# MOODY'S

#### **CREDIT OPINION**

23 September 2021

#### **Update**



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#### **RATINGS**

#### Energa S.A.

Domicile	Gdansk, Poland
Long Term Rating	Baa2
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.

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### Energa S.A.

Update to credit analysis

#### **Summary**

Energa S.A.'s (Energa) credit profile is underpinned by the low business risk profile of its network activities, which benefit from a relatively well-established regulatory framework and accounted for around 80% of group EBITDA over the 12 months to June 2021; and the company's moderate leverage, with funds from operations (FFO)/net debt forecast at 24%-30% over the next 12-18 months. These positives are balanced by the higher business risk profile of the group's generation and supply businesses; a structurally short generation/ supply position; and execution risks related to a sizeable PLN31.5 billion investment programme for 2021-30, which is likely to increasingly weigh on the company's currently strong financial profile.

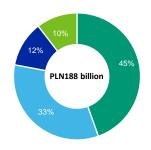
Finally, our assessment of Energa's credit profile also factors in the credit quality of its majority shareholder, oil, gas and petrochemicals group <u>Polski Koncern Naftowy ORLEN S.A.</u> (PKN ORLEN, Baa2 positive).

#### Exhibit '

In an enlarged PKN ORLEN group, Energa would be the smallest unit in terms of assets...

Total assets in 2020

PKN ORLEN PGNiG Grupa Lotos S.A. Energa



Pro forma aggregation without adjustments for the existing relationships between the group companies.

Sources: Companies' reports and Moody's Investors Service

Exhibit 2

... also ranking behind PKN ORLEN and PGNiG in terms of earnings EBITDA in 2020

PKN ORLEN PGNiG Grupa Lotos S.A. Energa



Pro forma aggregation without adjustments for the existing relationships between the group companies.

Sources: Companies' reports and Moody's Investors Service

#### **Credit strengths**

- » Regulated distribution operations underpin cash flow stability, supported by the consistent regulatory framework over 2016-21.
- » Earnings from thermal and renewable generation are underpinned by renewable support schemes and, from 2021, by capacity payments for existing and planned power plants.
- » Energa's current moderate leverage supports its substantial planned investment programme.

#### **Credit challenges**

- » The sales segment is exposed to price volatility stemming from a substantial short position in own generation.
- » The company is exposed to execution risks related to its large investment programme, though partly mitigated by risk sharing with other PKN ORLEN group entities in some generation projects.

#### Rating outlook

The outlook on Energa's Baa2 ratings is stable, reflecting the potential improvement in PKN ORLEN's credit quality, which would benefit Energa in terms of support capacity, if needed. Such an improvement is likely if the planned acquisitions of Grupa Lotos S.A. (Lotos) and Polskie Gornictwo Naftowe I Gazownictwo S.A. (PGNiG, Baa2 stable) are successfully completed, leading to higher diversification and scale of the enlarged PKN ORLEN group.

#### Factors that could lead to an upgrade

Energa's ratings could be upgraded if PKN ORLEN's rating was upgraded and, concurrently, Energa's standalone credit quality were to improve significantly; or the company were to benefit from tangible support from its parent company.

#### Factors that could lead to a downgrade

The ratings could be downgraded if PKN ORLEN's rating was downgraded or its rating outlook deteriorated significantly; the factors that mitigate PKN ORLEN's ability to take measures to the detriment of Energa's creditors were to disappear; the integration of Energa into the PKN ORLEN group appeared likely to have a significant adverse effect on its credit profile; or Energa's credit metrics, expressed as FFO/net debt, remained below the mid-20s in percentage terms on a sustained basis.

#### **Key indicators**

Exhibit 3 Energa S.A.

	Dec-17	Dec-18	Dec-19	Dec-20	LTM Jun-21	Moody's 12-18 Month Forward View
FFO Interest Coverage	6.4x	6.8x	5.1x	7.7x	13.2x	6x - 10x
Net Debt / Fixed Assets	31.6%	32.4%	42.7%	43.8%	38.4%	43% - 48%
FFO / Net Debt	37.1%	40.9%	21.3%	26.6%	41.4%	20% - 28%
RCF / Net Debt	35.2%	40.9%	21.3%	26.6%	41.4%	20% - 28%

All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for non-financial corporations.

Moody's forward view is Moody's opinion and does not represent the views of the issuer.

TM Jun-21 FFO Interest Coverage ratio has been calculated using interest paid for the period Source: Moody's Financial Metrics™

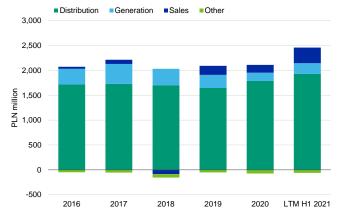
#### **Profile**

Energa S.A. (Energa) is the holding company for a utility group covering north-central Poland. The group's businesses comprise electricity distribution grid operations; power generation, which is mainly based on coal, including the cogeneration of heat and power, and a diversified renewable energy portfolio; and electricity supply to more than three million customers.

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.

Energa's largest segment constitutes the operation of its electricity distribution grid, which accounted for around 80% of the group's EBITDA for the 12 months that ended 30 June 2021. These operations are conducted by ENERGA-OPERATOR S.A., which is the third-largest distribution system operator in Poland, in terms of the volume of energy distributed through the grid to end-users. With a total installed capacity of almost 1.4 gigawatts (GW), Energa's generation segment is relatively small in the context of the Polish market, which has a total installed capacity of around 50 GW. Most of the group's generation mix is based on coal, with the remainder being hydro, biomass, wind and solar.

Exhibit 4
Strong contribution from regulated distribution supports Energa's credit profile
EBITDA breakdown, as reported



Sources: Company reports and Moody's Investors Service

# Exhibit 5 Energa is the third-largest distribution grid operator in Poland Distributed electricity volume in terawatt hours (TWh) by operator in the 12 months that ended June 2021



Sources: Moody's Investors Service and company reports

Energa (market capitalisation as of 22 September 2021: PLN3.34 billion, equalling around €720 million) has been listed on the Warsaw Stock Exchange since December 2013. In 2020, PKN ORLEN became Energa's majority owner, currently holding 90.92% of its capital and 93.28% of the voting rights with the remainder being free float.

#### **Detailed credit considerations**

## Energa stands to benefit from a stronger credit profile of an enlarged PKN ORLEN group through enhanced financial support capacity

Energa's majority owner PKN ORLEN is a key actor in the ongoing consolidation process of the Polish energy sector, orchestrated by the <u>Government of Poland</u> (A2 stable). PKN ORLEN is preparing to take over two companies under majority state ownership: PGNiG, Poland's dominant natural gas company, and Lotos, the country's second-largest refining company. To smoothen the takeover process, PKN ORLEN, PGNiG, Lotos and the State Treasury signed a cooperation agreement in May 2021, confirming all parties' aim to structure the transactions as share deals.

PKN ORLEN is working to fulfil certain conditions imposed by the EU Commission for the acquisition of Lotos by mid-November 2021, which implies that the transaction is unlikely to be completed this year. As for the PGNiG transaction, the current majority owner, the Polish government, expects the closing in the first half of 2022. Although certain legal and antitrust issues have yet to be resolved, we consider the successful completion of the takeovers as likely. For more details on the takeovers, see <a href="the latest Credit Opinion of PKN ORLEN">the latest Credit Opinion of PKN ORLEN</a>.

The enlargement of PKN ORLEN group will lead to improved credit quality of the group, which is a key determinant of Energa's credit risk profile. The combination of greater diversification, which will stabilise PKN ORLEN's overall cash flow; the significant increase in earnings and assets; and PKN ORLEN's low leverage, provided the envisaged funding structure is implemented, implies greater support capacity, which is beneficial for Energa.

The growing integration of Energa into PKN ORLEN group is reflected in the company's recently published long-term strategic investment plan for 2021-30, which includes risk-sharing of PKN ORLEN, Lotos and PGNiG in some of Energa's strategic generation

projects, such as the combined-cycle gas turbine (CCGT) plants Ostroleka C and Gdansk. The owner's support is also reflected in the establishment of a PLN1 billion credit facility for Energa in the context of the company's accession to PKN ORLEN's cash pooling arrangements.

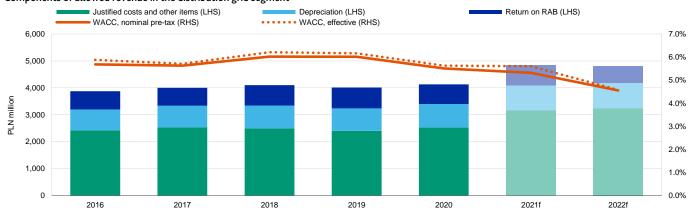
#### Regulated distribution grid operations underpin cash flow stability

Energa's standalone business profile is underpinned by the high contribution from regulated electricity distribution activities. Under the Polish regulatory framework, electricity distribution tariffs are set by the Energy Regulatory Office. The current regulatory period, which started in 2016, has been extended by one year to include 2021, with yearly adjustments to tariffs. The framework is fairly well developed, based on the revenue cap approach, and incorporates cost efficiency targets. It includes a return on regulated asset base (RAB), measured as pretax nominal weighted average cost of capital (WACC). The effective WACC is updated annually and calculated by integrating the qualitative and innovation components in the formula and also includes additional remuneration for smart metering investments completed before 2018. The quality and innovation coefficients are determined individually for each company on an annual basis, and have an upside and a downside.

While the overall framework has improved in recent years, its transparency is still below the levels seen in Western European jurisdictions. For more details on the current framework, please see <a href="Energy S.A. - Discussion of Key Credit Factors">Energy S.A. - Discussion of Key Credit Factors</a>, published on 25 April 2018.

Exhibit 6

Allowed return is likely to decline as a result of a decrease in the risk-free rate Components of allowed revenue in the distribution grid segment



Moody's forecasts (f) are Moody's opinion and do not represent the views of the issuer. Sources: Company reports and Moody's Investors Service

In the current financial year ending in December 2021, we expect the distribution segment's reported EBITDA to remain below the 2020 result of PLN1,790 million. While distributed volumes are expected to revert to pre-pandemic levels of more than 22 terawatt hours (TWh), which is earnings supportive, the reduction of the tariff by 1.7% on average and higher expenses for grid losses will likely lead to a decline in earnings. The increase in costs for grid losses is driven by the rise in their volume as distribution volumes increase, combined with significantly higher Polish power prices, which have gone up by more than 40% compared with last year.

Such cost effects will be incorporated into future tariff decisions, while volume deviations from 2021 are captured through a newly introduced regulatory account, which will be settled with a two-year time lag<sup>1</sup>. This segment will also be supported by a growing RAB as a result of investments focused on network expansion and modernisation, as well as the installation of smart metering equipment.

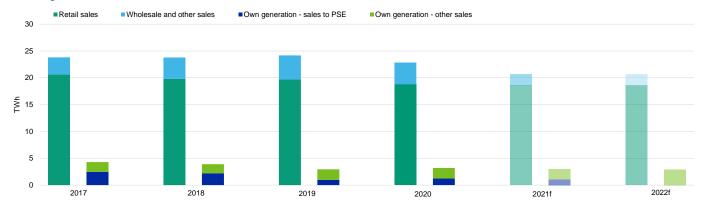
Our growth assumption for the RAB from its value of PLN13,332 million in 2021 is 4%-6% per annum over the next few years. This positive base effect is likely to be partly offset by a reduction in the rate of return (measured as WACC), given the declining yields on Polish 10-year Treasury bonds, which serve as a proxy for the risk-free rate component within the WACC. While the 2020 WACC incorporated a risk-free rate of around 2.80%, this year's rate is 2.52%, which translated into a decrease in the WACC to 5.32% in 2021 from 5.51% in the previous year. Overall, we expect the contribution from this segment to remain high at well above 70% of group

EBITDA over the next few years, provided there are no significant changes in the regulatory framework for the next period, which we expect to start in 2022.

#### Earnings in the sales segment are significantly exposed to the electricity wholesale market

Energa has a substantial structural short generation/supply position; 2020 retail sales totalled 18.8 TWh, compared with electricity production of 3.2 TWh.

Exhibit 7
Energa has a significant short position in own production compared with retail sales
Sales and generation in TWh



Moody's forecasts (f) are Moody's opinion and do not represent the views of the issuer. Sources: Company reports and Moody's Investors Service

To mitigate the risk of volatility in power prices, Energa seeks to minimise its open positions by matching supply and procurement contracts as much as possible. Additional uncertainty for retail earnings arises from the regulated household tariff (G tariff), which is set at least annually by the regulator but does not always cover actual energy costs in a timely manner.

Together with inherently volatile earnings from wholesale trading and hedging, which are also included in the sales segment, G tariff-related loss provisions are the key reasons for the low visibility into this segment's income contribution.

In H1 2021, the sales division reported EBITDA of PLN211 million, compared with PLN52 million in the year-earlier period. Key to the increase were a PLN248 million margin base effect, because H1 2020 was marked by the coronavirus pandemic, which led to lower consumption in a depressed economic environment; related to this drop, losses from the sale of excess volumes of electricity which had been procured before the pandemic; and low electricity prices affecting trading revenue.

#### Generation earnings remain exposed to volatile power and carbon prices, mitigated by capacity payments since this year

More than half of Energa's generation capacity of about 1.38 GW consists of thermal plants, with the 690-megawatt (MW) coal-fired Ostroleka B power plant being the main asset. Other thermal capacity (82 MW) includes combined heat and power plants (CHPPs), which are run on coal and biomass. Energa's renewable installations, namely hydropower plants (359 MW, including 157-MW pumped storage), onshore wind farms (242 MW) and solar installations (5.4 MW), account for the remaining capacity.

Ostroleka B and the CHPPs are significantly exposed to carbon and, to a lesser degree, fuel prices, while the renewable installations are exposed to weather conditions, driving output volatility. In H1 2021, Energa's plants generated around 1.9 TWh, an increase of around 0.5 TWh or 35% year over year. Around 80% of the additional output was produced by Ostroleka B, driven by requests from the transmission operator PSE S.A., to whom the plant is selling most of its generated volumes under a price-regulated system support contract that expires in 2025.

Higher revenue from system services and the start of payments under the Polish capacity market mechanism were the key drivers for Energa's generation EBITDA improvement in H1 2021 to PLN149 million from PLN98 million in H1 2020. Capacity and system service income in aggregate amounted to PLN98 million, compared with PLN43 million in H1 2020. Split by technology, the biggest EBITDA contribution in H1 2021 came from the company's hydro plants at PLN110 million, followed by wind installations at PLN60

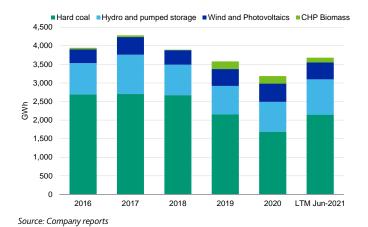
million, while Ostroleka B achieved negative EBITDA. The EBITDA loss was caused by the rise in carbon prices, which on average in H1 2021 more than doubled to €44/tonne (t), compared with the same period in 2020, and could not be offset by the positive effects of capacity payment income and a decrease in coal prices, which dropped by 8% to PLN287/t.

We expect the segment's earnings in 2021 to clearly surpass last year's result of PLN165 million reported EBITDA, which was marked by lower power prices and volumes during the pandemic, and to reach a slightly higher level than the 2019 reported EBITDA of PLN262 million. Key drivers are a higher level of wholesale prices and capacity payments, while the final tally of generation volumes is partly subject to weather conditions and thus uncertain. We estimate annual EBITDA contributions of the capacity payments, including demand-side response, in a range of PLN200 million-PLN210 million over 2021-25. These payments should cover a major share of the generation segment's fixed costs.

Exhibit 8

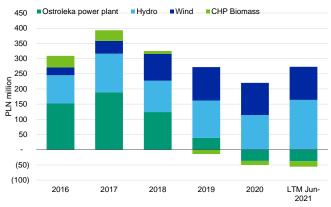
Generation from Ostroleka B still dominates Energa's output mix ...

Gross electricity production by type of fuel



## Exhibit 9 ... but the plant has ceased to contribute positively to the segment's earnings

Breakdown of the generation segment's EBITDA



Source: Company reports

#### Energa's new capital investment plans will lead to weaker leverage metrics over the next few years

In May 2021, Energa presented an updated long-term strategic investment plan for 2021-30, aligned with the corporate strategy of its owner PKN ORLEN. Following an amendment on 31 August 2021, the company envisages total investments of PLN31.5 billion, of which PLN16.8 billion is allocated to the distribution segment and another PLN13.6 billion to the generation segment. Necessary investments in the core distribution business as well as in heating installations and services are underpinned by an agreement between PKN ORLEN and the Polish state, which was closed before the state transferred its shares in and thus control over Energa to PKN ORLEN in April 2020.

Within the generation investments, the focus will be on renewable installations, intended to roughly double the current capacity of some 0.6 GW to around 1.1 GW of onshore installations by expanding wind and solar capacity through 2030. Energa, together with partners, also plans to enter into offshore wind in the second half of this decade by building 1.3 GW capacity in the Baltic Sea, which is likely to constitute the biggest investment by technology within the generation segment.

The company's investment plans for new generation capacity include three CCGT plants, Ostroleka C, Gdansk and Grudziadz. Under PKN ORLEN's ownership, the Ostroleka C project, which was originally planned as a 1 GW hard-coal plant, has been redesigned as a 750 MW gas-fired plant to be completed in 2025. According to an investment agreement signed in May 2021, Energa will own 50% plus one share in the designated project company, while PKN ORLEN shall own 1% minus one share, with PGNiG owning the remaining 49%.

The 650 MW CCGT in Gdansk could provide electricity to a nearby refinery of Lotos, but the final investment decision is subject to the award of a capacity market contract in the 2022 auction. As for the Grudziadz plant, PKN ORLEN has stated its willingness to provide funding to Energa for the PLN1.8 billion investment, provided that the project is awarded a capacity contract in the next capacity

auction in December. While the funds from the parent are likely to be granted as debt rather than equity, we view the commitment of PKN ORLEN as a credit positive.

Given the necessary outlays, which reflect a significant hike in annual investments from historical levels (see Exhibit 10), and the fact that there is a multiyear time lag between capital spending and cash inflows from many of these projects, we expect Energa's leverage metrics to weaken over the next few years. We expect net debt to increase to around PLN8.5 billion by year-end 2022 from PLN6.1 billion as of 30 June 2021 (Moody's-adjusted).

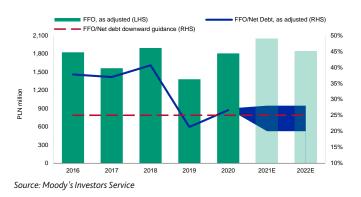
For 2021, we expect an increase in the earnings of all segments, mainly on account of a base effect since 2020 was marked by depressed economic activity, with real GDP down by 2.7% year over year and, therefore, lower electricity demand, at -2.3% against 2019, in Poland.

The company's FFO/net debt is likely to remain within an estimated range of 20%-28% through 2023, assuming the absence of dividend payouts. We believe that Energa has some flexibility to manage its leverage by postponing some less time-critical projects within the company's investment plan, for example, those related to grid modernisation and expansion. Such adjustments would likely be subject to PKN ORLEN's consent. Also Energa's dividend policy under the ownership of PKN ORLEN is not yet known.

Exhibit 10
Energa's corporate strategy assumes an increase in capital spending from the historical levels ...
Group's capital spending



Exhibit 11 ... which is likely to lead to weaker leverage metrics, even, if shareholder distributions remain moderate



#### Source: Company reports

#### Further support for the mining sector or large acquisitions are very unlikely, but would be credit negative

In the context of a large restructuring of the coal mining sector in 2016, Energa — together with its utilities peers PGNiG and Polska Grupa Energetyczna S.A. (PGE, Baa1 stable) — injected PLN600 million in equity in the ailing hard-coal miner Polska Grupa Gornicza (PGG) in exchange for a 15.32% equity stake. Given the enduring structural problems of the Polish mining industry, exacerbated by the drive for decarbonisation of the energy sector, Energa in 2019 and 2020 impaired the participation to a residual value of zero.

In September 2020, the main stakeholders of PGG agreed to a comprehensive mining phaseout plan for the company through 2049, which was complemented by a multilateral contract to determine compensation and subsidies for the affected miners, agreed in May 2021 and predominantly funded by public moneys.

Against this backdrop and referring to the statement by PKN ORLEN on 6 May 2020 that it does not intend to invest in PGG, we believe that there is a negligible risk of Energa injecting further cash into PGG. Accordingly, our assessment of Energa's credit profile factors in neither any cash support to the Polish mining sector nor any large-scale acquisitions that would significantly exceed the amount of capital spending defined in the strategy. Both types of events would be credit negative.

#### **ESG** considerations

Ownership and control, board oversight and effectiveness, and management are key elements of our assessment of how governance affects creditworthiness. The majority ownership of and control over Energa by PKN ORLEN expose the company to the currently

weaker standalone credit profile of its main shareholder. Because there are no ring-fencing covenants in place, PKN ORLEN's control over Energa's cash flow, investment strategy and financial policy could lead to a weakening of the company's standalone credit quality over time.

#### Liquidity analysis

As of 30 June 2021, Energa's cash balance (unrestricted) amounted to PLN345 million. In addition, the group had access to undrawn committed bank facilities totalling around PLN2,928 million, including some PLN2,500 million under two ESG-linked revolving credit facilities. The larger one, at PLN2 billion, which was granted by a bank consortium, will fall due in 2024, while the smaller one, at €120 million (around PLN540 million), was extended by the Japanese bank <u>Sumitomo Mitsui Banking Corporation</u> (A1 stable) and will expire in 2025. The company can also resort to a PLN1 billion short-term revolving facility from its parent PKN ORLEN, of which PLN800 million was drawn as of the end of June 2021.

Liquidity reserves and the company's strong cash flow generation should be sufficient to cover its planned capital spending and debt service obligations over the next 12-18 months.

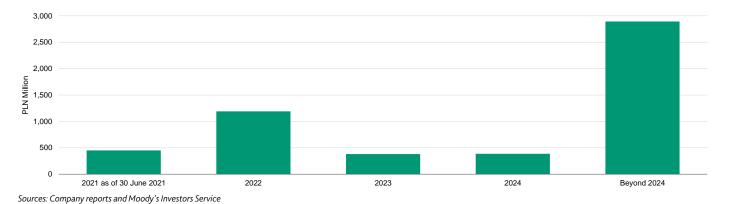
Energa is subject to a number of financial covenants under its financing agreements and was in compliance with those as of 30 June 2021. Financial covenants include a maximum leverage, measured as net debt/EBITDA, of 4.0x, under the company's ESG-linked loan agreements. As of 30 June 2021, leverage was 1.7x, thus indicating comfortable headroom.

The calculation of the leverage covenant does not include the hybrid bonds issued in 2017, totalling €250 million. The bonds were fully subscribed by the <u>European Investment Bank</u> (Aaa stable) under the Juncker Plan and contributed to the diversification of Energa's funding sources. However, they do not benefit from any equity credit under our <u>Hybrid Equity Credit rating methodology</u> (that is, they are treated as debt), given the relatively short tenure of 16 years and 20 years for the two €125 million tranches.

Exhibit 12

Next sizeable term debt maturity is related to the €300 million eurobond maturing in 2027

Debt maturities



### Methodology and scorecard

Energa is rated in accordance with the rating methodology for <u>Regulated Electric and Gas Networks</u>, published in March 2017. Based on the company's forecast financial results, the scorecard-indicated outcome is Baa1, which is above the assigned rating of Baa2.

Energa's rating also reflects the weaker credit profile of the other operations of its new majority shareholder PKN ORLEN, from which the company is not insulated through ring-fencing or other legal covenants; the higher risk profile of its generation and sales business segments, which are not captured in the scorecard; and the execution risks related to its large-scale capital spending programme.

Exhibit 13 **Rating factors** Energa S.A.

#### Regulated Electric and Gas Networks Industry Grid [1][2]

Factor 1: Regulatory Environment and Asset Ownership Model (40%)

#### Current LTM 6/30/2021

Measure

## Moody's 12-18 Month Forward

Score

Vie	
As of Septem	
Measure	Score
Baa	Baa
Aa	Aa
Baa	Baa
Baa	Baa
Ва	Ва
Baa	Baa
6x - 10x	Aa / Aaa
43% - 48%	A / Aa
20% - 28%	A / Aa
20% - 28%	A / Aa
	Baa1
	Baa1
	Baa2

a) Stability and Predictability of Regulatory Regime	Baa	Baa
b) Asset Ownership Model	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	Baa	Baa
d) Revenue Risk	Baa	Baa
Factor 2 : Scale and Complexity of Capital Program (10%)		-
a) Scale and Complexity of Capital Program	Ba	Ва
Factor 3 : Financial Policy (10%)		
a) Financial Policy	Baa	Baa
Factor 4 : Leverage and Coverage (40%)		
a) FFO Interest Coverage (3 Year Avg)	7.8x	Aaa
b) Net Debt / Fixed Assets (3 Year Avg)	41.5%	Aa
c) FFO / Net Debt (3 Year Avg)	30.6%	Aa
d) RCF / Net Debt (3 Year Avg)	30.6%	Aaa
Rating:		-
Scorecard-indicated outcome from Grid Factors 1-4		A3
Rating Lift		
a) Scorecard-indicated Outcome	-	A3
b) Actual Rating Assigned		_

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for non-financial Corporations. [2] As of 6/30/2021. [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. FFO Interest Coverage (3 Year Avg) ratio has been calculated using interest paid for respective LTM periods. Source: Moody's Investors Service

#### **Ratings**

#### Exhibit 14

Category	Moody's Rating
ENERGA S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	Baa2
PARENT: POLSKI KONCERN NAFTOWY ORLEN S.A.	
Outlook	Positive
Issuer Rating -Dom Curr	Baa2
Senior Unsecured	Baa2
ENERGA FINANCE AB (PUBL)	
Outlook	Stable
Bkd Senior Unsecured	Baa2
Source: Moody's Investors Service	

### **Appendix**

Exhibit 15
Peer comparison
Energa S.A.

	Energa S.A.		Fluvius Economic Group		SPP-distribucia, a.s.			Elering AS				
		Baa2 Stable		A3 Negative		Baa2 Stable			A2 Stable			
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE
(in USD million)	Dec-18	Dec-19	Dec-20	Dec-18	Dec-19	Dec-20	Jul-18	Jul-19	Jul-20	Dec-18	Dec-19	Dec-20
Revenue	2,867	3,172	3,226	3,476	3,349	3,337	298	481	467	169	159	156
EBITDA	587	507	536	1,694	1,142	1,245	236	375	365	78	76	83
Total Debt	1,947	2,067	1,857	7,367	7,593	8,761	760	723	785	406	385	407
Net Debt	1,240	1,705	1,820	7,342	7,521	8,722	707	599	720	334	338	345
(FFO + Interest Expense) / Interest Expense	6.8x	5.1x	7.7x	6.8x	4.4x	4.6x	15.2x	14.2x	19.2x	7.8x	25.1x	25.3x
Net Debt / Fixed Assets	32.4%	42.7%	43.8%	57.2%	58.5%	60.9%	26.9%	13.3%	15.5%	35.1%	32.7%	29.4%
FFO / Net Debt	40.9%	21.3%	26.6%	16.9%	9.9%	9.6%	26.0%	45.8%	42.0%	17.8%	19.2%	22.0%
RCF / Net Debt	40.9%	21.3%	26.6%	12.8%	5.6%	5.3%	0.6%	27.6%	21.0%	11.0%	9.4%	12.9%

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

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Exhibit 16
Select Moody's-adjusted financial data
Energa S.A.

<del>-</del>					
	FYE	FYE	FYE	FYE	FYE
in PLN million)	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
NCOME STATEMENT					
Revenue	10,181	10,534	10,337	12,172	12,553
EBITDA	2,100	2,263	2,117	1,946	2,087
EBIT	1,143	1,290	1,150	867	1,042
nterest Expense	243	291	326	338	269
Net income	694	792	707	(310)	197
BALANCE SHEET					
Total Debt	6,268	7,834	7,315	7,829	6,921
Cash & Cash Equivalents	1,444	3,610	2,656	1,370	139
Net Debt	4,824	4,224	4,659	6,459	6,782
Net Property Plant and Equipment	13,051	13,371	14,396	15,109	15,472
Total Assets	18,729	21,056	21,599	20,967	19,668
CASH FLOW					
Funds from Operations (FFO)	1,825	1,567	1,906	1,378	1,803
Cash Flow From Operations (CFO)	1,576	1,976	1,547	929	1,571
Dividends	203	79			
Retained Cash Flow (RCF)	1,622	1,488	1,906	1,378	1,803
Capital Expenditures	(1,578)	(1,280)	(1,638)	(1,710)	(1,661)
Free Cash Flow (FCF)	(205)	617	(91)	(781)	(90)
FFO / Debt	29.1%	20.0%	26.1%	17.6%	26.1%
FFO / Net Debt	37.8%	37.1%	40.9%	21.3%	26.6%
RCF / Net Debt	33.6%	35.2%	40.9%	21.3%	26.6%
FCF / Net Debt	-4.2%	14.6%	-2.0%	-12.1%	-1.3%
PROFITABILITY					
EBIT Margin %	11.2%	12.2%	11.1%	7.1%	8.3%
EBITDA Margin %	20.6%	21.5%	20.5%	16.0%	16.6%
NTEREST COVERAGE					
(FFO + Interest Expense) / Interest Expense	8.5x	6.4x	6.8x	5.1x	7.7x
EVERAGE					
Debt / EBITDA	3.0x	3.5x	3.5x	4.0x	3.3x
Net Debt / EBITDA	2.3x	1.9x	2.2x	3.3x	3.2x
Net Debt / Fixed Assets	37.0%	31.6%	32.4%	42.7%	43.8%

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
Moody's-adjusted debt calculation
Energa S.A.

		FYE	FYE	FYE	FYE	FYE
(in PLN million)		Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
As Reported Total Debt		6,150	7,711	7,183	7,661	6,735
	Pensions	118	123	132	168	186
	Leases	0	0	0	0	0
Moody's Adjusted Total Debt		6,268	7,834	7,315	7,829	6,921
	Cash & Cash Equivalents	(1,444)	(3,610)	(2,656)	(1,370)	(139)
Moody's Adjusted Net Debt		4,824	4,224	4,659	6,459	6,782

All metrics are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for non-financial corporations. Source: Moody's Financial Metrics<sup>TM</sup>

Exhibit 18 Moody's-adjusted EBITDA calculation Energa S.A.

		FYE	FYE	FYE	FYE	FYE
(in PLN million)		Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
As Reported EBITDA		1,865	2,228	1,975	1,150	1,419
	Unusual Items - Income Statement	150	25	196	266	370
	Pensions	33	34	36	34	34
	Leases	0	0	0	0	0
	Non-Standard Public Adjustments	52	(24)	(90)	496	264
Moody's Adjusted EBITDA		2,100	2,263	2,117	1,946	2,087

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**

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1 As an exception, in 2021, a partial settlement for the volume effects in 2020 is included to avoid a stark adjustment in 2022, given the steep drop in the context of the coronavirus pandemic.

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