

#### CREDIT OPINION

7 December 2021

## **Update**



#### RATINGS

#### NET4GAS, s.r.o

Domicile	Czech Republic
Long Term Rating	Baa2
Туре	LT Issuer Rating - Fgn 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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# NET4GAS, s.r.o

# Update to credit analysis

## Summary

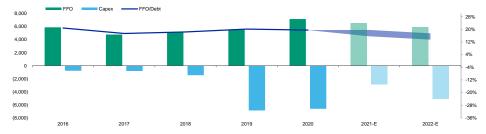
The credit quality of NET4GAS, s.r.o (N4G, Baa2 stable) is underpinned by the company's position as the monopoly provider of gas transmission and transit services in the Czech Republic; its strategic location along the preferred route for shipping Russian gas to Western Europe; and its stable and predictable cash flows generated from long-term capacity ship-orpay contracts, which underpin around 75%-80% of revenue, as well as regulated tariffs for domestic transmission activities, which account for the remaining 20%-25% of revenue.

N4G's credit quality is constrained by its significantly higher leverage than that of other European gas transit peers, in particular the Slovak pipeline owner <u>eustream</u>, <u>a.s.</u> (eustream [Baa2 stable; partly funded through <u>SPP Infrastructure Financing B.V.</u>, also rated Baa2 stable); and significant customer concentration and associated geopolitical risks.

The two large capital investment projects to extend N4G's domestic transport as well as transit capacities are scheduled to be completed by 2023. We note positively the shareholders' equity support for these projects, leading to reduced funding risk, which in turn supports the current credit quality.

Exhibit 1
Stable credit metrics despite significant capital spending programme, supported by shareholders' equity commitment

FFO and capex in CZK millions (left-hand scale); FFO/debt (right-hand scale)



Forecast reflects Moody's estimates and not the view of the issuer. Sources: N4G's annual financial statements and Moody's Investors Service

## **Credit strengths**

- » Monopoly provider of gas transmission and transit services in the Czech Republic, with strategic location, among others, along the preferred routes for shipping Russian gas to Western Europe
- » Stable and predictable cash flow generation under long-term capacity ship-or-pay arrangements as well as regulated tariffs for domestic transmission activities
- » Prudent capital structure and leverage management aligned to investment life cycles

## **Credit challenges**

- » Relatively high leverage compared with other European gas transit peers
- » Significant customer concentration and associated geopolitical risks
- » Sizable capital expenditures through 2022 to build grid capacity, mitigated by significant equity injections from its shareholders

## **Rating outlook**

The stable outlook reflects our expectation that N4G's business and financial profiles will evolve in a relatively predictable fashion because of the stability of cash flows generated under long-term ship-or-pay capacity contracts as well as from monopoly-regulated domestic transmission network operations. It also takes into account the supportive approach that shareholders are taking in the context of significant ongoing capital investments.

## Factors that could lead to an upgrade

N4G's Baa2 ratings could be upgraded if the company's financial profile improved, with funds from operations (FFO)/debt in the mid-20s in percentage terms, while maintaining a business risk profile underpinned by stable and predictable cash flow; or the company were able to diversify its revenue base across a portfolio of strong counterparties.

#### Factors that could lead to a downgrade

Downward pressure on the ratings could develop if N4G's credit metrics deteriorated below our expectations, in particular FFO/debt remaining below the midteens in percentage terms; geopolitical tensions affect the Russian main shipper's ability or willingness to comply with its ship-or-pay obligations; or there was a general shift towards a more aggressive financial policy.

## **Key indicators**

Exhibit 2
NET4GAS, s.r.o

The company exhibits stable and predictable metrics, underpinned by long-term ship-or-pay contracts

					12-18 months forward
	Dec-17	Dec-18	Dec-19	Dec-20	view
(FFO + Interest Expense) / Interest Expense	8.6x	8.9x	8.7x	12.0x	6x - 7x
FFO / Net Debt	18.0%	19.3%	21.9%	27.9%	16% - 19%
FFO / Debt	17.4%	18.4%	20.1%	25.6%	16% - 19%
RCF / Net Debt	8.1%	18.1%	17.0%	26.2%	-5% - 0%
RCF / Debt	7.8%	17.2%	15.6%	24.1%	-5% - 0%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Periods are financial year-end unless indicated otherwise. For definitions of Moody's most common ratio terms, please see the accompanying User's Guide. Forward view reflects Moody's estimates and not the view of the issuer. Source: Moody's Financial Metrics<sup>TM</sup>

#### **Profile**

NET4GAS, s.r.o (N4G) is the owner and operator of the Czech gas transmission system. The company's core business consists of transporting gas, primarily sourced from Russia, to Western and Southern Europe under long-term contracts, generating around 78% of its CZK10.0 billion (around €400 million) revenue in 2020. It is also the regulated domestic gas transmission network operator under

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.

an unlimited licence, which accounts for the remaining revenue. Management expects the share of revenue generated from gas transit to remain relatively stable at around 75% over the next five years, given the long-term nature of the gas transit contracts.

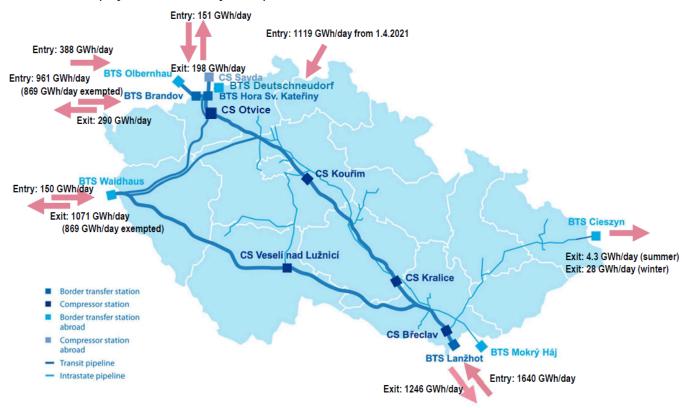
The company operates a network of more than 3,900 kilometres (km) of pipelines with a total capacity of up to 55 billion cubic metres (bcm) per year (in the East-West direction).

N4G's network serves flows not only along the East-West corridor, which had been the traditional route for Russian pipeline gas to Europe before the opening of Nord Stream, but also along the North-South corridor (N4G's wholly owned subsidiary BRAWA, a.s. owns the Gazelle pipeline, which provides the primary route for gas flows through the Czech transit network since its opening in 2013) and reverse West-East, with the following total capacities in each direction:

- » North–South (Brandov–Waidhaus) = around 1,070 giga-watt hours (GWh) per day, at around 37 bcm per annum
- » East–West (Lanzhot–Hora Sv. Kateriny + Waidhaus) = around 1,640 GWh per day, at around 57 bcm per annum
- » West–East (Brandov + Hora Sv. Kateriny–Lanzhot) = around 1,246 GWh per day, at around 44 bcm per annum

Exhibit 3

Overview of the company's network and entry/exit capacities



The numbers in the map indicate the maximum daily capacity at each border station, and arrows indicate the direction of flow. Source: Company

Annual transportation of natural gas amounts to around 45-48 bcm, including around 8-9 bcm for domestic use, and this gas is primarily shipped along the North-South and West-East routes.

N4G is directly wholly owned by NET4GAS Holdings, s.r.o., which in turn is owned 50% by Allianz Infrastructure Luxembourg I S.a r.l., part of the wider Allianz group, and 50% by Borealis Novus Parent B.V., a subsidiary of OMERS Administration Corporation. The consortium of Allianz and OMERS acquired N4G from RWE AG in August 2013, and have since developed a track record of stable and supportive shareholding.

7 December 2021 NET4GAS, s.r.o: Update to credit analysis

#### **Detailed credit considerations**

#### Strategic intermediate gas transit route for shipping Russian gas to Southern Europe

N4G's geographical location means that the company's network is in a key strategic location to ship Russian gas to its main customer base in Central, Western and Southern Europe. Specifically, the company's network connects the gas shipped through Nord Stream via Germany on the North-South route towards Southern Europe, and also allows for reverse flow to supply Ukraine, which has not taken any gas directly from Russia since 2016.

In comparison with its Slovak peer eustream, N4G is much less reliant on the East-West gas route through Ukraine and, with the opening of the first Nord Stream pipeline, started to see actual flows switching from the East-West route towards the North-South route in its network.

The planned addition of Nord Stream 2 (NS2) would increase flows along the company's West-East route from Germany (via the EUGAL onshore pipeline) through the Czech Republic via Slovakia into Austria and Italy. In May 2021 the <u>Government of United States of America</u> (Aaa stable) decided to waive the sanctions on NS2 suppliers, which had been put in place in late 2019, and in July the US and the <u>German government</u> (Aaa stable) jointly committed to support Ukraine's energy policy, including an extension of the gas transit agreement with Russia beyond 2024.

The lifting of the sanctions allowed the construction of NS2 to be completed in September. Around that time, the Swiss-based operating company of NS2 filed a request for regulatory certification with German regulator Bundesnetzagentur (BNetzA), implying a completion of the legal process latest in Q3 2022. However, in November 2021 BNetzA decided to suspend the certification process of the pipeline on account of its legal seat outside the European Union (EU). BNetzA will not resume the process before the relevant assets and operational resources have been transferred to a German legal entity to ensure application of EU gas regulation.

Given a lack of transparency around the time horizon to establish the Germany-based operating company; differing opinions on NS2 among the coalition partners of Germany's incoming new government; and the contentiousness of the project among EU members, we do not expect the pipeline to start operations before late 2022.

#### Long-term ship-or-pay contracts underpin stability of cash flow ...

Most of N4G's revenue is generated from its international gas transit activities. Transit tariffs are subject to price cap regulation by the Czech Energy Regulatory Office (ERO), but volumes are contractually negotiated and depend on supply and demand requirements as well as geopolitical developments. Under long-term contracts, the tariffs determined at the outset will apply for the entire period of the contract and escalate annually by inflation.

N4G's current transit contract portfolio also includes fully negotiated tariffs, in particular, the long-term North-South flow contract on the Gazelle pipeline, running until December 2034.

The company's main transit contracts consist of the following:

- » a contract for gas transit from Eastern Europe to Western Europe, expiring on 1 January 2022;
- » a contract for transit of Russian gas through the Gazelle Pipeline (north to south), expiring on 1 January 2035 (the Gazelle Contract); and
- » a contract for gas transit from Western Europe to Eastern Europe related to shipments of Russian gas through EUGAL in Germany via the Czech Republic towards Slovakia, which commenced in 2020 and will expire on 1 October 2039.

With the exception of the Gazelle Contract which is 80% ship-or-pay, all of N4G's contracts are on a full ship-or-pay basis, with a capacity-weighted average remaining contract life of around 16 years as of November 2021. The long-dated nature of contracts underpins the company's stable and predictable cash flow, and has also insulated N4G from demand fluctuations resulting from the coronavirus pandemic.

#### ... but customer concentration exposes N4G to geopolitical risks

Most of N4G's revenue is generated from non-EU countries and is primarily concentrated in a single customer, namely Gazprom Export LLC, a 100% subsidiary of Gazprom, PJSC (Baa2 stable).

Exhibit 4
Revenue split per geography
Amounts in CZK millions

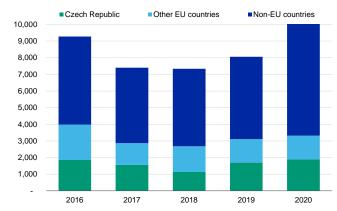
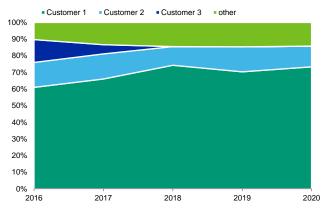


Exhibit 5
Revenue split per customer



Source: N4G's annual financial statements

Source: N4G's annual financial statements

In 2020, Gazprom Export supplied a total of 174 bcm of gas to European countries. Western European countries and Turkey accounted for around 78% of the company's exports from Russia, while Central European states accounted for the remaining 22%<sup>1</sup>.

With the completion of the C4G project at the end of 2020, and assuming that international transit contracts with expiry dates through 2022 are not renewed or replaced with other short-, medium- or long-term contracts, N4G's exposure to a single customer will remain around 75%.

N4G's overall credit quality is thus constrained by counterparty concentration and the associated geopolitical tension. We do not believe that the core counterparty's credit quality should act as a direct cap on N4G's credit quality, given that alternative shippers could step in to use the company's transit networks. However, the shipment of gas is predicated on Russia's supply meeting Europe's demand, and the geopolitical risk resulting from this is reflected in our assessment of N4G's credit quality.

While ongoing tensions between Russia and Ukraine have, in contrast to the Slovak peer eustream, had limited impact on N4G's transported volumes to date, any future global sanctions on Russia may hurt the company's interactions with Russia and its companies.

#### The regulatory regime governing domestic gas transmission continues to underpin the segment's solid revenue contribution

Domestic gas transmission activities account for around 20%-25% of N4G's revenue (compared with less than 5% for eustream) and are subject to a regulatory revenue cap, designed to provide an allowance for a return on the regulated asset base (RAB), regulatory depreciation and operating expenditure (with the last item being subject to adjustments for efficiency assumptions and price inflation).

The ERO was established on 1 January 2001 as the independent national regulator for energy networks. The regulator has set allowed returns under an RAB model for the past 10-15 years (since the start of the second regulatory period in 2005 for electricity transmission, and 2010 for gas transmission and energy distribution, as discussed below), a period similar to that for most of its mainland European peers.

Exhibit 6
The fifth regulatory period for Czech electricity and gas networks began on 1 January 2021

1st Period	2nd Period	3rd Period	4th Period	5th Period
2001-2004	2005-2009	2010-14	2016-18	2021-2025
		by one year	by two years	
		2010-15	2016-20	
			2001-2004 2005-2009 2010-14 by one year	2001-2004 2005-2009 2010-14 2016-18 by one year by two years

Source: ERO

The Czech regulatory regime has established a track record of supportiveness, in particular with respect to cost and investment recovery and the level of allowed returns, compared with most other European regulated networks. The regulatory principles for the

current fifth period (RP5; see Exhibit 7) confirm the ERO's supportive approach and include various credit-positive adjustments for N4G:

- » The company's current RAB results from a revaluation back in 2009, with a starting value of 50% of the book values of the then-existing assets. These have been adjusted over time by adding actual investments and subtracting depreciation. Over the course of RPS, and in addition to the period's net growth through investments and depreciation, the RAB will be gradually adjusted upward to reach the assets' net book value by year-end 2025.
- » Operating expenses (Opex in Exhibit 7) within tariff decisions are now based on three-year rolling averages and include a profit-sharing mechanism as a new incentive (adjustments for efficiency targets and inflation remain).
- » Allocation of costs between transit and domestic transmission activities are based on a capacity-weighted division of assets. Flow-based costs, namely for energy, will be subject to cost neutrality. Both changes contribute to transparency and revenue stability.

Exhibit 7

Summary comparison of key regulatory parameters for the fourth and fifth regulatory period

	Past period (2016-20)	Current period (2021-25)
Method	Revenue cap	Revenue cap
Length of period	5 years	5 years
RAB and depreciation	RAB adjusted for investment and depreciation; transit subject to allocation key	In addition to nominal investment, the RAB value will be gradually increased to match the book value under CZGAAP at the end of the 2025
Work-in progress and working capital	For transmission only, work in progress project in excess of CZK 500m can be included if construction >2 years and negative status of Development Fund (which compares long-term depreciation allowance and investment value over a period of 15 years from 2010); working capital not included	For transmission only, work in progress project in excess of CZK 500m can be included if construction >2 years and negative status of Development Fund (which compares long-term depreciation allowance and investment value over a period of 15 years from 2010); working capital not included
Opex	Base years 2012-13 average costs, adjusted by inflation and efficiency factor	Rolling three-year moving average (2017-19 reference years for 2021 allowance) updated for inflation and efficiency factors, with 50/50% profit sharing mechanism on a difference between actual and allowed costs.
Market factor	Adjusted for unexpected costs	To be maintained unchanged, but given three-year rolling average base is expected to be used less frequently.
Efficiency factor	General efficiency factor of around 1%, no company-specific factor	General efficiency factor set at 0.511% p.a., no company- specific factor
Quality incentives	Currently not used for gas	Currently not used for gas
WACC	Fixed for the entire period at 7.94% Marginal difference between gas and electricity (7.95%)	Fixed for the entire period at 6.43% Marginal difference between gas and electricity (6.54%)

Source: ERO

The allowed return, which is calculated as the weighted average cost of capital (WACC) multiplied by the year-average RAB, was reduced in RP5 to 6.43% from the previous 7.94%. The main driver for the reduction is the updated cost of debt, as the calculation in Exhibit 8 shows.

With the determination of the current WACC, which is applicable throughout RP5, the Czech framework continues to provide an allowed return above the European average (see Exhibit 34 in our <u>Outlook 2021 on Regulated Networks in EMEA</u>), reflecting the ERO's legal obligation (under the Energy Act) to provide incentives to network companies to realise their investment plans.

Exhibit 8

The lower risk-free rate is a key driver for the lower WACC rates in the fifth period, compared with the prior fourth period

	4th period (	(2016-20)	5th period	(2021-25)
	Electricity	Gas	Electricity	Gas
Risk-free rate	3.82%	3.82%	2.04%	2.04%
Asset beta	0.536	0.532	0.51	0.49
Equity beta	0.901	0.801	0.90	0.87
Market risk premium	5.00%	5.00%	6.54%	6.54%
Debt ratio	45.75%	38.48%	48.92%	48.89%
Equity ratio	54.25%	61.52%	51.08%	51.11%
Credit risk margin	1.38%	1.38%	1.09%	1.09%
Tax rate	19%	19%	19%	19%
Cost of debt (pre-tax)	5.20%	5.20%	3.13%	3.13%
Cost of debt (post-tax)	4.21%	4.21%	2.54%	2.54%
Cost of equity	8.32%	7.83%	7.94%	7.76%
NACC (post-tax)	6.44%	6.43%	5.30%	5.21%
WACC (vanilla)	6.89%	6.81%	5.59%	5.50%
VACC (pre-tax)	7.95%	7.94%	6.54%	6.43%
	i	<u>-</u> -		

The 5th period risk-free rate is based on the median of the monthly average yields of Czech government bonds with a residual tenor of 10 years over the period 2010-19. Source: ERO

## Sizeable investment projects to be completed through 2023 lay the foundation for long-term income streams

N4G's capital spending over the period 2021-23 of around CZK9 billion includes about CZK6 billion for the two main investment projects:

- » Project C4G, with a budget of €540 million, was commissioned in December 2020 and has created additional capacity to facilitate the shipments of gas from Germany through EUGAL towards Slovakia. The project allowed for ramp-up to full capacity at the end of 2020. The project led to a significant two-stage increase of N4G's West-East route annual gas transmission capacity. The entry and exit capacity at VIP Brandov and IP Lanzhot increased by 66% and 36% respectively, compared with 2019.
- » Moravia capacity extension (MCE), the domestic expansion of N4G's grid, which originally formed part of the currently suspended Czech-Polish interconnector (CPI) project. MCE's budget of CZK5 billion (€192 million) is slightly below 50% of N4G's planned outlays for the CPI project. MCE is aimed at creating enhanced security of supply for the Moravian region and is scheduled to be completed by year-end 2022.

Exhibit 9
N4G's capital spending will gradually return to the level of maintenance spending by 2023
Amounts in CZK millions

Equity-funding/debt-funding: Calculatory share of capital spending funded by equity or debt each year, not necessarily reflecting actual flows. Source: Company

The demand for C4G has been confirmed during the European capacity auction held on 6 March 2017, in which up to around 40 bcm have been contracted on a ship-or-pay basis until 2039. The project comprises additional pipeline works and a new compressor station, as well as upgrades to existing infrastructure assets.

The MCE project is meant to stabilise supply for northeast Czechia, which is currently relying on balancing demand through extraction from storages. Given that the MCE project is predominantly serving domestic market needs, the ERO approved 95% of the assets to be eligible for N4G's RAB, which is credit positive as it broadens the base for allowed returns. The funding structure for MCE remains unchanged from the plans for the original CPI project, which means that 70% of the expenditure is financed through equity injection.

The CPI cross-border pipeline project between Poland and Czechia was initiated to address security of supply concerns for Central-Eastern Europe, although it failed to meet the criterion of economic viability. While it still forms part of the ten-year network development plan, the probability of the project's revival has decreased as the competing Slovak-Polish interconnector is nearly completed. The project has to some extent been replaced by a standard incremental capacity process under European network rules, based on which a binding capacity auction was held in July 2021 but did not attract sufficient bids.

Another potential long-term project is a new interconnector link between Czechia and Austria, which, under the name of Bi-directional Austrian-Czech Interconnection (BACI), had already been discussed some years back but was halted in 2020 for lack of interest of shippers. <sup>2</sup> Following the approval in October 2021 by the Czech energy regulator of two capacity proposals submitted by N4G and its Austrian counterpart GAS Connect Austria, market interest will be tested anew through an auction to be held in July 2022. The offered annual capacity, either 1.8 bcm or 6.6 bcm, will include hydrogen readiness of the pipeline, which could be operational by the end of 2028. However, given the early stage of the project, we currently do not factor related investment expenditures or earnings into our credit view of N4G.

# Financial profile characterised by higher leverage than main European pipeline peers, mitigated by prudent capital structure management

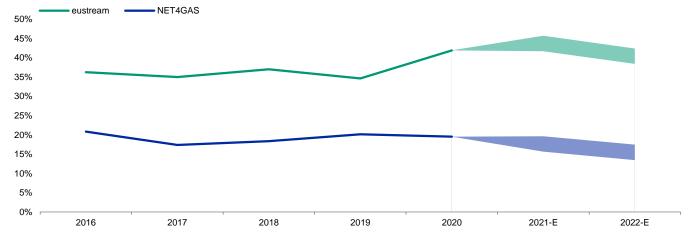
N4G has a relatively high EBITDA margin of around 80%-85%, supported by its long-term transit contracts and regulated network tariffs. The high earnings also support relatively stable credit metrics: Since 2016, FFO/debt has remained at least in the high teens in percentage terms, and we expect this trend to continue for the foreseeable future.

A further supporting factor is the strong commitment by N4G's shareholders, reflected in the equity funding provided for 100% of the C4G project and 70% of the MCE project, which allows an alignment of leverage with the earnings profile originating from the investments. A well-managed capital structure with a stable leverage on an FFO/debt basis, further underpinned by a flexible approach to dividend payments, is credit positive. Against the backdrop of N4G's investment phase lasting through 2022, we expect some volatility in dividend payouts, reflected in a volatile ratio of retained cash flow to debt.

While leverage remains significantly higher than that of its main European peer eustream (see Exhibit 10), N4G is less exposed to the geopolitical tensions around the East-West route for Russian gas shipment through Ukraine, and benefits from more predictable cash flows under generally longer-term ship-or-pay transit contracts and a much larger portion of regulated transmission tariffs.

To maintain its current credit quality, we expect N4G to continue to exhibit a relatively stable financial profile, with FFO/debt at least in the midteens in percentage terms, underpinned by continuing stable and predictable cash flows from its transit and transmission activities and supported by a flexible approach to dividend payments, particularly in a period of higher investment requirements.

Exhibit 10
N4G has a stable FFO-to-debt ratio, which, however, remains weaker than that of its Slovak peer eustream



eustream changed its accounting year to July in 2018; thus, the company reported only for seven months until July 2018. The above represents Moody's estimate of the annual calendar year performance. The estimates for 2021 and 2022 represent Moody's forward view, not the view of the issuer.

Source: Companies' annual financial statements and Moody's Investors Service

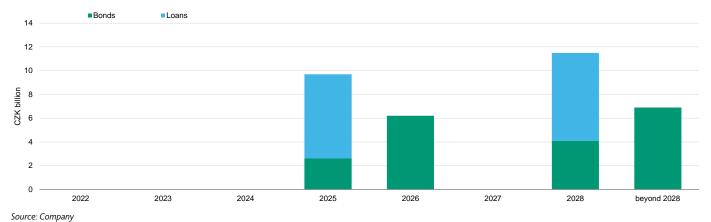
## Liquidity analysis

N4G's liquidity is strong, underpinned by cash reserves of CZK2.23 billion (about €88 million at the current exchange rate) as of 31 December 2020, and ongoing strong cash generation from its contracted gas transit and regulated gas transmission activities. The company also has access to a CZK2.6 billion (around €100 million) revolving and overdraft credit facilities, available until May 2022, with no restricting covenants or material adverse change (MAC) clauses. During the investment peak, liquidity has been supported by equity cash injections from the shareholders.

The next major debt maturity is in 2025, being a CZK7.1 billion bank loan and some CZK2.6 billion of notes issued in 2018 under a €5.0 billion EMTN programme. In early 2021 the company issued a CZK11.0 billion dual-tranche bond, including CZK6.9 billion maturing in 2031 and CZK4.1 billion in 2028, and also drew down a committed CZK7.4 billion term loan facility repayable in 2028. The new debt served to refinance around CZK12.3 billion senior notes falling due in 2021 and to accommodate the return of equity capital to shareholders

7 December 2021

Exhibit 11 N4G's debt maturities are longer term and well spread



The company carries some of its debt in US dollar to create a natural hedge against foreign-exchange revenue exposure, under specific transit contracts, the largest of which is Gazelle. Foreign-currency exposure will, however, decline as new capacity contracts are agreed, which tend to be denominated in Czech koruna.

## Methodology and scorecard

N4G's Baa2 ratings reflect the application of our rating methodology for Natural Gas Pipelines, published in July 2018. The scorecardindicated outcome based on our forward view is Baa1, one notch higher than the assigned ratings. However, the Baa2 ratings assigned to N4G also take into account the counterparty concentration and the associated geopolitical tension.

While ongoing tensions between Russia and Ukraine have, in contrast to its Slovak peer eustream, had limited impact on N4G's overall transit flows, any future global sanctions may hurt the company's interactions with Russia and its companies.

Exhibit 12 Rating factors NET4GAS, s.r.o

Natural Gas Pipelines Industry Scorecard [1][2]	Curre FY 12/31	
Factor 1 : Market Position (15%)	Measure	Score
a) Demand Growth	Aa	Aa
b) Competition	A	Α
c) Volume Risk & Throughput Trend	Baa	Baa
Factor 2 : Quality of Supply Source (10%)	-	
a) Supply Source	Baa	Baa
Factor 3 : Contract Quality (30%)	•	-
a) Firm Revenues	A	А
b) Contract Life	A	А
c) Shipper Quality / Recontracting Risk	Baa	Baa
Factor 4 : Financial Strength (45%)	<del></del> -	
a) (FFO + Interest) / Interest	12.0x	Aaa
b) FFO / Debt	25.6%	А
c) (FFO - Dividends) / Debt	24.1%	А
Rating:	·	-
a) Indicated Outcome from Scorecard	•	A2
b) Actual Rating Assigned	<u>.</u>	-

Moody's 12-18 Mon	
As of Decemb	er 2021 [3]
Measure	Score
Aa	Aa
А	Α
Baa	Baa
Baa	Baa
А	A
Α	A
Baa	Baa
6x - 7x	Aa/Aaa
16% - 19%	Baa
-5% - 0%	Caa / B
	Baa1
	Baa2

<sup>(1)</sup> All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations; (2) As of 31/12/2020; (3) This represents Moody's forward view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures. Source: Moody's Financial Metrics™

## **Ratings**

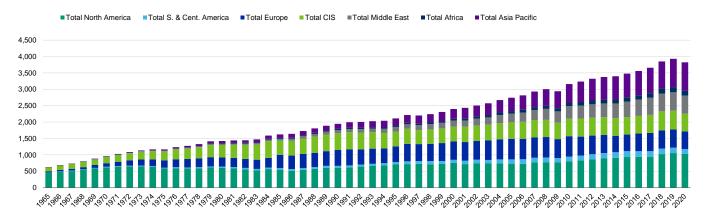
## Exhibit 13

Category	Moody's Rating
NET4GAS, S.R.O	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured	Baa2
Source: Moody's Investors Service	

## Appendix 1 - N4G's role in the European gas markets

Total gas consumption worldwide is driven by developed economies in the Northern Hemisphere as well as regions with vast natural gas reserves, specifically Russia. Evolving markets have seen growing demand over the last 20 years, with growth in consumption particularly pronounced in Asia (largely driven by China).

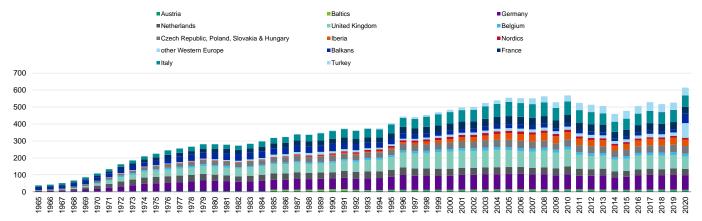
Exhibit 14
Global gas consumption per region (all amounts in bcm)



Source: https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

Main consumers of natural gas in Europe are Central Europe, including France and Germany, Southern Europe, including Spain and Italy, as well as the Netherlands and the UK. Turkey's demand has also been growing over the last decade.

Exhibit 15
European gas consumption per region (all amounts in bcm)

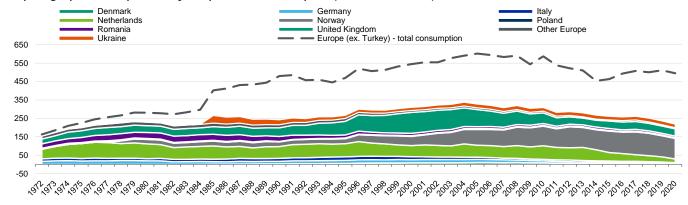


Balkans include Bulgaria, Croatia, Macedonia, Romania and Slovenia; Baltics include Estonia, Latvia and Lithuania; Nordics include Denmark, Finland, Iceland, Norway and Sweden; and other Western Europe includes Cyprus, Greece, Ireland, Luxembourg, Switzerland and others.

Source: <a href="https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html">https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html</a>

Europe receives its natural gas from a variety of sources. With decreasing gas production in the Netherlands, which will terminate production from the main Groeningen field in mid 2022, and in the UK, European domestic production is now largely stemming from Norway.

Exhibit 16
European gas production per country compared with consumption (all amounts in bcm)



Source: https://www.bp.com/en/qlobal/corporate/energy-economics/statistical-review-of-world-energy.html

To offset the mismatch of domestic production and consumption, pipeline gas, particularly from Russia, has grown in importance over the past 50 years. In 2020, European countries imported around 447 bcm of natural gas through pipelines, of which around 211 bcm came from sources outside of Europe. Liquefied natural gas (LNG) accounted for another 115 bcm, including around 110 bcm from outside Europe.

Exhibit 17
Europe - Natural gas imports, 2020

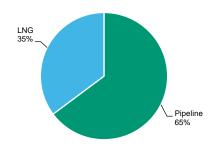
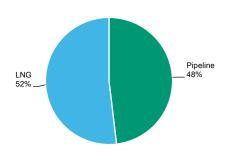


Exhibit 18
World - Natural gas imports, 2020



Source: https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

The vast majority of pipeline gas is provided by Russia, which accounts for close to 80% of pipeline imports into Europe from external sources, while LNG is shipped primarily from Qatar, Russia and the US (among them around 66% of LNG imported, when excluding European sources). The US became a large supplier to Europe only in 2019, which was a result of new liquefaction capacities coming online, which were built on the back of long-term contracts with European offtakers and a concurrent lower demand from Asia.

Exhibit 19
Origin of 2020 European pipeline gas

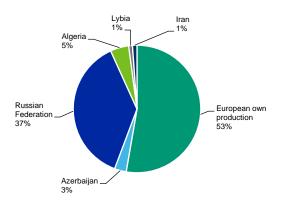
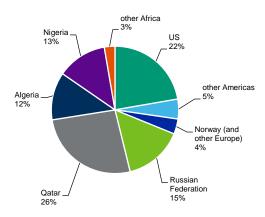
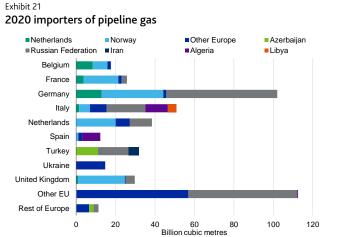


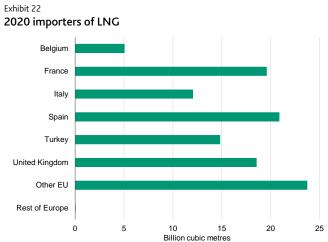
Exhibit 20
Origin of 2020 European LNG imports



Source: https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

Russian pipeline gas is primarily serving Central and Eastern Europe, with Germany in the North and Italy in the South being the main users, while LNG supplies principally serve Western and Southern Europe.

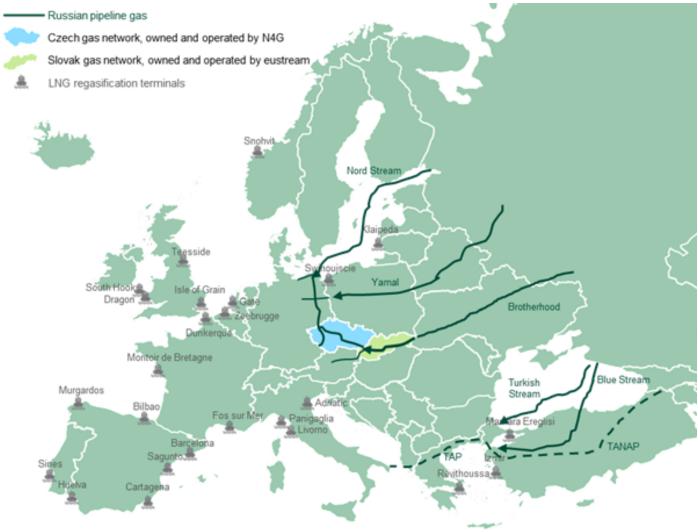




Source: https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

Global supply and demand balances and their influence on pricing as well as available and planned interconnections across the continent mean that LNG cannot easily replace pipeline gas and Russia remains a core supplier to European countries. However, LNG (also from Russia) is reckoned to remain a sizable contributor to European supply, as Norwegian and Dutch production is declining and will not be fully replaced with pipeline gas.

Exhibit 23 **European gas market map** 



Sources: International Energy Agency and Moody's Investors Service

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According to Gazprom Export, the most important gas transit routes for Russian gas to Western Europe include:

- » "Brotherhood" (Urengoy-Pomary-Uzhgorod): This is the largest and longest-serving gas route, with a transport capacity of up to 100 bcm per year, via Ukraine and Slovakia (that is, the eustream network). In Slovakia, the route splits into two parts, with connections into the Czech Republic and Austria. eustream plays an important role in delivering Russian natural gas to Italy, Hungary, Slovenia and Croatia. Gas deliveries along this route started in 1967. At the end of 2019, Russia and Ukraine agreed on a new five-year transit contract with ship-or-pay volumes of 65 bcm in 2020 and 40 bcm per annum in 2021-24.
- » Yamal-Europe: This pipeline runs across Russia, Belarus and Poland, ultimately reaching Germany. The first sections of the pipeline were commissioned in 1996, with the Belarusian part becoming operational in 1997. Upon the commissioning of the last compressor station in 2006, Yamal-Europe reached its full capacity of 33 bcm per year.
- » Trans-Balkan pipeline (through Romania): This route carries Russian gas for the domestic market, transiting Ukraine and Moldova, and furthermore serves the Balkan countries and Turkey. Its significance has been greatly reduced by the commissioning of the first string of Turkish Stream (Turk Stream 1) in 2020.

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- » Blue Stream: This line is intended for direct gas deliveries to Turkey, bypassing other transit countries, and started operations in 2003.
- » Nord Stream: This offshore pipeline, commissioned in 2012, has a capacity of 55 bcm per year and allows direct gas shipment to Western Europe. It consists of two lines with a throughput capacity of 27.5 bcm/year each. The core target markets for this line are Germany, the UK, the Netherlands, France and Denmark.

For delivery of gas to major Western European economies, Russia would firstly utilise available capacities of Nord Stream and Yamal, and only then the traditional East-West route through Ukraine.

Given Russia's strategy to increasingly diversify away from the Ukrainian route, any new alternative transit pipelines will likely lead to a reduction in flows and potentially lower capacity bookings along the East-West route over the medium to long term.

Currently proposed new pipeline projects include:

- » Nord Stream 2 (capacity 55 bcm): This pipeline will run in parallel to the existing Nord Stream and enter into Germany. Preliminary capacity bookings indicate that flows would be routed through the Czech Republic and Slovakia on the West-East route (thus utilising the networks of N4G and eustream) into Austria and Italy. For further details on NS2 see above "Strategic intermediate gas transit route for shipping Russian gas to Southern Europe".
- » Turkish Stream 2 (capacity around 16 bcm): This will allow some of the gas shipped via Turkey to reach Italy and will affect transit through Ukraine to Turkey; however, additional transit infrastructure from Turkey via Bulgaria, Serbia and Hungary to Western Europe has yet to be completed.
- » TAP/TANAP link through Turkey (capacity 16 bcm): This is a relatively small pipeline, but could divert some of the Caspian Sea gas from Azerbaijan, particularly destined for Turkey (where some of the demand growth is expected).

Assuming European gas demand is maintained around current levels and there is full utilisation of existing and planned routes, Russia may no longer need to rely on the Ukrainian route for gas flow. However, supply and demand for natural gas remains in flux, and it may act as an interim fuel to support the decarbonisation plans of the European economies. Rapidly declining indigenous production in Europe, the delay in the approval of NS2 and the transit bookings for the Brotherhood pipeline will support continued flows via the East-West route at least over the next five years.

## **Appendix 2 - Financial information**

Exhibit 24 Select peer comparison NET4GAS, s.r.o

	NET4GAS, s.r.o			eustream, a.s.			Alliance Pipeline L.P.		
		Baa2 Stable		Baa2 Stable			Baa2 Negative		
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	LTM
(in EUR million)	Dec-18	Dec-19	Dec-20	Jul-18	Jul-19	Jul-20	Dec-19	Dec-20	Jun-21
Revenue	286	314	379	451	793	748	283	252	260
EBITDA	241	263	313	399	706	674	197	173	174
Total Assets	1,871	2,102	2,123	4,509	4,798	5,019	660	573	575
Total Debt	1,073	1,080	1,059	1,322	1,388	1,140	354	314	313
Net Debt	1,022	995	975	1,271	1,258	1,097	354	313	312
(FFO + Interest Expense) / Interest Expense	8.9x	8.7x	12.0x	12.8x	11.8x	11.7x	8.8x	9.8x	11.6x
Net Debt / Fixed Assets	61.3%	50.6%	48.4%	30.2%	30.3%	24.0%	56.8%	58.5%	58.6%
FFO / Net Debt	19.3%	21.9%	27.9%	24.4%	38.2%	43.6%	49.3%	46.1%	51.1%
RCF / Net Debt	18.1%	17.0%	26.2%	-11.0%	18.3%	4.4%	2.6%	1.7%	4.3%

eustream changed its accounting year to July in 2018; thus, the company reported only for seven months until July 2018. All figures and ratios calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months. RUR\* = Ratings under review, where UPG = for upgrade and DNG = for downgrade.

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

Exhibit 25
Moody's-adjusted net debt breakdown
NET4GAS, s.r.o

		FYE	FYE	FYE	FYE
(in CZK million)		Dec-17	Dec-18	Dec-19	Dec-20
As Reported Total Debt		27,287	27,397	27,462	27,903
	Leases	256	260	0	0
Moody's Adjusted Total Debt		27,543	27,657	27,462	27,903
Cash	& Cash Equivalents	(931)	(1,302)	(2,162)	(2,226)
Moody's Adjusted Net Debt		26,612	26,355	25,300	25,677

All figures are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. Source: Moody's Financial  $Metrics^{TM}$ 

Exhibit 26 Moody's-adjusted EBITDA breakdown NET4GAS, s.r.o

		FYE	FYE	FYE	FYE
(in CZK million)		Dec-17	Dec-18	Dec-19	Dec-20
As Reported EBITDA		5,887	6,151	6,839	8,294
	Unusual Items - Income Statement	0	(45)	(91)	0
	Leases	64	65	0	0
Moody's Adjusted EBITDA		5,951	6,171	6,748	8,294

All figures are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. Source: Moody's Financial Metrics<sup>TM</sup>

Exhibit 27
Select historical financials (Moody's-adjusted)
NET4GAS, s.r.o

121 10/10, 5.1.0				
	FYE	FYE	FYE	FYE
in CZK million)	Dec-17	Dec-18	Dec-19	Dec-20
NCOME STATEMENT				
Revenue	7,397	7,335	8,054	10,029
EBITDA	5,951	6,171	6,748	8,294
EBITDA margin %	80.5%	84.1%	83.8%	82.7%
EBIT	3,883	4,227	4,746	5,890
EBIT margin %	52.5%	57.6%	58.9%	58.7%
nterest Expense	630	642	716	649
Net income	2,634	2,897	3,256	4,244
BALANCE SHEET				
Fotal Debt	27,543	27,657	27,462	27,903
Cash & Cash Equivalents	931	1,302	2,162	2,226
Net Debt	26,612	26,355	25,300	25,677
Net Property Plant and Equipment	43,403	42,964	50,025	53,054
Total Assets	45,490	48,231	53,473	55,915
CASH FLOW				
Funds from Operations (FFO)	4,789	5,084	5,532	7,153
Cash Flow From Operations (CFO)	4,337	4,593	5,797	7,038
Dividends	2,645	315	1,235	434
Retained Cash Flow (RCF)	2,144	4,769	4,297	6,719
Capital Expenditures	(799)	(1,459)	(6,869)	(6,602)
Free Cash Flow (FCF)	893	2,819	(2,307)	2
NTEREST COVERAGE				
(FFO + Interest Expense) / Interest Expense	8.6x	8.9x	8.7x	12.0x
EVERAGE				
FFO / Net Debt	18.0%	19.3%	21.9%	27.9%
FFO / Debt	17.4%	18.4%	20.1%	25.6%
RCF / Net Debt	8.1%	18.1%	17.0%	26.2%
RCF / Debt	7.8%	17.2%	15.6%	24.1%
Net Debt / EBITDA	4.5x	4.3x	3.7x	3.1x
Net Debt / Fixed Assets	61.3%	61.3%	50.6%	48.4%

All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. Source: Moody's Financial Metrics  $^{\text{TM}}$ 

## **Endnotes**

- 1 http://www.gazpromexport.ru/en/statistics/
- 2 BACI was challenged by N4G's Slovak peer eustream which argued that BACI would not add useful extra capacity but rather replicate the connection already provided by eustream from Czeachia through Slovakia to Austria.

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