Vadodara Gas Limited

March 22, 2024

Facilities/Instruments	Amount (₹ crore)	Rating[1]	Rating Action
Long-term bank facilities	200.47 (Enhanced from 76.22)	CARE A-; Stable	Reaffirmed; Outlook revised from Negative
Short-term bank facilities	25.00	CARE A2+	Reaffirmed

Details of instruments/facilities in Annexure-1.

Rationale and key rating drivers

Ratings assigned to bank facilities of Vadodara Gas Limited (VGL) continue to derive strength from its strong parentage of GAIL (India) Limited (GAIL; rated CARE AAA; Stable/ CARE A1+) and Vadodara Mahanagar Seva Sadan (VMSS; erstwhile Vadodara Municipal Corporation), its well-established city gas distribution (CGD) operations in its authorized geographical area (AGA) of the entire Vadodara district along with natural gas sourcing arrangements with GAIL and its diversified customer base.

Ratings also factor in steady expansion of its CGD network, growing but moderate scale of operation, comfortable leverage, moderate debt coverage indicators and adequate liquidity. CARE Ratings Limited (CARE Ratings) also takes cognisance of the significant decline in the VGL's profitability in FY23 (refers the period from April 01 to March 31) due to increase in the natural gas prices that was gradually passed-on, which, along with moderation in gas prices in current year led to a recovery in profitability in 9MFY24.

However, the above rating strengths are constrained by the project execution risk associated with the large-size debt-funded capital expenditure (capex), high system losses and end of its infrastructure exclusivity for the CGD authorization of the Vadodara district. Ratings of VGL are also constrained due to susceptibility of the demand for the natural gas from its industrial and commercial segment customers to price dynamics of alternate fuels and high regulatory risk associated with CGD business.

CARE Ratings also takes cognisance of the favourable outcome of the dispute regarding the AGA of the Vadodara district with Adani Total Gas Limited (ATGL; formerly Adani Gas Limited).

Rating sensitivities: Factors likely to lead to rating actions

Positive factors:

- Improving profit before interest, lease, depreciation and tax (PBILDT) margin above 20% through significant reduction in system losses leading to increase in the return on capital employed (ROCE) to above 10% on a sustained basis

Negative factors:

- Deteriorating total debt to PBILDT above 2x
- Significant penalty levied on VGL by Petroleum and Natural Gas Regulatory Board (PNGRB) for underachieving its minimum work program (MWP), and consequently having an adverse impact on its credit profile.

Analytical approach: Standalone while factoring management and operational linkages with one of its parent, GAIL.

Outlook: Stable

The outlook assigned to the long-term rating of VGL has been revised from 'Negative' to 'Stable' on account of significant improvement in the PBILDT margin in 9MFY24 which is expected to sustain, considering the moderation in the domestic natural gas prices coupled with the gradual increase in the tariff mainly in the PNG Domestic segment and stemming of the system losses through operational improvement measures.

Detailed description of the key rating drivers

Key strengths

Strong parentage

VGL is promoted by GAIL along with GAIL Gas Limited [GGL; a wholly owned subsidiary of GAIL; rated CARE AAA(CE); Stable] and VMSS. GAIL is the market leader in the transmission of natural gas in the country and has the largest gas pipeline infrastructure (about 70% market share of current pipelines in operation) in India. Its activities range from the gas transmission and distribution to production and marketing of petrochemicals and leasing bandwidth for telecommunications. The Government

[1]Complete definition of the ratings assigned are available at www.careedge.in and other CARE Ratings Ltd.'s publications

of India (GoI) holds 51.90% stake in GAIL as on December 31, 2023, while the balance stake is held by various institutions and public.
GGL has been authorized by PNGRB for the implementation of the CGD projects in various cities. VMSS is governed by the Gujarat Provincial Municipal Corporation Act, 1949 with jurisdiction over the Vadodara city (formerly known as Baroda). Thus, CARE Ratings expects, VGL would continue to benefit from its strong parentage and would continue to receive operational, management and technical support for its operations.

Established CGD operations in Vadodara district

VMSS was operating a PNG network, which is one of the oldest networks in India, in the city of Vadodara since 1972 whereas GAIL was operating compress natural gas (CNG) network in some parts of the city. Considering the growth prospects of the business, VMSS and GAIL merged and contributed their PNG and CNG assets in VGL, which was incorporated in September 2013. Post the formation of VGL, PNGRB, in October 2016, granted VGL an authorisation for the Vadodara district CGD network. PNGRB also granted the marketing as well as infrastructure exclusivity to VGL since the date of authorisation. While marketing exclusivity ended in October 2019, infrastructure exclusivity ended in March 2023.
Over the year VGL has steadily expanded its network in the Vadodara district. As of December 31, 2023, it had a network of over 2.35 lakh PNG domestic customers, 31 PNG industrial customers, more than 2,800 PNG commercial customers and 38 CNG stations in the Vadodara district.

Established natural gas sourcing arrangements with diversified sales mix

The Ministry of Petroleum & Natural Gas (MoPNG), GoI under its guidelines has accorded priority in gas allocation for the requirements of the PNG-domestic and CNG segments. Accordingly, VGL receives natural gas for its requirement for these segments under administered price mechanism (APM) from GAIL while balance requirement (PNG-Industrial and Commercial) is met through imported R-LNG sourced through GAIL. VGL also procures small quantity of the gas from the Indian Gas Exchange although the quantum of the same is very low. Out of the total gas requirement, procurement under APM was around 85% in FY23 (FY22: 80%) whereas balance 15% (FY22: 20%) was met through spot purchase (including long term contracts).
With the long-term sourcing contracts in-place, CARE Ratings believes, GAIL would continue to remain the major supplier of the natural gas to VGL, thus providing the latter a security regarding its natural gas requirement.

Steady expansion in the existing network along with proposed asset light expansion plans for CNG network

VGL is steadily expanding its network in the PNG-domestic and CNG stations along with laying pipeline in various industrial clusters adjoining the Vadodara city. While PNG domestic connections grew at a compounded annual growth rate (CAGR) of around 16%, PNG industrial and PNG commercial connections grew at a CAGR of 14% and 3% respectively in last five years ended FY23. VGL has added 10 new CNG stations in FY23 leading to total of 35 CNG stations in the Vadodara district as on March 31, 2023. There was substantial growth in the pipeline infrastructure (which almost doubled as on March 31, 2023). The said expansion capex was partly funded from the term loan of ₹75 crore (disbursed in phase manner till FY23) and balance from the internal accrual and customer deposit.
Till now, VGL used to appoint CNG dealers on the "Part Dealer Owned Dealer Operated" concept wherein both capex and operational expenditure of CNG equipment-related electrical and mechanical work, was being carried out by VGL and civil works and operation of dispensers were being carried out by dealers. To cater the fast-growing CNG demand, VGL is adopting asset light "Full Dealer Owned Dealer Operated" (Full DODO) model. Under this model, entire capex and operational expenditure would be carried out by the dealers while VGL would be responsible for the gas delivery. As articulated by the management, bids are already finalized and out of the same, 2-3 stations are likely to commence operation by end of March 2024 and around 15-18 stations would commence operation by FY25-end in a phase-wise manner. Going forward, with the adoption of the asset light model, CARE Ratings expects the CNG segment to grow at a healthy rate of 15-20% while other segments are expected to grow at moderate rate of 10-15%.

Growing but moderate scale of operations

VGL has moderate but growing scale of operation with its total operating income (TOI) grew by around 78% in FY23 over FY22 on the back of sales volume growth of around 29% along with average sales realization growth of around 42%. The major growth in the sales volume was driven by the CNG segment which grew by around 44% whereas PNG segment reported growth of around 12% in FY23 over FY22.
CNG contributed 56% of TOI in FY23 and 9MFY24 (FY22: 53%) whereas balance was contributed by PNG.
For 9MFY24, VGL has reported TOI of ₹325.78 crore as compared with ₹278.67 crore in 9MFY23. The growth in the TOI on a y-o-y basis was on the back of sales volume growth of around 17% whereas sales realization largely remained stable.

Going forward, CARE Ratings expects sustained growth in the scale of operation of the VGL to be supported by asset light expansion plans in the CNG segment and steady network expansion in the PNG segment including domestic, industrial and commercial.

Moderate profitability which declined significantly in FY23 due to significantly increasing gas prices but recovered in 9MFY24

Profitability of VGL marked by PBILDT margin declined significantly from 16.10% in FY22 to 0.26% in FY23. The major reason for this decline was an increase in the natural gas prices. This increase was gradually passed-on, particularly in the PNG-Domestic segment, through tariff revision, leading to a decline in the spread between the average procurement cost and sales realisation in FY23.

In FY23, VGL sourced around 80% (FY22: 83%) gas under APM price from GAIL. The shortfall under the APM procurement was replaced with the spot purchase which was at a higher price as compared with the APM price, thus impacting the overall cost structure and profitability the company. Due to old pipeline network, VGL incurs high repair and maintenance cost and system loss which also impacts its profitability.

With the decline at the PBILDT level along with the moderate interest and depreciation charges, VGL incurred losses of ₹10.51 crore in FY23 as compared with net profit of ₹16 crore in FY22. VGL reported cash losses of ₹2.77 crore in FY23 as compared with gross cash accruals (GCA) of ₹31.34 crore in FY22.

However, with moderation in the natural gas prices, an increase in the proportion of APM gas procurement (85%) and a gradual tariff revision led to improving PBILDT and profit after tax (PAT) margin to 14.05% and 7.18% respectively in 9MFY24. VGL implemented several operational improvement measures resulting into reduction in the system losses from 23% in FY23 (FY22: 35%) to 21% in 9MFY24. Consequently, GCA improved to ₹40.45 crore in 9MFY24 as compared with a cash loss of ₹0.53 crore registered in 9MFY23.

CARE Rating expects VGL to benefit from the downward revision in the domestic natural gas price under APM, since procurement under the same constitutes majority of its gas requirement, along with various operational improvement measures which would lead to a sustained PBILDT margin in the range of 14-16% going forward.

Comfortable capital structure and moderate debt coverage indicators

VGL continues to have comfortable capital structure marked by an overall gearing of 0.51x as on March 31, 2023 as compared with 0.31x as on March 31, 2022. The moderation in the overall gearing was mainly on account of increase in the total debt from ₹54.57 crore as on March 31, 2022 to ₹84.08 crore as on March 31, 2023 mainly due to network expansion. VGL has moderate net-worth base ₹165.65 crore as on March 31, 2023 which provides adequate headroom for borrowing in case of exigencies.

VGL's debt primarily comprises the term loan availed for the net-work expansion as well as working capital borrowing. Debt coverage indicators moderated in FY23 on the back of decline in the profitability. However, with improving profitability in current year and moderate debt level, its debt coverage indicators improved as compared with FY23 level and continued to remain moderate marked by PBILDT interest coverage and total debt to gross cash accrual (TDGCA) of 7.12x and 1.41x respectively in 9MFY24.

VGL is undertaking a debt-funded capex for the overhauling of its old pipeline infrastructure which is to be executed in a phase-wise manner in next 4-5 years, considering which it would continue to have moderate capital structure and debt coverage indicators.

Key weaknesses

Project execution risk associated with the large-size partially debt-funded capex

Apart from the on-going network expansion capex, VGL is undertaking a large-sized debt-funded capex for the overhauling of its old pipeline network to reduce the high system losses. Under this, the natural gas pipeline infrastructure of high-density polyethylene (HDPE)/Underground GI pipeline (UGGI) pipeline under the old city of Vadodara would be replaced with medium density polyethylene (MDPE) pipeline. VGL would replace the existing lines with all latest monitoring system to identify the leakages. Under this, VGL has identified areas and the households which would be completely overhauled in a phase-wise manner over the next 4-5 years. Earlier the capex was expected to commence from FY24 onwards. However, there was some delay in finalisation of the tenders, considering which major work is expected to start from FY25 onwards.

The total project cost is estimated at ₹157.36 crore which will be funded from the term loan of ₹149.50 crore, which will be drawn in line with the capex progress, and balance from the internal accruals. Timely completion of the said capex and consequent generation of the envisaged benefit thereon would be crucial from credit perspective.

High level of system losses due to old network

VGL's PNG network, particularly in the inner areas of Vadodara city (old Vadodara city), is more than four decades old (operations commenced in 1972) due to which it has sizeable leakages alongwith inefficient metering, resulting in high system losses of around 35% in FY22 which reduced to 23% in FY23 and 21% in 9MFY24.

System loss mainly occurs on account of supply to PNG segment. However, with proposed capex plan (as mentioned above) for the overhaul of the old gas pipeline network, CARE Ratings expects VGL's system losses to moderate gradually by around 15-20% of the prevailing losses from FY26 onwards.

Ability of the company to successfully reduce system losses going forward remains a key monitorable.

Favourable outcome of the dispute regarding the GA of the Vadodara district however risk of competition due to expiry of the exclusivity period

VGL and ATGL were operating CGD network in the Vadodara district before the establishment of PNGRB. Post the establishment of PNGRB, VGL and ATGL both applied for the authorization to expand their CGD network and have marketing and infrastructure exclusivity in the Vadodara district. In October 2016, PNGRB accepted the claim of VGL for the authorisation of the Vadodara district against which ATGL had filed the special civil application in the Gujarat High Court. In January 2024, VGL won the case in the Gujarat High Court against the said claim. The infrastructure exclusivity of VGL for the Vadodara district ended on March 31, 2023. Considering the same any other CGD player can set up their infrastructure in Vadodara district which may lead to competition especially in the CNG segment which contributed around 56% of VGL's TOI in FY23 (FY22: 53%).

As of now, no other CGD entity has started marketing piped natural gas in the AGA of VGL due to practical difficulties in the implementation of the common carrier regulations and its evolving nature. Even if the common carrier regulations are implemented, VGL is envisaged to be compensated for the use of its CGD infrastructure for the supply of natural gas; though its adequacy needs to be seen.

Demand from industrial and commercial customers has close linkages with prevailing price of competing fuels

VGL faces higher susceptibility of changes in demand for natural gas from industrial & commercial segments (which accounted for nearly 10% of its total sales value in FY23) due to change in price of other competing fuels. Sales volume from industrial and commercial segment has largely remained stable over the past three years. In the industrial segment, furnaces are designed for easy switch of fuel and during times of relatively higher gas prices, the customers can shift to alternate fuels which could reduce gas off-take from VGL. Most of the equipment in PNG-commercial segment is designed to use LPG as a fuel, with natural gas as an option. Apart from this, CNG prices also have correlation with alternatives such as petrol and diesel and any change in prices of the later has the bearing on the former.

Regulatory risk associated with the CGD sector

The PNGRB, set-up in 2007 by the GoI, is the regulating body of CGD business in India.

PNGRB had granted exclusive marketing rights to the CGD players in the respective GAs post their formation for a stipulated time period. Many of the AGAs have reached the end of the time frame for exemption from the purview of a common contract carrier. In November 2020, PNGRB has formulated new guidelines for determining CGD network tariff and allowing third-party access to existing CGD players' infrastructure network, for supply of natural gas after expiry of the marketing exclusivity period. As and when such regulatory changes are implemented and the form in which they are implemented would be a key monitorable for the CGD sector going forward as this could result in possible entry of competitors in the existing AGAs through implementation of common contract carrier regulation after the expiry of the marketing exclusivity period and could lead to concomitant impact on the CGD sector's profitability.

PNG-Domestic and CNG segments contribute heavily to the profitability of CGD companies. VGL's operating margins, like other CGD companies, are vulnerable to the mix of APM gas and costlier imported RLNG used in its product mix. As per existing regulations, CGD companies are allotted APM gas to meet their requirement to cater to the PNG-Domestic and CNG segments. However, looking at the subdued domestic gas production, the continuation of the same allocation of APM gas shall be critical going forward. Any adverse change in the regulations regarding priority in allocation of APM gas for PNG-Domestic and CNG segments and/or its pricing can adversely impact the profitability margins of the CGD companies, including VGL.

While CGD entities have the pricing power, and thus the flexibility to increase the price of natural gas sold to pass the increase in the cost of the raw material to the customers, the increase will only be limited to the extent that natural gas remains competitive in the market against other alternative fuels.

Liquidity: Adequate

VGL has adequate liquidity with moderate cash accruals against debt repayment obligation and moderate utilization of its working capital limits. VGL is expected to achieve GCA of ₹55-60 crore as against debt repayment obligation of ₹12.64 crore in FY24. Its

liquidity is supported by the cushion available against un-secured sanctioned overdraft limit of ₹30 crore which was utilized to the extent of around 31% for past 12 months ended February 2024.
VGL has modest free cash and bank balance of ₹6.23 crore as on December 31, 2023. It also received deposit from the new customers which is utilized for the working capital purpose. Cash flow from operation declined from ₹55.30 crore in FY22 to ₹4.33 crore in FY23 due to decline in the profitability. AVGL has capex requirement of around ₹50-60 crore each year, part of which would fund from the term debt and balance from the cash accruals and the customer advances. It has availed the term debt of ₹149.50 crore to be disbursed phase-wise in line with the capex progress. The said term loan has moratorium period of two years and repayment tenor of 96 months which will provide sufficient cushion for the built-up of the liquidity.
VGL's current ratio remained below unity at 0.40x as on March 31, 2023 as compared with 0.70x as on March 31, 2022, mainly on account of classification of deposits from its customers (sticky in nature but repayable on demand) of around ₹62 crore as current liabilities as on March 31, 2023 (₹48 crore as on March 31, 2022). The operating cycle shortened and remained lean at 14 days in FY23 as compared with 26 days in FY22.

Assumptions/Covenants: Not applicable

Environment, social and governance risk (ESG) risks: Not applicable

Applicable criteria

Definition of Default
Factoring Linkages Parent Sub JV Group
Liquidity Analysis of Non-financial sector entities
Rating Outlook and Rating Watch
Financial Ratios – Non financial Sector
Short Term Instruments
City Gas Distribution

About the company and industry

Industry classification

Macro-economic Indicator	Sector	Industry	Basic Industry
Energy	Oil, Gas & Consumable Fuels	Gas	Gas Transmission/Marketing

VGL (CIN: U40106GJPLC076828) is a JV between GAIL (holds 32.93% equity stake), GGS (17.07%) and VMSS (50%). VGL is engaged in the marketing and distribution of natural gas (piped and compressed). It supplies PNG to industrial, commercial, domestic customers and CNG to the transportation sector in its only authorized area of Vadodara district. The PNGRB has granted the exclusive authorization to VGL for the Vadodara district for the CGD operations.

Brief Financials (₹ crore)	March 31, 2022 (A)	March 31, 2023 (A)	9MFY24 (UA)
Total operating income	218.10	389.17	325.78
PBILDT	35.12	1.00	45.78
PAT	16.00	-10.51	23.40
Overall gearing (times)	0.31	0.51	0.40
Interest coverage (times)	7.12	0.14	7.12

A: Audited; UA: Un-audited; Note: The above results are the latest financial results available.

Status of non-cooperation with previous CRA: Not applicable

Any other information: Not applicable

Rating history for last three years: Please refer to Annexure-2

Covenants of rated instruments/facilities: Detailed explanation of covenants of the rated instruments/facilities is given in Annexure-3

Complexity level of various instruments rated: Please refer to Annexure-4

Lender details: Please refer to Annexure-5

Annexure-1: Details of instruments/facilities

Name of the Instrument	ISIN	Date of Issuance (DD-MM-YYYY)	Coupon Rate (%)	Maturity Date (DD-MM-YYYY)	Size of the Issue (₹ crore)	Rating Assigned along with Rating Outlook
Fund-based - LT-Term Loan	-	-	-	March 2033	200.47	CARE A-; Stable
Non-fund-based - ST-Letter of credit	-	-	-	-	25.00	CARE A2+

Annexure-2: Rating history for last three years

Sr. No.	Name of the Instrument/Bank Facilities	Current Ratings			Rating History			
		Type	Amount Outstanding (₹ crore)	Rating	Date(s) and Rating(s) assigned in 2023-2024	Date(s) and Rating(s) assigned in 2022-2023	Date(s) and Rating(s) assigned in 2021-2022	Date(s) and Rating(s) assigned in 2020-2021
1	Fund-based - LT-Term Loan	LT	200.47	CARE A-; Stable	-	1)CARE A-; Negative (29-Mar-23)	1)CARE A-; Stable (25-Feb-22)	1)CARE A-; Stable (24-Mar-21)
2	Non-fund-based - ST-Letter of credit	ST	25.00	CARE A2+	-	1)CARE A2+ (29-Mar-23)	1)CARE A2+ (25-Feb-22)	1)CARE A2+ (24-Mar-21)

*Long term/Short term.

Annexure-3: Detailed explanation of covenants of the rated instruments/facilities: Not applicable

Annexure-4: Complexity level of various instruments rated

Sr. No.	Name of the Instrument	Complexity Level
1	Fund-based - LT-Term Loan	Simple
2	Non-fund-based - ST-Letter of credit	Simple

Annexure-5: Lender details

To view the lender-wise details of bank facilities please click here

Note on the complexity levels of the rated instruments: CARE Ratings has classified instruments rated by it based on complexity. Investors/market intermediaries/regulators or others are welcome to write to care@careedge.in for clarifications.

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About us:

Established in 1993, CARE Ratings is one of the leading credit rating agencies in India. Registered under the Securities and Exchange Board of India, it has been acknowledged as an External Credit Assessment Institution by the RBI. With an equitable position in the Indian capital market, CARE Ratings provides a wide array of credit rating services that help corporates raise capital and enable investors to make informed decisions. With an established track record of rating companies over almost three decades, CARE Ratings follows a robust and transparent rating process that leverages its domain and analytical expertise, backed by the methodologies congruent with the international best practices. CARE Ratings has played a pivotal role in developing bank debt and capital market instruments, including commercial papers, corporate bonds and debentures, and structured credit.

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