

CREDIT OPINION

20 June 2024

Update



RATINGS

Southern 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.

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Southern Gas Networks plc

Regular update to credit analysis

Summary

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

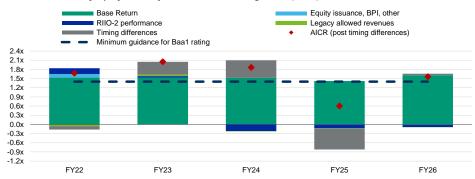
Credit quality is constrained by the company's historically high leverage relative to peers and regulatory assumptions, with net debt to regulatory asset value (RAV) slightly above 70%, although currently in the mid-60s in percentage terms as high inflation has facilitated de-gearing. Credit quality 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.

The company also faced operational difficulties, which will result in it overspending its cost allowances and – together with a higher interest cost environment for any new debt being raised – pressure its interest coverage in the later years of the current regulatory period (RIIO-GD2, which began on 1 April 2021). Our assessment of Southern GN's credit quality focuses on average credit metrics over the period given the significant year-on-year volatility associated with regulatory timing differences (see Exhibit 1).

Exhibit 1

Southern 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) 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 backloaded investment programme will likely lead to an increase in leverage over the next two years

Credit challenges

- » Challenging regulatory efficiency targets and allowances in the current RIIO-GD2 period
- » Interest coverage metrics are depressed by higher leverage than other energy networks and regulatory assumptions
- » Additional leverage at Southern 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 Southern 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 Southern GN will have limited headroom on its average interest coverage metrics over the current regulatory period because of likely operational underperformance and higher interest costs. In addition, consolidated leverage at SGN MidCo in the low- to mid-70s in percentage term 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 Southern 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 Southern 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 regulatory timing differences, over RIIO-GD2. Downward rating pressure would also arise if a more aggressive financial policy was pursued at Southern 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
Southern 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	1.3x	1.7x	1.6x	1.4x	1.6x	2.0x	1.3x-1.4x
Net Debt / RAV	73.1%	72.1%	71.3%	70.2%	67.9%	64.4%	67%-69%
FFO / Net Debt	9.9%	11.2%	11.3%	10.5%	8.5%	10.7%	8%-10%
RCF / Net Debt	5.7%	8.8%	9.5%	7.7%	6.3%	9.2%	5%-7%

Timing differences (true-ups for pass through costs) significantly boosted FYE March 2023 metrics. 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.

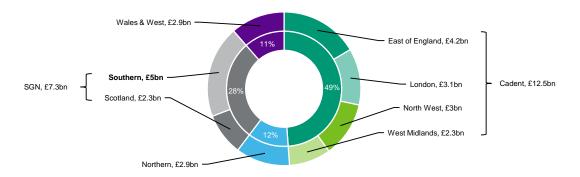
Source: Moody's Financial Metrics™ and Moody's Ratings forecasts

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

Southern GN is the largest of the eight gas distribution networks (GDNs) in Great Britain by RAV, which stood at £5.0 billion at March 2024. It provides gas distribution services to around 4.1 million customers through approximately 50,000 kilometres of gas pipelines in the south of England, including the cities of Milton Keynes and Dover, and London boroughs south of the River Thames.

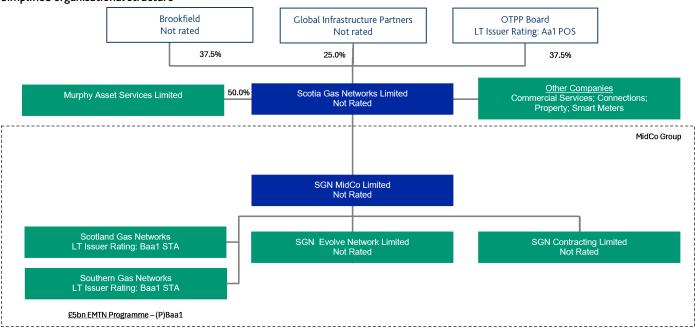
Exhibit 3
Regulatory Asset Value by gas distribution network operator group RAV at 31 March 2024, nominal



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

Southern 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 Scotland Gas Networks plc (Scotland GN, Baa1 stable) as well as SGN Natural Gas 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), with 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 in the past. Southern 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
Southern GN service area



Source: Energy Networks Association

Exhibit 6 Price control overview

	GB Gas Distribution
Regulator/ Price Control	Ofgem / RIIO-GD2
Regulated Business	Southern Gas Networks plc
Term of price control	April 2021 - March 2026
Allowed return on RAV	3.04% (2021-22); 2.96% (2022-23); 3.27%
(vanilla real, CPIH stripped)	(2023-24); 3.50% (2024-25)
	Forecast average for RIIO-GD2: 3.27%
Return on regulatory equity	5.09% expected average (Ofgem assm)
(Real, CPIH stripped)	(Company forecast ~1.15% of operational
	underperformance)
RAV at March 2024	£5.0 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

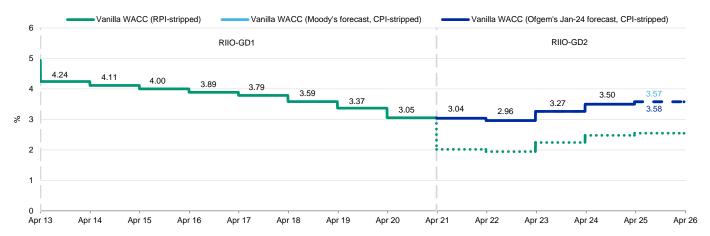
Southern GN's allowed equity returns are around a third lower in the current price control period than in RIIO-GD1, on a comparable basis, although the rising interest rate environment will increase the risk-free rate component over time. Each 100 basis point move in real risk-free rates changes allowed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

Southern 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 year 2025/26 are as of end April 2024 and February 2024 respectively.

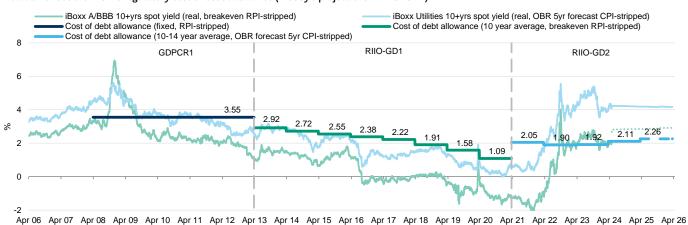
Source: Ofgem; Moody's Ratings

Southern GN raised around £325 million (equivalent) through private placements in March 2024 (funding dates expected in April and June 2024), with a weighted average swapped coupon of around 5.7%. It also raised a £300m bond with an interest rate at 6.625% (and tapped their existing 2031 bond for £200 million) in September 2023. Although this is only a small portion of total debt, given currently higher market rates, these issuances carry relatively high interest cost. In addition, the company 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.

Exhibit 8

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

Evolution of Southern 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, 25 bps for Southern GN) to set the cost of debt allowance in RIIO-1 and RIIO-2 respectively.

Source: Regulatory data; Moody's Ratings

Between April 2021 and February 2022, Southern GN executed inflation-linked swaps with an aggregate original notional of £540 million, all consumer price index (CPI)-linked. Following the swaps, around 40% of Southern GN's debt is inflation-linked (compared to 17% at the start of RIIO-GD2 and the regulatory assumption of 30%), which will help reduce cash interest payments. Overall, we

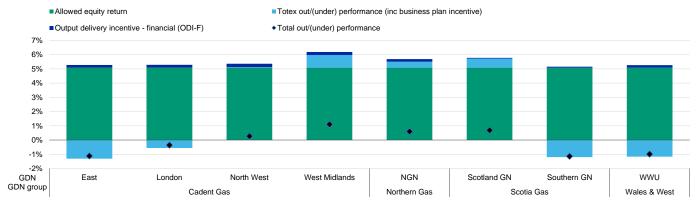
expect Southern GN's average AICR (before timing differences) to range between 1.4-1.5x over the entire five-year RIIO-GD2 period, but at comparably weaker levels for the last three years of the period.

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.¹

Southern GN expects operational underperformance on the regulatory return on equity (RORE), largely underpinned by underperformance of totex allowances.

Exhibit 9
Southern GN expects operational underperformance 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

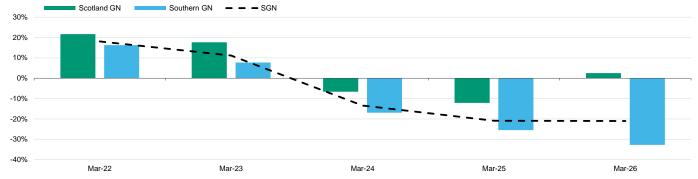
Limited scope for cost outperformance due to challenging regulatory efficiency targets

In RIIO-GD1, Southern GN's return on regulatory equity was boosted by over 400 basis points from operational outperformance with the vast majority of this coming from outperformance of regulatory cost allowances, 14.2% 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 – Southern GN's baseline total expenditure (totex) allowance was set at around £1,787 million (in 2018/19 prices) post-appeal, around 10.5% (second largest of all GDNs) below the company's revised regulatory submission, on a comparable basis and after volumes adjustments – make future outperformance more difficult.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.

Southern GN now forecasts total RIIO-GD2 expenditure of £2,051 million, resulting in an overall 10% underperformance against updated allowances of £1,860 million (in 2018/19 prices, excluding ca. £51 million additional revenue allowance for network innovation and carbon monoxide safety initiatives). Totex underspent in earlier years will reverse due to some backloading of expenditure but also a step change in opex and repex following operational challenges faced in FY 2022/23. The company missed the minimum response time for uncontrolled and controlled gas escapes in that year (the licence requires GDNs to respond to 97% of reported incidents within one or two hours for uncontrolled or controlled escapes, respectively), but has since recovered its performance.

Exhibit 10
Southern GN expect sizeable underperformance of totex allowances in the final three years of the current period
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

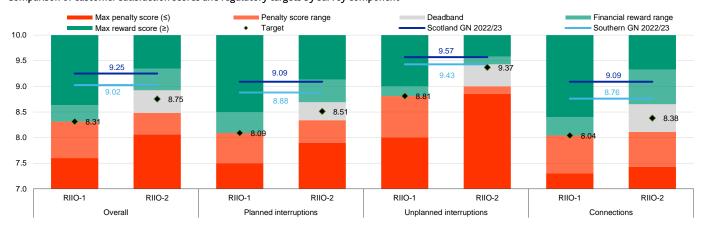
Southern GN shares 50% of any out- or underperformance against totex allowances with customers, a higher proportion than in RIIO-GD1 (36.27%), with a two-year lag. Totex outperformance in the early years of GD2 has boosted the company's AICR, while the expected underperformance in the later years will depress it.

ODI-Fs reward potential more limited in RIIO-GD2

In RIIO-GD1, Southern GN earned on average around £15 million per annum (in 2020/21 prices) from output delivery incentives carrying financial rewards or penalties (ODI-Fs), primarily on the broad measure of customer satisfaction, environmental emissions and NTS exit capacity incentives. Incentive income was paid with a lag during RIIO-GD1, and Southern 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 first two years of RIIO-GD2, the company reported a net reward of £4.5 million (in 2018/19 prices), around half of which was related to a collaborative streetworks incentive that only applies to two Cadent networks and Southern GN, which operate in the Greater London area. 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 Southern GN to earn limited ODI-F rewards on customer satisfaction in RIIO-GD2 due to the tougher regulatory targets
Comparison of customer satisfaction scores and regulatory targets by survey component

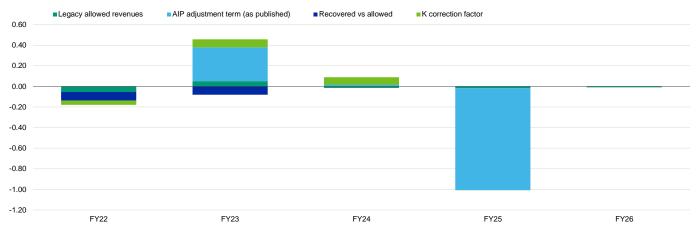


To earn the maximum reward on the customer satisfaction survey a GDN needs to score (at least) the maximum reward on each component. Source: Moody's Ratings on regulatory data

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 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...

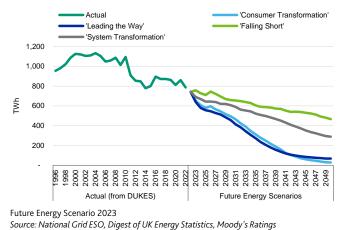
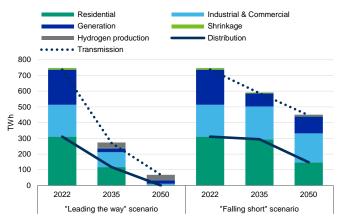


Exhibit 14 ...and on both transmission and distribution systems



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

In the short term, Southern 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 Southern 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 in late June/ early July 2024 with the final business plans to be submitted by companies on 11 December 2024.

ESG considerations

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

Exhibit 15

ESG credit impact score



Source: Moody's Ratings

Southern 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

Southern 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 Southern 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

Southern 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 RIIO-2 determinations. Southern 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

Southern 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 RAV historically above 70%, which, in turn, places downward pressure on interest coverage metrics. Southern GN is ultimately owned by SGN HoldCo which, in turn is owned by a consortium of three North Amercian 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 Southern 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.

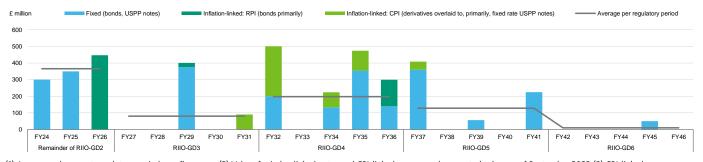
The weaker credit quality of SGN MidCo group acts as a constraint on Southern GN's rating. However, the operating company benefits from regulatory ring-fencing provisions, which partly insulates it from the credit quality of SGN MidCo (described in Appendix B, Considerations for ratings within a corporate 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 Southern GN's liquidity as good over the next 12 months, reflecting the (1) 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; and (2) its access to a £600 million revolving credit facility, which it shares with Scotland GN, not maturing until March 2025 and with £540m undrawn as of March 2024.

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



(1) Assumes subsequent regulatory periods are five years. (2) Values for index-linked notes and CPI-linked swaps are the accreted values as of September 2023 (3) CPI-linked swaps comprise (a) £490 million of original notional that were overlaid to fixed rate USPP notes issued over 2018-20 and maturing between 2030 and 2034; and (b) £40 million of CPI-linked swaps that were overlaid to £40 million of the £400 million 2036 fixed rate bond. (4) Includes USPP notes issued in March 2024.

Source: Company; Moody's Ratings

Rating methodology and scorecard factors

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

Exhibit 18
Rating methodology scorecard
Southern 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 Ва Factor 4: Leverage and Coverage (40%) a) Adjusted Interest Coverage Ratio (3 Year Avg) 1.7x Baa 1.3x - 1.4x Ва b) Net Debt / RAB (3 Year Avg) 67.3% Baa 67% - 69% Baa c) FFO / Net Debt (3 Year Avg) 9.9% Ва 8% - 10% Ва d) RCF / Net Debt (3 Year Avg) 7.8% 5% - 7% Baa Ва 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

Category	Moody's Rating
SOUTHERN GAS NETWORKS PLC	
Outlook	Stable
Issuer Rating -Dom Curr	Baa1
Senior Unsecured -Dom Curr	Baa1
Underlying Senior Unsecured -Dom Curr	Baa1
Source: Moody's Ratings	

⁽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 Southern Gas Networks plc

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

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

Southern Gas Networks plc

(in £ millions)	2019	2020	2021	2022	2023
As reported debt	2,848.0	2,980.0	3,003.0	3,020.0	3,219.0
Leases	12.0	13.9	16.4	13.1	17.3
Non-Standard Adjustments	-	-	-	29.0	86.0
Moody's-adjusted debt	2,860.0	2,993.9	3,019.4	3,062.1	3,322.3
Cash & Cash Equivalents	(10.0)	(85.0)	(99.0)	(46.0)	(208.0)
Moody's-adjusted net debt	2,850.0	2,908.9	2,920.4	3,016.1	3,114.3

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. Southern Gas Networks plc's financial year ends on 31 March.

Source: Moody's Financial Metrics™

Exhibit 22

Moody's-adjusted funds from operations reconciliation Southern Gas Networks plc

2019	2020	2021	2022	2023
325.0	316.0	325.0	246.0	305.0
11.0	9.0	3.0	2.0	-
2.5	2.5	2.6	1.5	2.1
(20.0)	12.0	(11.0)	(55.0)	(118.0)
(12.6)	(13.1)	(13.3)	-	-
-	(1.0)	-	-	2.0
13.7	3.7	-	61.0	142.0
319.6	329.1	306.3	255.5	333.1
	325.0 11.0 2.5 (20.0) (12.6) - 13.7	325.0 316.0 11.0 9.0 2.5 2.5 (20.0) 12.0 (12.6) (13.1) - (1.0) 13.7 3.7	325.0 316.0 325.0 11.0 9.0 3.0 2.5 2.5 2.6 (20.0) 12.0 (11.0) (12.6) (13.1) (13.3) - (1.0) - 13.7 3.7 -	325.0 316.0 325.0 246.0 11.0 9.0 3.0 2.0 2.5 2.5 2.6 1.5 (20.0) 12.0 (11.0) (55.0) (12.6) (13.1) (13.3) - - (1.0) - - 13.7 3.7 - 61.0

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. Southern Gas Networks plc's financial year ends on 31 March.

Source: Moody's Financial MetricsTM

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

(in £ millions)	2019	2020	2021	2022	2023
Repex Allowance Classed as Fast Money by the Regulator	30.7	14.6	-	-	-
Regulatory Depreciation	206.7	231.9	257.3	220.3	244.8
Excess Fast/(Slow) Money	8.2	16.4	3.2	(13.6)	(3.0)
Operating Leases	2.5	2.5	2.6	1.5	2.1
Moody's Regulatory Capital Charges	248.2	265.4	263.1	208.2	244.0

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. Southern Gas Networks plc's financial year ends on 31 March. Source: Moody's Ratings

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

(in £ millions)	2019	2020	2021	2022	2023
INCOME STATEMENT					
Revenue	797	818	806	715	799
EBITDA	492	508	476	361	466
EBITDA margin %	61.7%	62.1%	59.1%	50.5%	58.3%
EBIT	371	384	344	223	325
EBIT margin %	46.6%	46.9%	42.7%	31.3%	40.7%
Interest Expense	126	117	105	134	213
Net income	202	155	193	(101)	82
BALANCE SHEET					
Total Debt	2,860	2,994	3,019	3,062	3,322
Cash & Cash Equivalents	10	85	99	46	208
Net Debt	2,850	2,909	2,920	3,016	3,114
Net Property Plant and Equipment	4,424	4,616	4,759	4,863	5,007
Total Assets	4,874	5,220	5,331	5,407	5,668
CASH FLOW					
Funds from Operations (FFO)	320	329	306	256	333
Cash Flow From Operations (CFO)	294	330	299	216	375
Dividends	68	53	81	65	47
Retained Cash Flow (RCF)	252	276	225	191	286
Capital Expenditures	(264)	(296)	(243)	(211)	(250)
Free Cash Flow (FCF)	(38)	(19)	(24)	(60)	78
INTEREST COVERAGE					
Adjusted Interest Coverage Ratio	1.7x	1.6x	1.4x	1.6x	2.0x
LEVERAGE					
FFO / Net Debt	11.2%	11.3%	10.5%	8.5%	10.7%
RCF / Net Debt	8.8%	9.5%	7.7%	6.3%	9.2%
FCF / Net Debt	-1.3%	-0.7%	-0.8%	-2.0%	2.5%
Debt / EBITDA	5.8x	5.9x	6.3x	8.5x	7.1x
Net Debt / EBITDA	5.8x	5.7x	6.1x	8.4x	6.7x
Net Debt / Regulated Asset Base	72.1%	71.3%	70.2%	67.9%	64.4%

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. Southern Gas Networks plc's financial year ends on 31 March. Source: Moody's Financial Metrics™

Endnotes

- 1 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.
- 2 Ofgem originally set an allowance of £1,772 million. The majority of the cut (65%) in Southern GN's allowances were attributable to Ofgem concluding from its benchmark analysis that the company was the second least efficient company in the sector. The remaining cuts were due to (1) Ofgem assuming a higher level of annual productivity gains than both Southern GN's regulatory submission and the RIIO-GD1 assumption (around 0.85%); and (2) 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 £14 million for Southern GN over RIIO-GD2).
- 3 https://www.ofgem.gov.uk/publications/ofgem-welcomes-energy-act-getting-royal-assent

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