

CREDIT OPINION

20 June 2024

Update



RATINGS

Scotland Gas Networks plc

Domicile	United Kingdom
Long Term Rating	Baa1
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

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

Contacts

Stefanie Voelz +44.20.7772.5555 VP-Sr Credit Officer stefanie.voelz@moodys.com

Samuel Mok +44.20.7772.1000
Lead Ratings Associate
samuel.mok@moodys.com

Neil Griffiths- +44.20.7772.5543 Lambeth

Associate Managing Director neil.griffiths-lambeth@moodys.com

Scotland Gas Networks plc

Regular update to credit analysis

Summary

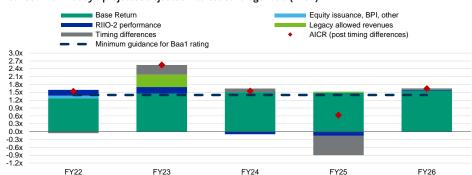
The credit quality of <u>Scotland Gas Networks plc</u> (Scotland GN, Baa1 stable) is supported by (1) the company's position as monopoly owner and operator of the gas distribution network in Scotland; and (2) the sector's well-established and transparent regulatory regime.

Credit quality is constrained by the company's historically high leverage relative to peers and regulatory assumptions, with net debt to regulatory asset value (RAV) slightly above 70%, although currently in the mid-60s in percentage terms as high inflation has facilitated de-gearing. Credit quality is further constrained by additional debt at its immediate parent company, SGN MidCo Limited (SGN MidCo), leading to consolidated net debt / RAV of just over 70% at March 2023.

While Scotland GN has a strong track record of operational performance, we see limited scope for operational outperformance to support interest cover metrics in the current regulatory period (RIIO-GD2, which began on 1 April 2021). Regulatory targets remain challenging, and totex outperformance in earlier years will largely be offset by some backloading of expenditure into later years. Our assessment of Scotland GN focuses on average credit metrics over the period, because of significant year-on-year volatility associated with regulatory timing differences (see Exhibit 1).

Exhibit 1
Scotland GN will maintain limited headroom to minimum interest coverage guidance in RIIO-GD2

Breakdown of Moody's projected adjusted interest coverage ratio (AICR)



Company forecast of operational performance as per Ofgem's PCFM 2023 PCFM update (published January 2024). Legacy adjustments in FY 2023 relate to a true up for higher actual transmission exit capacity pass through costs in the last year of RIIO-GD1, which are recoverable with the two-year lag. Source: Moody's Ratings

Credit strengths

- » Well-established and transparent regulatory framework underpins stable and predictable cash flows, with visibility until March 2026
- » High inflation has facilitated de-gearing in RIIO-GD2 to-date, but the backloaded investment programme will likely lead to some increase in leverage over the next two years

Credit challenges

- » Interest coverage metrics are depressed by higher leverage than other energy networks and regulatory assumptions
- » Additional leverage at Scotland GN's parent company, SGN MidCo, equivalent to around 6-7% of RAV
- » High environmental risks linked to national decarbonisation policies, although partially mitigated by our expectation of some regulatory support, and the potential for usage of the natural gas network to transport hydrogen, to the extent this becomes significant in the UK

Rating outlook

The stable outlook reflects our expectation that Scotland GN will maintain financial metrics commensurate with the current Baa1 rating level over the RIIO-GD2 regulatory period.

Factors that could lead to an upgrade

Upward pressure on the ratings is unlikely to arise given our expectation that Scotland GN will have limited headroom on its average interest coverage metrics over the current regulatory period. In addition, consolidated leverage at SGN MidCo in the low- to mid-70s in percentage terms will continue to constrain ratings. However, the ratings could be considered for an upgrade if there was a change in financial policy leading to, at both Scotland GN and SGN MidCo, net debt / RAV not above 68% and an AICR sustainably above 1.6x. Any upward rating pressure would have to be considered in the context of the long-term future of gas networks and potential alternative use options.

Factors that could lead to a downgrade

The ratings could be downgraded if Scotland GN's net debt to RAV appeared likely to increase above 75% or AICR was expected to fall below 1.4x, on average and excluding timing differences, over RIIO-GD2. Downward rating pressure would also arise if a more aggressive financial policy was pursued at Scotland GN's immediate parent company, SGN MidCo, such that either net debt to RAV rose above 85% or AICR fell below 1.2x. However, we do not anticipate this situation arising.

Key indicators

Exhibit 2
Scotland Gas Networks plc
Regulatory timing differences lead to year-on-year fluctuation in metrics

	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	2024-2026 avg
Adjusted Interest Coverage Ratio	1.9x	1.6x	1.6x	1.6x	1.6x	2.6x	1.2x-1.4x
Net Debt / RAV	72.4%	72.6%	74.2%	73.2%	68.8%	65.5%	66%-68%
FFO / Net Debt	11.5%	11.6%	11.4%	11.1%	8.9%	12.1%	8%-10%
RCF / Net Debt	6.0%	9.2%	9.3%	5.6%	5.2%	10.5%	5%-8%

Timing differences (true-ups for pass through costs) significantly boosted FYE March 2023 metrics. Cash balances held by Scotland GN (and other SGN group companies) are pooled at its sister company Southern GN, but Moody's does not consider intercompany receivables within its net debt calculations. All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Moody's Projections (proj.) are Moody's opinion and do not represent the views of the issuer.

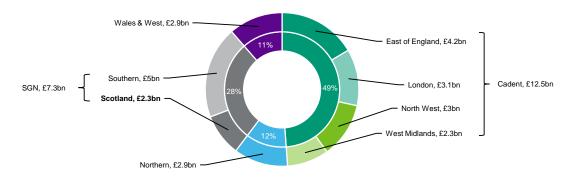
Source: Moody's Financial Metrics™ and Moody's Ratings forecasts

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

Profile

Scotland GN is the second smallest of the eight gas distribution networks (GDNs) in Great Britain by RAV, £2.3 billion at March 2024. It provides gas distribution services to around 1.8 million customers through around 24,000 kilometres of gas pipelines in Scotland.

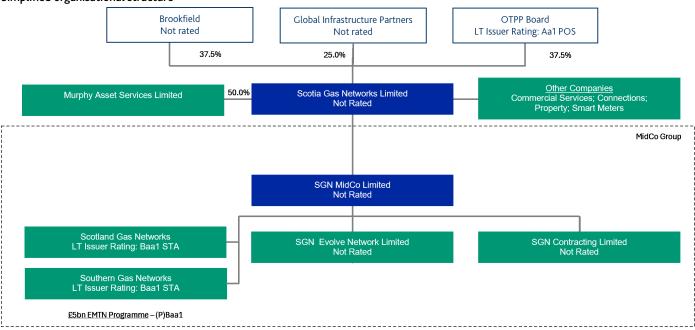
Exhibit 3
Regulatory Asset Value by gas distribution network operator group RAV at 31 March 2024, nominal



RAV as per Ofgem's PCFM 2023 update (published January 2024) Source: Ofgem, Moody's Ratings

Scotland GN is a wholly owned subsidiary of Scotia Gas Networks Limited (Scotia Gas Networks) via the intermediate holding companies SGN MidCo Limited (SGN MidCo) and SGN PledgeCo Limited. Scotia Gas Networks is owned by a consortium which, since March 2022, comprises (1) Ontario Teachers' Pension Plan Board (Aa1 positive), 37.5% stake; (2) Brookfield Super-Core Infrastructure Partners (Brookfield), 37.5%; and (3) Global Infrastructure Partners (GIP), 25%. Scotia Gas Networks also owns Southern Gas Networks plc (Southern GN, Baa1 stable) as well as SGN Evolve Network Limited in Northern Ireland. The networks have separate regulatory licences and remain legally separate and independent of each other. Whilst they are operationally managed independently, group functions are run centrally and policies, including treasury, and processes are aligned across entities.

Exhibit 4
Simplified organisational structure



Source: Company reports, Moody's Ratings

Detailed credit considerations

Well-established and transparent regulatory framework underpins stable and predictable cash flow; good visibility until March 2026

The GDNs in Great Britain benefit from a very transparent, stable and predictable regulatory regime based on clearly defined risk and reward principles. It is overseen by an experienced regulator, the Office of Gas and Electricity Markets (Ofgem), which has a long track record of consistent decision making. Ofgem has consulted widely with a variety of stakeholders whenever changes to the regulatory framework have been made. Scotland GN has good visibility of revenues and cash flow under the amended (post appeal) regulatory determination for the current price control for gas distribution networks (RIIO-GD2), which began on 1 April 2021 and runs until 31 March 2026.

Exhibit 5
Scotland GN service area



Source: Energy Networks Association

Exhibit 6 Price control overview

	GB Gas Distribution
Regulator/ Price Control	Ofgem / RIIO-GD2
Regulated Business	Scotland Gas Networks plc
Term of price control	April 2021 - March 2026
Allowed return on RAV	3.07% (2021-22); 3.00% (2022-23); 3.30%
(vanilla real, CPIH stripped)	(2023-24); 3.54% (2024-25)
	Forecast average for RIIO-GD2: 3.31%
Return on regulatory equity	5.09% expected average (Ofgem assm)
(Real, CPIH stripped)	(Company forecast ~ 70bps of operational
	outperformance)
RAV at March 2024	£2.3 billion

In RIIO-GD2, average allowed return and allowed return on regulatory equity (RoRE) are estimates as per Ofgem's GD2 PCFM 2023 update (published January 2024). The RAV and RIIO-GD2 company forecast of operational outperformance also comes from this source. Source: Company reports; Ofgem

We continue to view regulation of the UK energy networks by Ofgem as among the most transparent regimes and on a par with 'best in class' globally. Social risks have, however, become evident, with the regulator seeking to reduce the rewards (and penalties) for outturn operational performance deviating from regulatory assumptions and targets in RIIO-2, which we believe is a reaction to public and political concerns about the cost of energy and profitability of utilities (see RIIO-2 proposals support sector's business risk profile, but legitimacy in greater focus, 3 August 2020 for more details).

On 1 August 2023, Ofgem published an open letter ('call for input') outlining possible changes following the high levels of inflation seen in the current price controls for electricity and gas networks (8.9% CPIH and 13.5% RPI over the twelve months to March 2023), and the related increase in achieved returns compared with regulatory assumptions for the period. Ofgem concluded in their next steps document that any policy option would apply to the RIIO-3 price control although a transition mechanism may be required to facilitate implementation. Furthermore, Ofgem ruled out the option of clawing back retrospective outperformance in RIIO-2 – one of the options that we understand was initially included largely for completeness. Radical change could undermine investor confidence in the predictability and stability of the regulatory regime (please see Regulated Electric & Gas Networks – Great Britain: Ofgem outlines possible changes following high inflation, 3 August 2023, for more details).

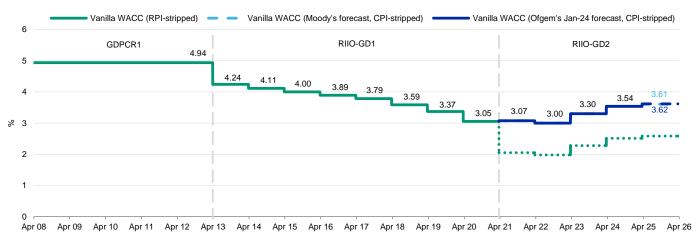
Initially lower RIIO-GD2 allowed returns will rise in rising rate environment

Scotland GN's allowed equity returns are around a third lower in the current price control period than in RIIO-GD1, on a comparable basis, although the rising interest rate environment will increase the risk-free rate component over time. Each 100 basis point move in real risk-free rates changes allowed equity returns by around 24 basis points and overall allowed returns by around 10 basis points.

Despite the cut, allowed cash returns over the first two years of RIIO-GD2 were largely comparable to the final year of RIIO-GD1. This primarily reflects the move to a structurally lower measure of inflation (the consumer prices index adjusted for housing costs, or CPIH, rather than the retail prices index, or RPI, previously).

The sharp rise in bond yields since spring 2022 led to the first year-on-year increase, from April 2023, in the regulatory cost of debt allowance for over a decade and will drive an increase in allowed returns over the second half of RIIO-GD2. We currently expect allowed returns over the final three years of RIIO-GD2 to be in a range of 3.3-3.6% (compared with 3.76% on average over RIIO-GD1, including equity returns above 5% (compared with around 7% on comparable terms in RIIO-GD1).

Exhibit 7
Scotland GN's average cash allowed returns in RIIO-GD2 will be rising slowly in a higher rate environment Evolution of allowed returns over RIIO-GD1 and RIIO-GD2



RIIO-GD2 figures reflects the amended Final Determination, i.e. the removal of the outperformance wedge in the allowed equity return which increased overall allowed returns by 10 basis points. Moody's and Ofgem estimates in RIIO-GD2 for regulatory years 2025/26 are as of end April 2024 and February 2024 respectively.

Source: Ofgem; Moody's Ratings

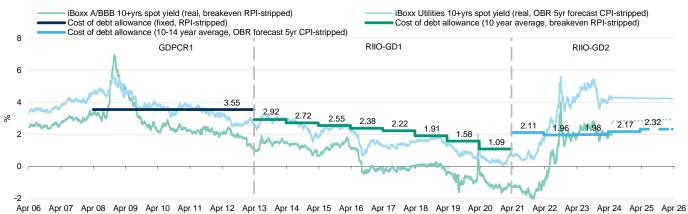
Scotland GN refinanced the majority of its largest debt instrument, a £278.7 million bond (equivalent to almost 20% of the company's outstanding debt), in October 2022 when rates where close to a peak, at interest rates around 6.2-6.4% p.a. Around half of the issuance volume was swapped into floating rates and re-fixed in three intervals at February, May and August 2023, resulting in an average fixed rate of 6.15%. The company also raised £50m million through private placements in March 2024 (funding dates expected in April and June 2024). Although this is only a small portion of total debt, given currently higher market rates, the issuance carries relatively high interest cost with a weighted average coupon of 5.78%. In addition, Scotland GN entered RIIO-GD2 with a higher embedded cost of debt than many of its peers and also carries higher overall leverage. The latter will likely lead to a tax clawback under the regulatory model for gearing above the notional level, which follows a glide path from 65% towards 60% over the five-year period.

However, Scotland GN has only £35 million of debt maturities over the remainder of RIIO-GD2 and limited incremental financing requirements due to slower RAV growth for gas networks. The company will therefore benefit from higher rates feeding into higher return allowances over the remainder of RIIO-GD2.¹

Exhibit 8

Scotland GN's cost of debt allowance expected to rise over the coming years

Evolution of Scotland GN's regulatory cost of debt allowance (Moody's projections in RIIO-GD2)



Ofgem used a trailing average of the iBoxx non-financial (average of A and BBB series) and iBoxx utilities series (plus an additional costs of borrowing allowance, 31 bps for Scotland GN) to set the cost of debt allowance in RIIO-1 and RIIO-2 respectively.

Source: Regulatory data; Moody's Ratings

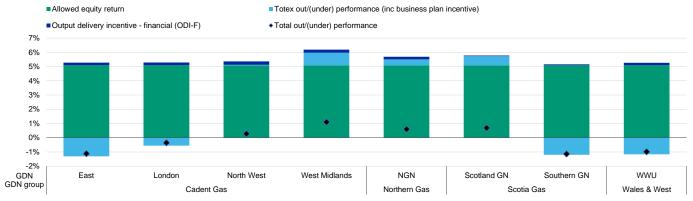
During 2021, Scotland GN also executed inflation-linked swaps with an original notional of £130 million, all consumer price index (CPI)-linked. Following the swap, around 35% of Scotland GN's debt is inflation-linked, which will help reduce cash interest payments. Overall, we expect Scotland GN's average AICR (before timing differences) to range between 1.4-1.5x over the entire five-year RIIO-GD2 period, but at comparably weaker levels for the last three years of the period.

Reduced scope for operational outperformance in RIIO-GD2

In RIIO-GD2, the scope for operational outperformance is lower than in RIIO-GD1 because of a recalibration of output delivery incentives carrying financial rewards and penalties (ODI-Fs) and more challenging totex assumptions. ²

Nevertheless, Scotland GN expects modest operational outperformance on the regulatory return on equity (RORE), largely underpinned by underspending on its overall totex allowances.

Exhibit 9
Scotland GN expects to deliver small RORE outperformance over RIIO-GD2
Forecast RoRE over RIIO-GD2 by GDN group under regulatory gearing assumptions



Allowed equity return is subject to indexation - the value of 5.09% is the expected value based on Ofgem's GD2 PCFM 2023 update (published January 2024). Chart excludes any financing out/under performance by the companies.

Source: Ofgem; Moody's Ratings

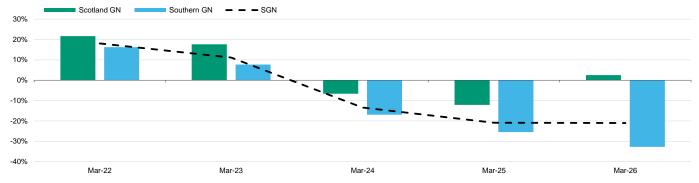
Limited scope for cost outperformance due to challenging regulatory efficiency targets

In RIIO-GD1, Scotland GN's return on regulatory equity was boosted by over 500 basis points from operational outperformance with the vast majority of this coming from outperformance of regulatory cost allowances, 18.6% across the four cost categories that make up total expenditure (direct opex, indirect opex, capex and replacement expenditure, repex). However, tougher allowances for RIIO-GD2 – Scotland GN's baseline total expenditure (totex) allowance was set at almost £915 million (in 2018/19 prices) post-appeal, around 5% below the company's revised regulatory submission, on a comparable basis and after volumes adjustments – make future outperformance more difficult. $\frac{3}{2}$

During RIIO-GD2, totex allowances are subject to annual change and may be more volatile than during RIIO-GD1, due to uncertainty mechanism spend and indexation adjustments to reflect real price effects.

Scotland GN now forecasts total RIIO-GD2 expenditure of £919 million, resulting in an overall 5% outperformance against updated allowances of £964 million (in 2018/19 prices, excluding ca. £24 million additional revenue allowance for network innovation and carbon monoxide safety initiatives). Expected outperformance has reduced by 1% compared with the prior year. Performance is subject to phasing, with some expenditure backloaded. This means that current totex outperformance rates of 18-22% over the first two years of RIIO-GD2 will be mostly reversed over the last three years.

Exhibit 10
Scotland GN expect totex outperformance to be front-loaded in RIIO-GD2
Company projected totex performance in RIIO-GD2



Figures as per Ofgem's GD2 PCFM 2023 update (published January 2024)
Source: Regulatory data and Moody's Ratings

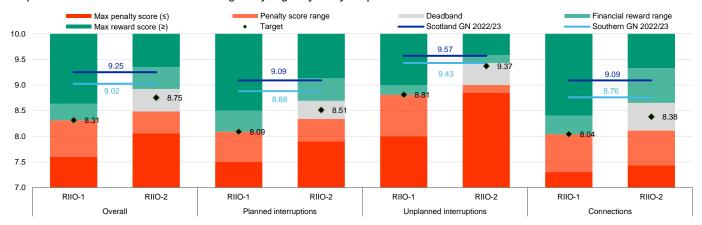
Scotland GN shares 51% of any outperformance (or underperformance) of totex allowances with customers, a higher proportion than in RIIO-GD1 (36.27%), with a two-year lag. The totex outperformance in the early years of GD2 has boosted the company's AICR, while the expected underperformance in the later years will depress it.

ODI-Fs reward potential more limited in RIIO-GD2

In RIIO-GD1, Scotland GN earned on average around £3.5 million per annum (in 2020/21 prices) from output delivery incentives carrying financial rewards or penalties (ODI-Fs), primarily on customer satisfaction and shrinkage and environmental emissions. Incentive income was paid with a lag during RIIO-GD1, and Scotland GN continued to benefit from earned ODI-F rewards during the first two years of RIIO-GD2.

Reward potential in RIIO-GD2 will be lower, because regulatory targets have been increased and a deadband introduced. In the two years of RIIO-GD2, the company reported a net reward of £1.4 million (in 2018/19 prices). During RIIO-GD2, companies will be able to incorporate forecast incentive income within their annual charges, so that it is earned when incurred, with a true-up for potentially diverging actual performance two years later.

Exhibit 11
We expect Scotland GN to earn some ODI-F rewards on customer satisfaction despite the tougher regulatory targets in RIIO-GD2
Comparison of customer satisfaction scores and regulatory targets by survey component

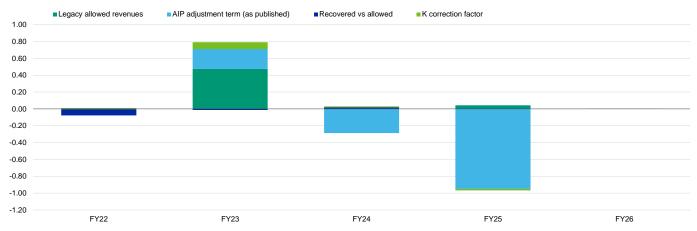


To earn the maximum reward on the customer satisfaction survey a GDN needs to score (at least) the maximum reward on each component. Source: Moody's Ratings on regulatory data

Changes in prices and gas demand have created volatility in credit metrics

A volatile gas price environment, particularly following Russia's invasion of Ukraine, has led to unusually large deviations on companies estimates for forecast costs of replacing lost gas from the network (known as shrinkage) and other pass-through cost items, which flow into their revenue allowances. As companies set charges two months in advance of the start of the charging year, changes to allowed revenue may lead to over- or under-recoveries that have to be trued up in the following year. This leads to greater volatility in reported credit metrics from year to year. With actual cost for shrinkage gas being lower than previously estimated in FYs 2022/23 and 2023/24 and higher allowances having to be returned primarily in FY 2024/25, we expect metrics in that year to be particularly weak (see also Exhibit 1).

Exhibit 12
Timing differences associated with changes to allowed revenue will lead to meaningful volatility in credit ratios
Estimated AICR impact of revenue adjustments



FY reflects regulatory year with financial year-end on 31 March. Source: RIIO-GD2 2023 PCFM update(published January 2024)

Uncertainty around long-term future of gas networks and potential alternative use options...

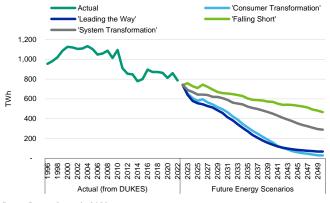
In recent years, the UK has set increasingly ambitious decarbonisation targets. In June 2019, the UK passed legislation committing to net zero greenhouse gas emissions by 2050, and, in April 2021, set in law the Climate Change Committee's recommendation of a 78% emissions reduction (from 1990 levels) by 2035. Following passage of the Energy Act in October 2023, Ofgem has a new statutory duty to support the government to meet the 2050 target. This will require very substantial reductions in natural gas consumption.

Gas demand (excluding exports and shrinkage) in Great Britain fell by around 23% between 2010 and 2022 to 742 terawatt hours (TWh) from 965 TWh. This was mostly driven by falling demand for gas from power generation, but domestic gas demand for heating has also fallen from 390 TWh in 2010 to 311 TWh in 2022, largely because of the installation of more efficient gas boilers.

More dramatic change could result from the replacement of gas boilers, which heat 86% of homes in England, by air- and ground-source heat pumps. In its Net Zero Strategy, the UK government also set out an ambition that no new gas boilers will be sold by 2035, and plans to suppress gas demand by shifting certain taxes currently levied on electricity consumption to gas during the 2030s. The UK government's Heat and Buildings Strategy includes a target to install 600,000 heat pumps annually, although actual installation levels have been well below that at around 50-60,000 during 2023 (mostly air-source heat pumps). The government will take a policy decision over the future of heat in the UK in 2026. How much hydrogen the UK can be expected to produce and the likely size of demand (e.g. its role in meeting the heat requirements of domestic and industrial customers and powering the transport sector) are two key areas of uncertainty. In April 2022, the UK government doubled the country's hydrogen production target to up to 10 gigawatts (GW) by 2030, with at least half of this from green hydrogen, but in October 2023, the National Infrastructure Commission recommended not to consider hydrogen for heating. In May 2024, following the decision not to proceed with the Hydrogen village trial in Redcar, the government decided that it would not progress work on a hydrogen town pilot until after the 2026 strategic decisions on the role of hydrogen in decarbonising heat.

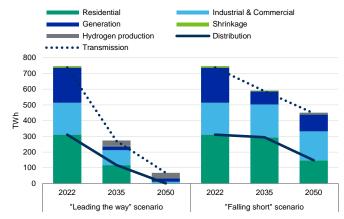
Exhibit 13

Gas demand continues to fall under all scenarios...



Future Energy Scenario 2023 Source: National Grid ESO, Digest of UK Energy Statistics, Moody's Ratings

Exhibit 14 ...and on both transmission and distribution systems



Future Energy Scenarios 2023 Source: Ofgem, National Grid ESO, Moody's Ratings

In the short term, Scotland GN has essentially no volume exposure, as any revenue shortfalls due to faster-than-expected declines in demand can be recovered from customers with a two-year lag. In the longer term, Ofgem has a statutory obligation to "secure" that gas transportation companies "are able to finance the provision of gas supply services." However, a continued decline in demand for Scotland GN's core service may create challenges for the business which are difficult to quantify and forecast.

... and regulator considering options for RIIO-GD3

In December 2023, Ofgem published a <u>sector-specific methodology consultation (SSMC)</u> on its approach to the RIIO-3 period, which will run from April 2026 to March 2031. Given uncertainties over the future of gas, Ofgem is considering potential mechanisms to recoup networks' investment, including for example by accelerating cash flow to spread the cost evenly between a larger number of current and likely smaller number of future customers.

Ofgem also wants to maintain optionality for future hydrogen networks. Because important government policy decisions will be made too late to be reflected in the final determination, significant elements of RIIO-3 are likely to be handled through reopeners or other uncertainty mechanisms. In particular, Ofgem may try to manage asset lives to support the potential transfer of suitable gas assets to future hydrogen network licensees. The SSMC also recognises that the cost of decommissioning redundant assets could become material from the mid-2030s, and that these costs will need to be recovered from customers or taxpayers.

RIIO-3 may include new constraints on networks' financial policy. Ofgem expects that any acceleration in cash flows would be used to repay operating company debt broadly in proportion to the decline in RAV, such that gearing does not increase. To ensure that companies do so, the regulator is considering strengthening of the regulatory ring-fence, for example by introducing a gearing limit, where a breach would result in a distribution block. It has also highlighted concerns over the impact on operating companies of ownership by highly leveraged holding companies.

The SSMC also includes three possible options for amending the cost of debt allowance mechanism: (1) moving from a real to nominal allowance for the portion of the RAV financed by fixed-rate debt; (2) indexing this part of the RAV by a long-run assumption of inflation; or (3) maintaining the RIIO-2 methodology but reviewing the long-run inflation assumption. Of particular relevance to options (1) and (2), the regulator also said that it would consider reducing the notional assumption to 0% for indexed linked debt.

The consultation closed on 6 March 2024 and Ofgem will publish its decisions late June/ early July 2024 with the final business plans to be submitted by companies on 11 December 2024.

Scotia Gas Networks' involvement with hydrogen

Scotia Gas Networks' flagship study is the H100 Fife project on the east coast of Scotland to demonstrate end-to-end-heating of homes with 100% renewable hydrogen. In the project's first phase, the network is expected to heat around 300 local homes using clean hydrogen produced by a dedicated electrolysis plant, powered by a nearby offshore wind turbine. The project received £28 million of funding from Ofgem in RIIO-GD2.

ESG considerations

Scotland Gas Networks plc's ESG credit impact score is CIS-3

Exhibit 15

ESG credit impact score



Source: Moody's Ratings

Scotland GN's **CIS-3** indicates that ESG considerations have a limited impact on the current credit quality with potential for greater negative impact over time. This is largely driven by high environmental risk linked to carbon transition, albeit partly mitigated by our expectation of some regulatory support, as demonstrated by a faster recovery of gas investments than of electricity investments, and the potential for usage of the natural gas network to transport hydrogen, to the extent this becomes significant in the United Kingdom.

Exhibit 16
ESG issuer profile scores



Source: Moody's Ratings

Environmental

Scotland GN's high environmental risk (**E-4**) reflects its exposure to carbon transition risk. Domestic gas connections for newly build houses are scheduled to cease from 2025 and the UK government set out an ambition that no new gas boilers will be sold by 2035. Overall natural gas demand is expected to continue falling, reducing demand for Scotland GN's core service, for the UK to meet its ambitious decarbonisation objectives. Hydrogen offers a possible future: in April 2022 the UK government doubled the country's hydrogen production target to up to 10 gigawatts by 2030, with at least half of this from green hydrogen. Scotia Gas Networks, along with sector peers, is planning for this shift to hydrogen by utilising regulatory allowances to undertake studies exploring the ability of the gas distribution networks to transport hydrogen.

Social

Scotland GN's **S-3** social risk score reflects the risk, common to all regulated utilities, that public concern over environmental, social or affordability issues could lead to adverse regulatory or political intervention. These risks are slightly higher for gas networks than electricity networks due to the UK's ambitious decarbonisation objectives. The regulator has sought to materially reduce the level of achieved equity returns for energy networks in its most recent determinations. Scotland GN also carries moderate risk exposure associated with public safety, as a gas leak or explosion, although unlikely, could have a significant negative impact on the company's reputation.

Governance

Scotland GN's **G-3** governance risk score reflects a financial strategy where the company's leverage is above peers and regulatory assumptions, with net debt to regulatory asset value (RAV) historically above 70%, which, in turn, places downward pressure on interest coverage metrics. Scotland GN is ultimately owned by SGN HoldCo which, in turn is owned by a consortium of three North American institutional investors each owning a minority stake.

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

Structural considerations

Our assessment of Scotland GN factors in the weaker credit quality of the SGN MidCo group that it belongs to. The weaker credit profile of the SGN MidCo group is primarily the result of the additional leverage at SGN MidCo Limited, amounting to around £471 million at September 2023 or around 6-7% of the combined RAV of Scotia Gas Networks. With higher inflation, we expect consolidated leverage to be around the low to mid-70s in percentage terms over RIIO-GD2 (although SGN MidCo's financing structure allows gearing of up to 85% before a distribution block would be triggered), compared with leverage at Scotland GN and Southern GN around the mid- to high-60s in percentage terms.

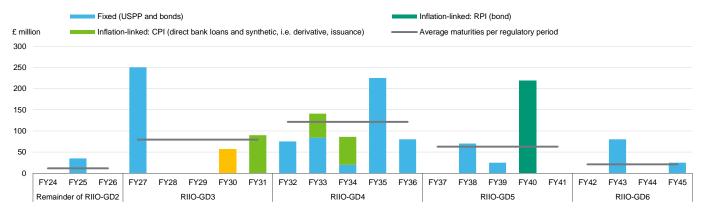
The weaker credit quality of SGN MidCo acts as a constraint on Scotland GN's rating. However, the operating company benefits from regulatory ring-fencing provisions, which partly insulates it from the credit quality of SGN MidCo (described in Appendix B, Considerations for ratings within a corporate family, of the Regulated Electric and Gas Networks rating methodology) and supports the current Baa1 rating level.

We also consider that the covenant package in the SGN MidCo financing structure insulates the operating companies from shareholder loans at the ultimate holding company, Scotia Gas Networks. As a result, the debt at Scotia Gas Networks does not constrain the credit quality of the operating companies.

Liquidity analysis

We view Scotland GN's liquidity as excellent over the next 18 months, reflecting (1) the stable and predictable cash flow generated by its regulated gas distribution business that allows it to fund the bulk of its capex and repex requirements; (2) its access to a £600 million revolving credit facility, which it shares with Southern GN, not maturing until March 2025 and with £540 undrawn as of March 2024; and (3) limited remaining debt maturities during RIIO-GD2, following refinancing activity in October 2022.

Exhibit 17 External debt maturity profile by regulatory period following recent financing activity As of September 2023 (includes accretion on CPI-linked swaps and bank loans)



(1) Assumes subsequent regulatory periods are five years. (2) Values for inflation-linked instruments are the accreted amounts as of September 2023. (3) CPI-linked instruments comprise original notional of (a) £100 million of CPI-linked loans (two £50 million tranches with a 7- and 10-year tenor that were drawn down in October 2022); and (b) £130 million of CPI-linked swaps that were overlaid to existing fixed rate USPP notes. (4) Includes USPP notes issued in March 2024. Source: Company; Moody's Ratings

Cash balances held by Scotland GN, and other operating companies in the SGN group, are pooled into Southern GN. While we do not give benefit to intercompany receivables in our ratio calculations, Scotland GN held net receivables of £66 million in September 2023, associated with an intercompany loan to its sister company, Southern GN.

Rating methodology and scorecard factors

Our assessment of Scotland GN's credit quality is based on the rating methodology for Regulated Electric and Gas Networks. The scorecard-indicated outcome is Baa1, which is in line with the assigned rating.

Exhibit 18
Rating methodology scorecard
Scotland Gas Networks plc

Current Moody's 2024-2026 forward view Regulated Electric and Gas Networks Industry[1][2] FY 3/31/2023 Factor 1: Regulatory Environment and Asset Ownership Model (40%) Measure Score Measure Score a) Stability and Predictability of Regulatory Regime Aaa Aaa Aaa Aaa b) Asset Ownership Model Aa Aa Aa Aa c) Cost and Investment Recovery (Ability and Timeliness) Α Α Α Α d) Revenue Risk Aa Aa Aa Aa Factor 2 : Scale and Complexity of Capital Program (10%) a) Scale and Complexity of Capital Program Α Α Α Α Factor 3: Financial Policy (10%) a) Financial Policy Ва Ва Ва Ba Factor 4: Leverage and Coverage (40%) a) Adjusted Interest Coverage Ratio (3 Year Avg) 1.9x Baa 1.2x - 1.3x Ва b) Net Debt / RAB (3 Year Avg) 68.9% Baa 66% - 68% Baa c) FFO / Net Debt (3 Year Avg) 10.7% Ва 8% - 10% Ва d) RCF / Net Debt (3 Year Avg) 7.2% 5% - 10% Baa Baa Rating: Scorecard-Indicated Rating from Grid Factors 1-4 Baa1 Baa2 Rating Lift 0.5 0.5 0.5 a) Scorecard-Indicated Outcome Baa1 Baa1 b) Actual Rating Assigned Baa1

Ratings

Exhibit 19

Moody's Rating
Stable
Baa1
Baa1
Baa1

⁽¹⁾ All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. (2) As of 31/03/2023. (3) This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Financial Metrics™

Appendix

Exhibit 20

Peer Comparison Scotland Gas Networks plc

	Scotland Gas Networks plc Cadent Gas Limited		Northern Gas Networks Limited			Southern Gas Networks plc						
	В	aa1 Stable		Baa1 Stable		Baa1 Stable			Baa1 Stable			
	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
(in £ millions)	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23
Revenue	384	339	407	2,075	1,984	2,340	439	421	504	806	715	799
EBITDA	226	178	243	1,306	1,120	1,408	254	211	359	476	361	466
Total Debt	1,362	1,384	1,438	7,499	7,046	8,014	1,632	1,695	1,836	3,019	3,062	3,322
Net Debt	1,362	1,384	1,438	6,676	7,044	7,487	1,619	1,688	1,825	2,920	3,016	3,114
Adjusted Interest Coverage Ratio	1.6x	1.6x	2.6x	2.2x	2.5x	3.2x	2.2x	2.4x	3.8x	1.4x	1.6x	2.0x
Net Debt / Regulated Asset Base	73.2%	68.8%	65.5%	64.7%	62.7%	61.4%	68.0%	65.6%	64.7%	70.2%	67.9%	64.4%
FFO / Net Debt	11.1%	8.9%	12.1%	12.4%	11.0%	13.8%	12.1%	10.2%	13.1%	10.5%	8.5%	10.7%
RCF / Net Debt	5.6%	5.2%	10.5%	12.4%	8.2%	9.1%	5.9%	4.8%	8.2%	7.7%	6.3%	9.2%

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

Exhibit 21

Moody's-adjusted net debt reconciliation

Scotland Gas Networks plc

(in £ millions)	2019	2020	2021	2022	2023
As reported debt	1,288.0	1,349.0	1,354.0	1,378.0	1,430.0
Leases	8.0	8.0	8.0	6.1	8.3
Moody's-adjusted debt	1,296.0	1,357.0	1,362.0	1,384.1	1,438.3
Cash & Cash Equivalents	-	-	-	-	-
Moody's-adjusted net debt	1,296.0	1,357.0	1,362.0	1,384.1	1,438.3

All figures and 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. Scotland Gas Network plc's financial year ends on 31 March.

Source: Moody's Financial MetricsTM

Exhibit 22

Moody's-adjusted funds from operations reconciliation

Scotland Gas Networks plc

(in £ millions)	2019	2020	2021	2022	2023
As reported funds from operations (FFO)	153.0	154.0	161.0	116.0	168.0
Pensions	6.0	5.0	2.0	1.0	-
Leases	1.7	1.7	1.8	0.8	1.6
Alignment FFO	(10.0)	(4.0)	(9.0)	(19.0)	(56.0)
Unusual Items	(8.3)	(8.6)	(8.7)	-	-
Non-Standard Adjustments	8.4	6.4	4.0	24.0	61.0
Moody's-adjusted funds from operations (FFO)	150.8	154.5	151.1	122.8	174.6

All figures and 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. Scotland Gas Network plc's financial year ends on 31 March.

Source: Moody's Financial MetricsTM

Exhibit 23 Moody's regulatory capital charges Scotland Gas Networks plc

(in £ millions)	2019	2020	2021	2022	2023
Repex Allowance Classed as Fast Money by the Regulator	11.0	5.0	-	-	-
Regulatory Depreciation	95.2	107.2	119.6	100.0	111.2
Excess Fast/(Slow) Money	18.0	12.7	3.0	(8.0)	(5.9)
Operating Leases	1.7	1.7	1.8	0.8	1.6
Moody's Regulatory Capital Charges	125.9	126.7	124.4	92.8	106.9

All figures and 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. Scotland Gas Network plc's financial year ends on 31 March. Source: Moody's Ratings

Exhibit 24 Overview on selected historical Moody's-adjusted financial data Scotland Gas Networks plc

(in £ millions)	2019	2020	2021	2022	2023
INCOME STATEMENT					
Revenue	350	357	384	339	407
EBITDA	219	235	226	178	243
EBITDA margin %	62.6%	65.8%	58.9%	52.5%	59.7%
EBIT	159	174	163	111	174
EBIT margin %	45.5%	48.8%	42.5%	32.8%	42.9%
Interest Expense	54	55	47	76	103
Net income	86	70	94	(45)	53
BALANCE SHEET					
Total Debt	1,296	1,357	1,362	1,384	1,438
Cash & Cash Equivalents	-	-	-	-	-
Net Debt	1,296	1,357	1,362	1,384	1,438
Net Property Plant and Equipment	2,007	2,083	2,127	2,165	2,232
Total Assets	2,247	2,420	2,428	2,483	2,568
CASH FLOW					
Funds from Operations (FFO)	151	155	151	123	175
Cash Flow From Operations (CFO)	93	108	178	171	147
Dividends	31	28	75	51	23
Retained Cash Flow (RCF)	120	127	76	72	152
Capital Expenditures	(136)	(130)	(95)	(93)	(117)
Free Cash Flow (FCF)	(74)	(50)	8	27	7
INTEREST COVERAGE					
Adjusted Interest Coverage Ratio	1.6x	1.6x	1.6x	1.6x	2.6x
LEVERAGE					
FFO / Net Debt	11.6%	11.4%	11.1%	8.9%	12.1%
RCF / Net Debt	9.2%	9.3%	5.6%	5.2%	10.5%
FCF / Net Debt	-5.7%	-3.7%	0.6%	2.0%	0.5%
Debt / EBITDA	5.9x	5.8x	6.0x	7.8x	5.9x
Net Debt / EBITDA	5.9x	5.8x	6.0x	7.8x	5.9x
Net Debt / Regulated Asset Base	72.6%	74.2%	73.2%	68.8%	65.5%

All figures and 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. Scotland Gas Network plc's financial year ends on 31 March. Source: Moody's Financial Metrics™

Endnotes

- 1 See also Regulated Electric & Gas Networks Great Britain: Size of financing requirements drives winners and losers of higher funding costs, October 2022 for more information.
- 2 For RIIO-GD2, Ofgem applied (1) a more demanding regulatory benchmark to assess cost efficiency; (2) a higher level of annual productivity gains to set regulatory cost allowances, particularly on capex and repex (0.95% compared to 0.7%); and (3) a smaller increase in allowed revenues for a high quality business plan submission.
- 3 Ofgem's original allowances was £907 million. Regulatory cuts in Scotland GN's allowances reflected a combination of (1) its positioning towards the bottom in regulatory benchmark analysis; (2) Ofgem assuming a higher level of annual productivity gains than both Scotland GN's regulatory submission and the RIIO-GD1 assumption (around 0.85%); and (3) technical adjustments. The CMA slightly moderated the cut on appeal by lowering the annual cost efficiency improvement factor to 1% from 1.2% (from the value of the innovation uplift adjustment being changed to 0% from 0.2%). This increased regulatory cost allowances for the sector and by around 0.8% for SGN's networks (over £7 million for Scotland GN over RIIO-GD2).
- 4 https://www.ofgem.gov.uk/publications/ofgem-welcomes-energy-act-getting-royal-assent

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT, FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials. To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy.

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER