.6%	46.7%	24.7%
INTEREST COVERAGE					
(FFO + Interest Expense) / Interest Expense	19.4x	16.5x	29.6x	36.2x	1.7x
EBITDA / Interest Expense	25.2x	18.6x	33.9x	41.2x	-3.5x
LEVERAGE					
Debt / EBITDA	5.1x	6.9x	5.0x	3.3x	-19.3x
Net Debt / EBITDA	5.0x	6.6x	4.9x	2.8x	2.5x
Net Debt / Fixed Assets	67.4%	59.2%	62.8%	35.9%	-4.3%

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 17
EPSO-G UAB
Peer comparison

	EPSO-G UAB Baa1 Stable			Elering AS A2 Stable			CEPS, a.s. Aa3 Negative			Fingrid Oyj A1 Stable			Statnett SF A2 Stable		
(in USD million)	FYE Dec-20	FYE Dec-21	FYE Dec-22	FYE Dec-20	FYE Dec-21	FYE Dec-22	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-20	FYE Dec-21	FYE Dec-22	FYE Dec-20	FYE Dec-21	FYE Dec-22
Revenue	307	424	619	156	238	408	657	642	818	779	1,291	1,913	1,121	1,623	2,323
EBITDA	86	94	(12)	80	58	61	275	229	306	255	278	245	753	940	1,234
Total Debt	455	298	234	407	367	335	302	367	422	1,438	1,317	1,127	5,777	5,663	4,666
Net Debt	449	251	(30)	345	248	37	153	274	248	1,284	1,067	344	5,535	5,216	4,344
(FFO + Interest Expense) / Interest Expense	29.6x	36.2x	1.7x	25.3x	20.2x	23.4x	60.9x	56.7x	52.5x	14.1x	18.0x	-1.6x	7.1x	11.7x	9.0x
Net Debt / Fixed Assets	62.8%	35.9%	-4.3%	29.2%	21.8%	3.2%	9.1%	14.4%	13.0%	60.6%	51.8%	17.7%	67.6%	63.1%	57.6%
FFO / Net Debt	17.3%	30.8%	-7.4%	22.0%	21.4%	169.9%	162.3%	80.5%	109.1%	16.6%	22.9%	-13.5%	11.6%	16.4%	21.3%
RCF / Net Debt	17.0%	30.3%	-2.9%	12.9%	16.9%	169.9%	130.6%	46.5%	72.3%	2.5%	8.5%	-54.7%	8.9%	14.1%	19.6%

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™

Exhibit 18
EPSO-G UAB
Adjusted net debt calculation

(in EUR million)		FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-22
As Reported Total Debt		197	174	223	178	220
	Contingent Consideration	157	157	149	84	0
Moody's Adjusted Total Debt		354	330	372	262	220
	Cash & Cash Equivalents	(10)	(13)	(5)	(41)	(248)
Moody's Adjusted Net Debt		344	317	367	221	(29)

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 19
EPSO-G UAB
Adjusted EBITDA calculation

(in EUR million)		FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-22
As Reported EBITDA		68	48	75	80	(11)
	Unusual Items - Income Statement	1	0	0	0	0
Moody's Adjusted EBITDA		69	48	75	80	(11)

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

Endnotes

1 Adjusted EBITDA reflects earnings adjusted for regulatory account movements and deviations of actual revenue and costs from regulatory allowances in the reporting year.

2 Eligible bonds need to have maturities of at least 3,468 days, which equals 9.5 years.

3 EPSO-G's forecast was actually for 2020-30, announcing €1.8 billion of capital spending, but around €200 million from this amount has already been spent in 2020 and 2021.

4 Lithuania'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, the capacity between Lithuania and Poland will expand from the current 500 MW (LitPol link) by building a 700 MW subsea cable, the so-called Harmony Link. This project serves to improve integration because a single connection to the European grid could threaten the security of supply in the Baltic region if there is an outage.

5 In April 2023, Litgrid successfully conducted a large-scale exercise to test the operation of its electricity system in isolation from BRELL, the electricity system synchronised with Russia, Belarus and the other Baltic countries. Estonia and Latvia indicated that they need more time and did not join the test. All three Baltic countries at this time remain part of the BRELL system, which as of now continues to operate smoothly.

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