

Summary:

Open Grid Europe Group

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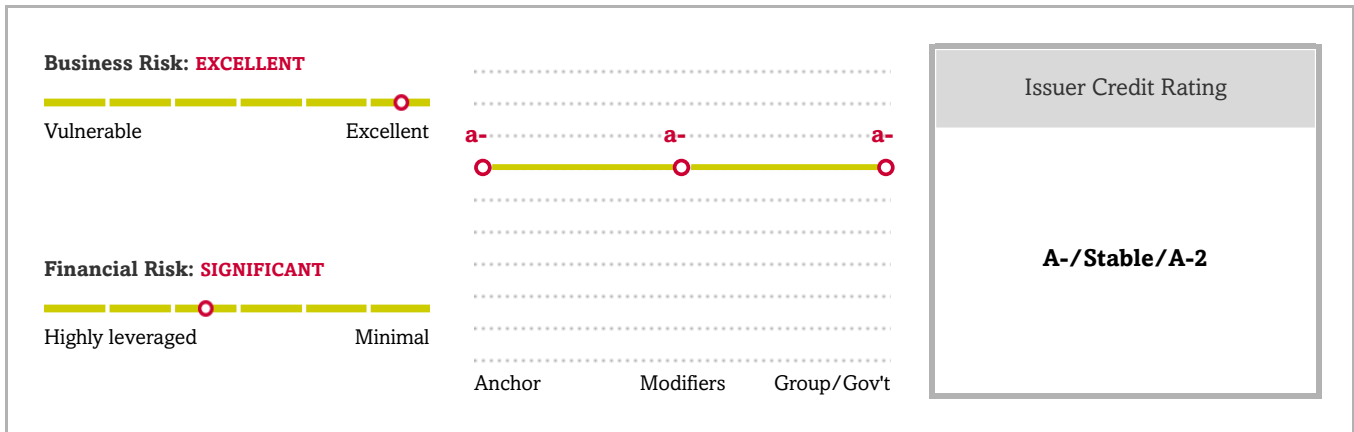
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Summary:

Open Grid Europe Group



Credit Highlights

Key Strengths	Key Risks
<ul style="list-style-type: none"> • Operations focused on low-risk regulated gas transmission operations in Germany, which has a supportive regulatory framework. • Largest gas transmission network and operator in Germany (out of 16) with a natural monopoly position in its service area. • The network development plan (NDP) in Germany provides ongoing growth for OGE's core business. 	<ul style="list-style-type: none"> • Intensive capital spending (capex) program and sustained dividends will pressure the company's credit ratios in 2019 and 2020. • Lower regulated remuneration over the 2018-2022 regulatory period puts pressure on revenue and profitability.

A supportive German regulatory framework continues to support Open Grid Europe's credit quality.

We see the German regulatory framework as one of the strongest frameworks in Europe because of the regulator's solid track record of stability and five-year regulatory period with well-defined and transparent tariff-setting procedures. It also enables the Open Grid Europe Group (OGE) to fully recover its costs--as long as deemed efficient by the regulator--and moderates the effects of volume and commodity risks via a regulatory account mechanism. This fundamentally supports OGE's credit quality from S&P Global Ratings' perspective as it makes OGE's performance stable and predictable. The current regulatory period runs until 2022.

We note, however, that regulatory return on capital set by the German regulator, Bundesnetzagentur (BNetzA), has decreased to 6.91% for new assets and 5.12% for old assets over the 2018-2022 regulatory period, from 9.05% and 7.14%, respectively, in the previous regulatory period. In addition, return on excess equity (ROEE) decreased to 3.03% over the current regulatory period from 4.19% in the past. Because the return on equity (ROE) represents OGE's

remuneration on old and new assets, all other things equal, this results in lower regulatory remuneration and puts some additional pressure on OGE's profitability.

OGE's results in 2018 benefited from higher capacity bookings than anticipated, but such excess revenue will have to be returned to the market later on.

OGE generated funds from operations (FFO) to debt of 13.8% for 2018 partially as a result of volume effects due to higher capacity bookings than anticipated, which translated in excess revenue. OGE's results are exposed to volume risk, but these effects are mitigated by the regulatory framework because if its revenue falls short of, or exceeds, the revenue cap, the deficit or surplus is calculated each year and offset by the regulatory account mechanism. The current regulatory account mechanism, in place since 2017, states that, irrespective of the size of revenue shortfall (or excess), the deviation, plus an interest component, must be settled over a three-year period in the future. Such mechanism is implemented with a two-year time lag. As such, one-third of the about €64 million of excess revenue due to volume effects in 2018, plus an interest component, will be returned to the market each year over 2020-2022, counterbalancing the extraordinary effects in 2018.

Network Development Plan (NDP) continues to drive most of OGE's investments.

In line with the Energy Industry Act (EnWG), transmission system operators (TSOs) operating in Germany must jointly submit a 10-year NDP in each even calendar year. Projects under this plan are necessary for the energy transition to a new energy mix, grid stability, and integration of the German network. The majority of OGE's capex over the coming years is included in the German NDP. Moreover, about 60% of the total capex over the next five years is classified as "investment measure effective". Such investments are entitled to immediate cost recognition and regulatory return, as opposed to investments falling outside these measures, which have time-lag cost recognition. In addition, we believe such investments will enable OGE to retain its key role as gas TSO. We view both of these factors as positive for OGE's credit quality.

Its intensive investment agenda, together with ongoing dividend payments, will put some pressure on OGE's credit metrics.

OGE's expanding investments will be financed through a mix of additional debt and own resources. In addition, we expect the company to sustain its dividend payments of €110 million-€120 million over the next two years, which effectively reduces OGE's available resources and increases net debt. As a result, we expect adjusted debt to increase 13% in 2019 and 5% in 2020. FFO will also increase, thanks to additional remuneration on new assets, but less rapidly, leading to a decline in credit ratios over the next two years, such that FFO to debt will fall from 13.8% in 2018 to 11.8% in 2019 and 11.6% in 2020. Therefore, although we forecast the company's FFO to debt will remain above 12% on a weighted average basis, in line with the current rating level, we continue to see limited financial headroom within the rating in the near term.

Outlook: Stable

Our stable outlook on OGE captures our expectation that credit ratios will remain, on average, at or above 12% on a weighted average basis, despite declining to 11.8% in 2019 and 11.6% in 2020, mainly due to elevated capex related to the NDP, before recovering above 12% by 2021 thanks to increasing regulated earnings. Returns on an expanding regulated asset base will gradually improve EBITDA generation.

Downside scenario

We would consider a downgrade if we believe that OGE's FFO to debt trajectory will remain below 12% on a prolonged basis. This could occur due to any of the following reasons, or a combination thereof:

- Significant increases of debt-financed investments, especially non-investment measure capex, which would expose the company to higher execution risk;
- Adverse regulatory decisions; or
- Increased dividend payments beyond what we contemplate in our base case.

Upside scenario

Rating upside appears remote currently because of OGE's capex intensity, which results in higher debt levels, and sustained dividends. However, we would consider it in the event of a sustained improvement in credit metrics, including adjusted FFO to debt of at least 15%.

Our Base-Case Scenario

Assumptions	Key Metrics			
<ul style="list-style-type: none"> We forecast German GDP growth at about 2.2% in 2019 and 1.7% in 2020. Although OGE's revenue are not directly correlated to GDP performance, given their regulated nature, we believe that economic resiliency should provide fundamentals to continue investing into long-term German infrastructure. An efficiency factor of 100% for the regulatory period of 2018-2022, or the third regulatory period. We consider a ROE of 6.91% and a general productivity factor of 0.49% as our base case, despite the appeal processes ongoing. We also consider a ROEE of 3.03% for the third regulatory period that runs until 2022. We assume relatively stable operating expenditure, meaning that we expect costs will increase at a slower pace than revenue beyond 2019. Capex at about €480 million-€490 million in 2019 and €430 million-€450 million in 2020, about 60%-70% of which will be allocated for investment measures aligned with the NDP. Dividend distributions of about €120 million in 2019 and €110 million in 2020, based on a financial policy that prioritizes rating stability and an FFO to debt above 12% on a weighted average basis. 				
		2018A	2019E	2020E
	FFO to debt (%)*	13.8	11.8	11.6
	Debt to EBITDA(x)*	6.3	6.2	5.7
	Capex (mil. €)*	436	480-490	430-450
	EBITDA (mil. €)*	551	500-510	540-550
	FFO (mil. €)*	387	370-380	385-395
Discretionary Cash Flow	Negative	Negative	Negative	
	<p>*Adjusted by S&P Global Ratings. A--Actual. E--Estimate. FFO--Funds from operations. Capex--Capital expenditure.</p>			

Base-case projections

Profitability will decline in 2019 and steadily recover thereafter.

We forecast EBITDA margins decreasing to about 49% in 2019 from 54.7% in 2018, due to the dissipation of volume effects which translated into excess revenue in 2018, and additional fuel energy and CO2 costs, as well as the increasing low to high caloric gas conversion levy, which is the cost all operators spread across Germany in order to adapt gas infrastructure to high caloric gas in relevant areas. We expect, however, that a relatively steady cost structure, comprising a high share personnel and maintenance expenses, will contribute to EBITDA margins steadily recovering, since revenue will be boosted by return on regulated investments.

Continued investments and dividend payments will result in negative discretionary cash flow (DCF) over the medium term.

We forecast capex at about €480 million-€490 million in 2019, and €430 million-€450 million in 2020. According to our base-case scenario, such investments, coupled with dividend distributions of about €120 million in 2019 and €110 million in 2020, will result in negative FOCF after dividends over the next two years, more so in 2019 than in 2020, leading to an increase of gross debt of about €250 million over the period. This will be compensated in time by

additional regulatory return.

Ongoing appeal processes on regulatory parameters could represent an upside for OGE.

BNetzA fixed the ROE at 6.91% and the sector productivity factor (x-gen) at 0.49%, for the 2018-2022 regulatory period (third regulatory period), from 9.05% and 1.5%. Although the reduction in the x-gen factor is positive for OGE, ROE reduction will more than offset this effect, which will result in lower remuneration. OGE and other network operators filed an appeal with the Düsseldorf Higher Regional Court against the BNetzA. Timing for resolution is still uncertain regarding the x-gen factor appeal; however, the court ruled in favor of OGE and other operators concerning their ROE appeal. BNetzA filed a legal appeal with the Federal Court of Justice to contest this decision and a final ruling is expected in 2019.

Although we don't give benefit of potential favorable rulings of these appeals in our base-case scenario, a positive result would be applied retroactively, and could add up to about 4% of incremental EBITDA each year over the third regulatory period.

Company Description

Open Grid Europe GmbH is the largest of Germany's 16 gas TSOs. It is a wholly owned subsidiary of Vier Gas Transport GmbH (VGT). Through OGE, the group designs, constructs, operates, and markets gas transmission networks.

OGE transmits about 70% of Germany's annual gas volume through its 12,000-kilometer-long network, making it the largest supra-regional pipeline network in Germany. Its pipeline systems connect the border-crossing points to cities, municipalities, and industrial users in German regions and to pipeline systems of neighboring countries, such as The Netherlands, Belgium, France, Switzerland, Austria, and the Czech Republic.

Business Risk: Excellent

OGE's low-risk operating environment is a key element of its business risk profile. Almost all of OGE's operations stem from German regulated gas transmission activities. In addition, we see Germany's regulatory framework as supportive because it is transparent, relatively stable, and predictable. The current legal dispute between the sector players and the regulator is a relatively common feature and does not change our view. The framework provides virtually full coverage of costs and protection against volume and commodity risk. These characteristics result in credit-supportive operating conditions for network operators.

OGE is one of the largest TSOs in continental Europe and holds key infrastructure assets that are crucial for German and European security of supply. We expect OGE's regulatory asset base to steadily expand over the next few years as a result of investments related to the NDP, which is a 10-year natural gas infrastructure development plan aiming to ensure long-term, secure gas supplies for Germany and facilitate the transition to a low-carbon energy mix. Total investments under this plan amount to €6.9 billion by 2028, out of which OGE accounts for 32% of the total. TSOs have to jointly submit an updated plan to the regulatory authority in Germany each even calendar year following

public consultation.

We expect OGE to invest about €2.3 billion over the next decade to expand and improve its grid under the NDP. Out of these investments, we expect a substantial share will be in the Zeelink project in 2019 and 2020. This pipeline is relevant for low calorific (L-gas) to high calorific gas (H-gas) conversion, as it will enable transport of additional H-gas volumes from, for example, the Belgian Zeebrugge LNG Terminal into areas which were previously supplied with L-gas. The Zeelink project, of which OGE owns 75% and Thyssengas the remaining 25%, will contribute to strengthening the security of Germany's supply while at the same time supporting low to high caloric gas conversion in the region; its commissioning date is 2021.

In our opinion, gas and gas infrastructure will remain critical to Germany's achieving low-carbon energy mix over the medium to long term and network stability. Particularly since Germany embarked on phasing out coal-fired generation by the mid-2030s, in an effort to accelerate its carbon emission reductions, and scheduled phasing out of nuclear power generation by 2022. This supports OGE's business risk profile, in our view.

Financial Risk: Significant

OGE's financial risk profile benefits from a large share of regulatory revenue, which results in predictable and stable cash flows over the third regulatory period (2018-2022) in Germany, albeit somewhat pressured due to a ROE of 6.91% on new assets and 5.12% on old assets over the 2018-2022 regulatory period, which decreased versus 9.05% on new assets and 7.14% on old assets over the 2012-2017 regulatory period.

OGE's results in 2018 were above our expectations mainly thanks to higher capacity bookings than anticipated, which resulted in excess revenue and yielded an FFO-to-debt ratio of 13.8%. However, we believe that the company won't sustain this metric at 2018 levels beyond 2019 because of the dissipation of such volume effects and somewhat increasing costs that will lead to lower profitability.

Importantly, we also forecast that the capex plan under the German NDP will represent additional funding needs for OGE over the next two years. Also, we forecast dividend payments of about €120 million for 2019 and €110 million for 2020, which are higher than previous years' levels.

We believe that the aggregate of these factors will result in negative FOCF after dividends and an FFO to debt of 11.8% in 2019 and 11.6% in 2020, and therefore will continue to limit OGE's headroom under the current rating category over the next two years (we note that we nonetheless expect OGE to post FFO to debt above 12% on a five-year weighted average basis).

Moreover, we do acknowledge that OGE's investments are entitled to immediate imputed cost of capital (imputed equity interest plus imputed trade tax). This partially counterbalances negative FOCF effects because it means that new assets are entitled to regulated remuneration and continuously add to revenue growth and EBITDA, as opposed to investments with time-lag cost recognition, which essentially are those falling outside this classification.

We benchmark OGE's ratios against the low volatility table given the strength of the regulatory framework.

Liquidity: Adequate

We assess OGE's liquidity as adequate because its sources of liquidity will exceed its uses by 1.1x over the next 12 months, in our opinion.

Our assessment also includes qualitative factors, such as proven access to debt capital markets and sound relationships with banks, reflected in the company's diverse sources of funding. We also believe that the company displays prudent risk management that underpins its liquidity position.

Principal Liquidity Sources	Principal Liquidity Uses
<p>Principal liquidity sources over the next 12 months include:</p> <ul style="list-style-type: none"> • Cash and short-term marketable securities of €409 million as of Dec. 31, 2018. • Committed undrawn credit facilities of €600 million expiring in 2023. • Cash FFO of €334 million. 	<p>Principal liquidity uses for 2019 include:</p> <ul style="list-style-type: none"> • Debt maturities of €106 million until the fourth quarter of 2019. • Capex of €486 million. • Dividend payments of €121 million.

Environmental, Social, And Governance

The German energy transition creates significant opportunities for gas infrastructure companies, such as OGE. In our opinion, gas will remain a crucial component for the transition process to the medium and long-term energy mix, particularly in light of recently disclosed plans to shut down coal generation and the nuclear shutdown in Germany scheduled for 2022.

Most of OGE's capex over 2019 and 2020 included in our base case will fall under investment measures, which represents gas infrastructure that will be key for the energy transition in Germany and is fully aligned with country's long-term climate policy.

Overall, we are not aware of any social and governance factors that would materially influence OGE's credit quality. In our view, the company's management and governance framework meets industry standards and is particularly driven to align stakeholder interests toward long-term sustainability goals. On the other hand, we believe that the company's technical and operational standards will continue to ensure a high degree of network security and reliability, thereby mitigating environmental risks over the coming years.

Group Influence

The Vier Gas Transport Group comprises VGT (the parent company) and its subsidiary OGE and its equity investments, which include a number of gas transmission assets with different levels of ownership. VGT largely performs a holding company function for OGE. Vier Gas Services GmbH & Co. KG, a long-term investment consortium including British Columbia Investment Management (32.15%), Abu Dhabi Investment Authority, through Infinity Investments (24.99%), Macquarie and associated LP (24.13%), and Munich Re (18.73%), is the sole shareholder of VGT.

Issue Ratings - Subordination Risk Analysis

Capital structure

As of Dec. 31, 2018, OGE's capital structure consists of:

- €2.75 billion bonds issued at the VGT level.
- €315 million issued at the pipeline companies level.
- €44 million in other short-term liabilities.

Analytical conclusions

We rate OGE's debt at the level of the issuer credit rating, because we believe debt sitting at pipeline companies does not represent a material disadvantage to bondholders.

Ratings Score Snapshot

Issuer Credit Rating

A-/Stable/A-2

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Strong

Financial risk: Significant

- **Cash flow/Leverage:** Significant

Anchor: a-

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)

- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Business And Financial Risk Matrix						
Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb-/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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