COMPANY UPDATE

BOBCAPS
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BUY

TP: Rs 520 | ⮝ 26%

INDRAPRASTHA GAS | Oil & Gas | 27 December 2022

Growth levers intact despite EV

- **IGL targets 10% volume growth over FY23-25E, aims to offset loss from electric vehicles**
- **Implementation of Parikh Committee recommendations is key to restoring competitiveness and margins**
- **We assume coverage with BUY with a TP of Rs520; IGL to deliver high-single digit volume growth over medium-term with a reasonable margin**

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Takeaways from management call: While Q3FY23 margin is likely to be under pressure, margin can stabilise with policy support. IGL continues to target a healthy double-digit growth to reach 10mmscmd by FY25. Near-term drivers include BS6.2 implementation from Apr'23 for CNG, and a ban on polluting vehicles and industries from Oct'22. Domestic and commercial growth will likely continue with deeper penetration of pipeline infrastructure in Delhi and expansion into new GAs (new Geographical Areas). IGL expects medium-term growth from Rewari, Muzaffarnagar, Kanpur and Ajmer, and also from other new GAs. Management is also open to inorganic opportunities in newer geographies.

CNG to co-exist with EVs. While electric buses pose risk to ~10% of IGL's current volume, company expects the transition to EV ecosystem to be gradual. IGL is also actively pursuing scaling-up of long-haul CNG buses to offset losses from EVs over medium term. CNG, in our view, is likely to remain dominant in the passenger and commercial vehicle segments over next 5-10 years as significantly higher upfront prices and lack of adequate charging facilities will continue to dampen EV penetration.

Policy to support CGD growth: Government has been encouraging CGD sector so as to lower consumption of costly LPG, and to tackle pollution in urban areas. It has awarded 295 GAs so far. Winners of GAs have committed to connect 123mn households and set up 17,700 CNG stations. Amid tightening of international gas prices, Government set up the Parikh committee to identify solutions to ensure fair price for consumers. The recommendations can help CGD companies restore price advantage of CNG/ PNG over competing fuels.

Buy with TP Rs520: We expect IGL EBITDA to grow at a 10% CAGR mainly driven by 11% growth in volumes over FY23-FY25. We expect EBITDA margin to stabilise around Rs7.4-7.5/scm. We set target price of Rs520 based on cost of equity of 11%, volume CAGR of ~8% and average EBITDA margin of Rs 7.6/scm over FY22-33E, and terminal growth of 4%. Our DCF-based target price of Rs 520 implies target FY24E PE of 20.6x, broadly in line with 5-10Y mean 1Y forward PE.

Key changes

Target	Rating
▼	◄ ►

Ticker/Price	IGL IN/Rs 414
Market cap	US$ 3.5bn
Free float	55%
3M ADV	US$ 11.5mn
52wk high/low	Rs 489/Rs 321
Promoter/FPI/DII	45%/21%/20%

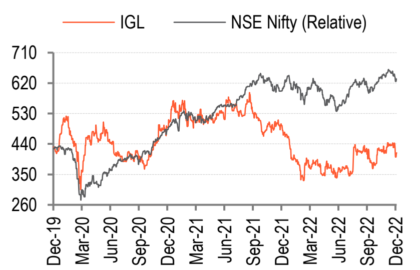
Source: NSE | Price as of 27 Dec 2022

Key financials

Y/E 31 Mar	FY22A	FY23E	FY24E
Total revenue (Rs mn)	77,100	136,794	146,248
EBITDA (Rs mn)	18,811	21,502	24,712
Adj. net profit (Rs mn)	15,023	15,868	17,696
Adj. EPS (Rs)	21.5	22.7	25.3
Consensus EPS (Rs)	21.5	21.5	24.3
Adj. ROAE (%)	21.6	19.4	18.8
Adj. P/E (x)	19.3	18.2	16.4
EV/EBITDA (x)	14.5	12.9	11.2
Adj. EPS growth (%)	28.1	5.6	11.5

Source: Company, Bloomberg, BOBCAPS Research

Stock performance



Source: NSE

IGL: Takeaways from management call

We summarise key takeaways from a group call with the senior management of IGL: Sanjay Kumar – CFO, Rajeev Kumar – Head Marketing and Manjeet Singh – Finance.

Q3 margin likely to be under pressure

Rising gas costs impacts near-term margin

IGL has raised CNG prices by mere 5% since May'22 to Rs 79.56/kg currently. Its margins are likely to be under pressure in Q3FY23 as the price hike is inadequate to offset the increase in gas purchase cost.

- **Price increases are constrained** due to limited headroom, given current prices of diesel (Rs 89.62/l) and petrol (Rs 96.72/l). Note, IGL does not want to stifle the momentum in conversion of vehicles to CNG.
- **Gas purchase cost has increased** in Q3 with administered (APM) gas price rising from US$ 6.13/MMbtu to US$ 8.57/MMbtu from 1 Oct 2022, while higher volume growth continues to drive up the need for even costlier spot LNG.
- **Purchase of short-term gas is adding to costs.** For IGL, the purchase of short-term gas has increased to 7-9% of its total gas purchase to bridge the shortfall in priority sector gas allocation, as per our calculation. This is higher than the 1-3% indicated by the IGL MD during a media interview in Oct'22. IGL highlighted that priority sector gas allocation has reduced to ~85% of requirements. Further, it is receiving supply of only 60-65% on its 2mmscmd of contracted regasified LNG (RLNG) volumes and needs to procure short-term gas through Indian Gas Exchange (IGX) to plug the gap.

Margin can stabilise upon normalisation of gas purchase cost

IGL expects margins to return to historical average levels upon normalisation of gas purchase cost. MD Sanjay Kumar had mentioned in a media interview (Source: Zee Business) that the company is looking for EBITDA/scm of Rs 7.0-7.5 in FY23. This compares with historical levels of Rs 5.8-5.9 over FY17-FY19, Rs 6.4 in FY20 and Rs 7.4-7.6 over FY21-FY22. Factors that could help restore margins are indicated below:

- **APM gas price may reduce by US$2/MMbtu.** Kirit Parikh Committee has proposed gas price of US$ 6.5/MMbtu during the first year with an annual increase of US$ 0.5/MMbtu till FY26. If Government accepts this recommendation, city gas distribution (CGD) companies will be insulated from linkage to higher LNG price, at a time when international market is likely to remain tight.
- **Exposure to high-cost spot gas may come down** once IGL starts to receive full contracted supply of LNG. The company has contracted 2mmscmd of RLNG with GAIL and other importers, which is well above its current requirement of 1mmscmd for industrials and commercial customers. With the tightening of supply from GAIL and in global markets, it is receiving only the minimum supply level – equivalent to 60-65% of contracted quantity. Resumption of full contractual supply would reduce its exposure to short-term gas.

- **Improvement in domestic gas availability from RIL/ONGC** could further curtail the need for high-cost, short-term gas. While the availability of domestic APM gas will continue to decline in our view, RIL and ONGC are likely to add free-market gas, which will be available at the ceiling price under the current mechanism.
- **Easing of contracted LNG price** in line with decline in crude price from FY23 levels. Note, we forecast moderation in oil price.
- **Easing of global LNG market balance from CY26 onwards** could help lower gas purchase cost. We believe that global LNG prices are likely to ease from CY26 as the next wave of LNG projects come online and could allow Indian gas consumers to secure LNG under long-term contracts.

Volume growth in healthy double digits

IGL's current sale volume is at ~8.2mmscmd (8.1mmsmd in Q2FY23), with 82% of consumption from priority sector including CNG (75%) and households (7%). The company indicated that its sale volumes are currently growing at 10-12% annually.

- **New GAs to extend growth profile.** While demand from Delhi increased by 9-10% yoy in H1FY23, new geographical areas (GA) collectively are growing at 15-16% annually, albeit off a lower base, and contributing 16-17% to company's sales mix.
- **CNG is showing healthy growth across legacy and new GAs.** IGL indicated that CNG demand is growing in Delhi by 10% annually, in Noida by 11-12%, Ghaziabad 15%, Muzaffarnagar 20%, Kanpur 44%, Rewari 48%, Karnal 29%, and Kaithal 24% as per H1FY23 data. Most of the new GAs are clocking more than 20% growth, although on a low base. Conversion of CNG stations in new GAs from the offline to online mode by connecting them to pipelines over the next few months should lend a further impetus to growth.
- **CNG and commercial segments have been key growth drivers in H1FY23.** Amongst business segments, CNG is clocking growth of 20% YoY, the commercial segment at 40% YoY, while domestic and the industrial segment were flat, though expected to grow in Q4 as per management. We believe higher growth is in part, due to recovery from Covid-related lockdowns.
- **CNG conversions have moderated.** From 18k vehicles per month at the start of the year, CNG conversions have reduced to 14-15k/month. New vehicles account for the major part of growth of CNG vehicle population, with the conversion rate of retrofitted vehicles running at ~3.5k/month. Amongst new vehicles, both cars and commercial vehicles contribute ~5k new units each per month.

Targeting double-digit growth over FY24-FY25

IGL aims to increase volumes from 8.2mmscmd to 10mmscmd by FY25, implying ~10% annual growth over the next two years. To this end, the company aims to incur capital expenditure of Rs 14bn-15bn annually over the next two years. Capex will include Rs 3bn-4bn on CNG stations (to add 100 new stations annually and upgrade existing ones) and Rs 6bn-7bn on pipelines. The outlay will be split equally between Delhi and other regions, bearing in mind that Delhi is still growing at 10% and accounts for 80-85% of IGL's sales.

Near-term growth drivers

- **BS6.2 can be a near-term catalyst for CNG conversion.** CNG vehicle additions will receive another fillip as India transitions from BS6.1 to BS6.2 from Apr'23. This move is intended to take India on par with Euro-VI emission norms in real-time driving conditions.

  This will result in an increase in the cost of vehicles due to the addition of an on-board self-diagnostic device, programmed fuel injectors, and upgrades to semiconductors and other systems. As the cost escalation is likely to be higher for diesel/petrol versions than CNG, the new norms could act as another catalyst in the shift towards CNG vehicles.

- **NGT's ban on use of polluting fuel should catalyse industrial demand.** Following the National Green Tribunal (NGT) directions, Commission for Air Quality Management (CAQM) has banned usage of diesel generator (DG) in the National Capital Territory (NCT) of Delhi and adjoining areas from Oct'22. Existing DG sets need to be converted to Hybrid/ Dual fuel mode with 70% gas-based fuel or be replaced with CNG/ PNG gensets. CQAM has also banned use of coal for industrial or domestic purposes from Jan'23. With ban on all polluting fuels in NCT Delhi, IGL has connected 300 new industrial consumers, including a few mobile tower companies, which were previously using diesel fuel. (TRAI estimate suggests use of 8,760 litres of diesel per tower annually, assuming an 8-hour operation by DG set) These industrial consumers will add to demand growth from Q4FY23 onward.

- **Legacy NCT Delhi GA yet to mature.** Growth in the domestic and commercial segments has not yet matured in Delhi, where sales of LPG are still significantly high. The company has started laying pipeline infrastructure in difficult areas to tap some of this potential.

Contribution from new GAs to accelerate over medium term

IGL is currently present in 11 GAs across 4 states/union territories in Northern India. The company reckons that volume growth from the areas of Rewari, Muzaffarnagar, Kanpur and Ajmer is likely to ramp up over the medium term.

Fig 1 – IGL's GA footprint

GA	State	PNGRB Bidding round	Domestic-PNG	Commercial-PNG	Industrial-PNG	CNG stations
			Mar-22	Mar-22	Mar-22	Mar-22
NCT Delhi	Delhi	NA	12,61,605	3,134	1,708	456
Noida, Greater Noida (i.e. Gautam Budh Nagar)	Uttar Pradesh	NA	288,734	703	1076	53
Ghaziabad	Uttar Pradesh	NA	277,740	359	407	62
Rewari-Dharuhera, Bawal	Haryana	6th	13,996	43	98	24
Karnal	Haryana	8th	14,563	10	37	14
Gurugram	Haryana	NA	19,835	101	32	15
Meerut, Muzaffarnagar, Shamli	Uttar Pradesh	9th	26,708	16	0	18
Kaithal	Haryana	10th	29,992	0	0	10
Kanpur, Fatehpur & Hamirpur	Uttar Pradesh	10th	21,483	0	0	14
Ajmer, Pali, Rajsamand	Rajasthan	10th	114,579	0	0	55
Banda, Chitrakoot, Mahoba	Uttar Pradesh	11th	DFR is in progress			

Source: Company, PNGRB, PPAC, BOBCAPS Research

EV bus segment – a medium-term challenge

IGL derives 11% of volumes from the Delhi bus segment, which could be challenged by electric vehicle (EV) penetration. Management highlights that electric buses have been slow to take off in Delhi so far. At this juncture, ~250 electric buses operate in Delhi against ~7,000 running on CNG. IGL also points out that Delhi is continuing to add to its CNG fleet, as seen from the recent addition of 150 CNG buses and plans are afoot for another 500 in coming years.

However, the Delhi government also has an ambitious plan to induct 8,000 electric buses by 2025 to achieve 80% electrification. To this end, 1,500 additions are planned by Nov'23 and another 6,380 by 2025. The roadmap also involves an increase in the overall fleet from 7,373 buses to 10,000 buses. To support rollout of EV buses, the government aims to add charging stations at 55 bus depots by the end of next year. Stations have already been set up at 3 depots as of Oct'22 and are planned at another 17 by end-2023 (Source: Hindustan Times).

Management believes that the CNG fleet will only be gradually replaced by electric buses and aims to offset the loss by the introduction of long-haul CNG buses with type-4 cylinders that can cover 600-700km on one tank. The company is running several pilots across Uttarakhand (five buses), Jaipur and Uttar Pradesh (under discussion). Its pilot for the Delhi-Dehradun-Delhi route has now been running for 1.5 years. For scaling up long-haul bus implementation, IGL needs to secure the approval for the type-4 cylinder from the Automotive Research Association of India (ARAI).

EVs will be slow to challenge private and commercial cars

Per IGL, CNG is likely to coexist with EVs in the passenger and commercial segments over 5-10 years as challenges to the latter are yet to be ironed out. These include high upfront capex for the user, inadequate charging infrastructure, higher charging time (currently cars take ~2.5 hours for a full charge at public charging points), and limited access to charging stations for private vehicles parked on roads. Most taxis also run 2-3 shifts and may not have the time to recharge on a slow/ moderately fast chargers.

As part of the Delhi government's current policy for public charging stations, plans are afoot to set up close to 500 stations across 100 locations. To support all vehicles, the Delhi government will mandate a certain number of slow, moderate and fast charges on each site, with service fees being the bidding criterion to select the concessionaire. (Source: https://ev.delhi.gov.in/charging_station). This could mean gradual development of fast public chargers and accordingly gradual adoption of EVs in the passenger car and commercial vehicle segments. That said, given geographical spread of Delhi (~1,500 Square Km), 100 locations will not be sufficient to have meaningful penetration of EVs.

Strategic initiatives

- **Inorganic growth opportunities.** IGL is keen to diversify its footprint across India, and management has previously indicated that it is exploring options for inorganic growth in Karnataka and Maharashtra, with the possibility of some deals being closed in FY23. During our interaction, the company reiterated its appetite for inorganic opportunities with an investment of Rs 5bn-10bn per transaction.
- **Diversifying into related value chains.** IGL has launched meter manufacturing and is also participating in a few solar energy projects in a bid to diversify its portfolio.
- **Embracing EVs.** While EVs are a threat, the company aims to put up electric chargers at its CNG stations and has plans to commission this infrastructure at 50-60 stations in FY23 (4 implemented so far). The Delhi Development Authority has now allowed IGL to set up EV charging at all its stations, which was previously restricted to COCO (company-owned, company-operated) units. The company acknowledged that the business model for EV charging stations is in a nascent stage and carries significant uncertainty over profitability.

Overview of Indian City Gas Distribution industry

Several reasons for Indian government to support the CGD sector

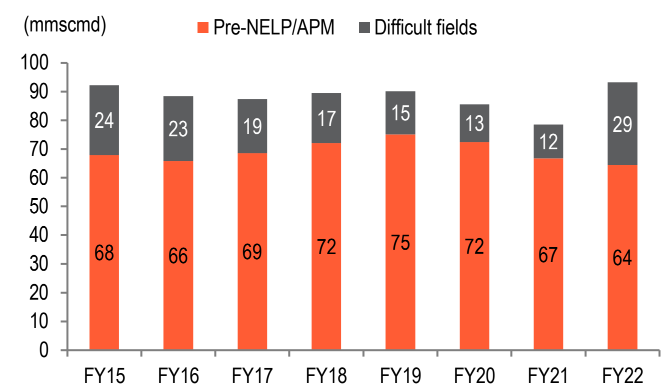
Given government's goal of increasing share of natural gas in the primary energy mix to 15% by 2030 from existing 6.3%, PNGRB (Petroleum and Natural Gas Regulatory Board) has allocated 295 GAs over 2008-22. These cover ~98% of India's population and 88% of the country's geographical area, spread over ~630 districts in 28 states and union territories. CGD companies in turn have committed to connect 123mn households, and install 17,700 CNG stations under Minimum Work Program commitments. It is therefore important that the competitiveness of CGD sector is maintained to achieve these objectives.

India has consistently supported CGD sector with higher gas allocation

Indian government has supported penetration of domestic piped natural gas (D-PNG) and CNG segments by allocating a share of pre-NELP (pre-New Exploration Licensing Policy) fields, i.e. onshore fields owned by ONGC and Oil India (OIL) which were awarded before the implementation of NELP, also termed as APM gas.

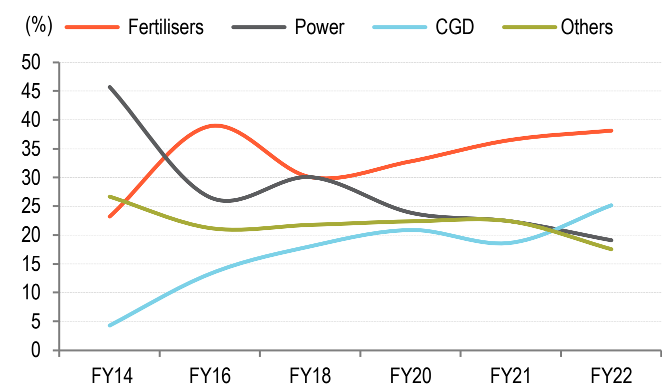
To counter the consistent decline seen in matured pre-NELP fields, government has been increasing the share of the CGD sector at the expense of other users of gas. While pre-NELP/ APM gas availability has declined from ~68mmscmd in FY15 to ~64mmscmd in FY22, availability to CGD segment has jumped to ~22mmscmd. Within the APM gas basket, share of the CGD sector increased from 13.3% of the total domestic gas in FY16 to 25.2% by FY22.

Fig 2 – To counter decline in availability of APM Gas…



Source: PPAC, BOBCAPS Research

Fig 3 – … allocation to CGD segment has been increased



Source: PPAC, BOBCAPS Research

… however, increase in APM gas price has impacted margins of CGD

With a rise in international gas prices driven by geopolitical tensions, Indian APM gas price has also been increased, given its linkage to the international benchmarks of producer countries. However, prices of the competing liquid fuels have been kept constant by the Oil Marketing Companies. This has reduced the price advantage of CNG over petrol/ diesel. This has been an unintended fall-out of the subsidy on liquid fuels. We believe the government would ultimately need to adjust its policy to correct this anomaly.

With international gas market is likely to remain tight over FY22-25 in our view, as Europe continues to reduce its dependence on Russian gas by buying LNG cargoes, it is imperative for Indian government to look at alternatives to maintain viability of the CNG against competing liquid fuels.

Recommendations of Parikh Committee has a potential to support CGD

In September 2022, the Government of India (GoI) constituted an expert committee under former planning commission member Kirit S Parikh to examine the issues of domestic natural gas pricing regimes; ensure fair prices for end-consumers; suggest market-oriented transparent and reliable pricing regimes for India's long-term vision for ensuring a gas-based economy; and review existing natural gas pricing regimes.

Key recommendations from the Report submitted by the Parikh Committee are below:

- **Gas price for APM fields of ONGC and OIL:** Gas price to be linked to 10% of import price of Indian crude basket with a dynamic ceiling and fixed floor with first ceiling of US$ 6.5/MMbtu, with a subsequent increase of US$ 0.5/MMbtu annually and floor of US$ 4/MMbtu.
- **Gas price for other operators under different price regimes**: Gas price at declared APM price without any floor and ceiling.
- **Incentive for additional production from nomination blocks**: For a new well or well intervention in nomination blocks, a premium of 20% over and above the APM prices for ONGC/ OIL.
- **Full deregulation by 1 Jan'27** of APM and other gas prices.
- **Retention of ceiling price** for the time being, and full deregulation by 1 Jan'26 for deep water, ultra-deep water, high-pressure high-temperature areas .
- **Monitoring of consumer prices** with detailed break-up by PPAC to ensure that the benefit of decreased price is passed on.
- **Develop a localised price discovery (India price)** mechanism for the development of the gas market to prepare for the decontrolled regime.
- **Continuation of current APM gas allocation policy** with the highest priority given to CNG (transport) and PNG (domestic) sectors. To reduce the impact on other sectors from the increased allocation to the CGD companies, subsidise fertiliser manufacturers based on the fertiliser sale price fixed by the government, free power producers from take-or-pay obligations, who were promised priority allocation of gas and whose cost of generation has become uncompetitive due to significant reduction in cost of renewable power.
- **Bring gas under GST regime**
- **Discussion about subsidy mechanism.** Separately but not as an explicit recommendation, the report also discusses a subsidy mechanism to address

concerns of the CGD companies. The report acknowledges the CGD industry's requirement of selling CNG and PNG domestic at affordable price. It considers a 20% discount to LPG price for PNG consumers and 20% discount to CNG consumers as a good incentive to promote use of gas.

Drivers of CGD demand

Cost competitiveness of gas

While CNG vehicles competitiveness has reduced versus the petrol variant due to recent increase in CNG prices, we believe implementation of the Parikh Committee recommendations can help CGD companies regain advantage.

As an example, simple payback period for Maruti Swift has increased to ~21 months at current CNG and petrol prices. Here we consider fuel efficiency at 15km/l for petrol vehicles and 28km/kg for CNG vehicles (as communicated by Maruti) and incremental capex for factory fitted car at Rs 100k. Even in case of a more modest assumption of fuel efficiency of 14km/l for petrol car and 22km/kg for CNG car, payback period has increased to ~23 months. Note, in this simple payback analysis, we have ignored difference in maintenance and interest costs under two options.

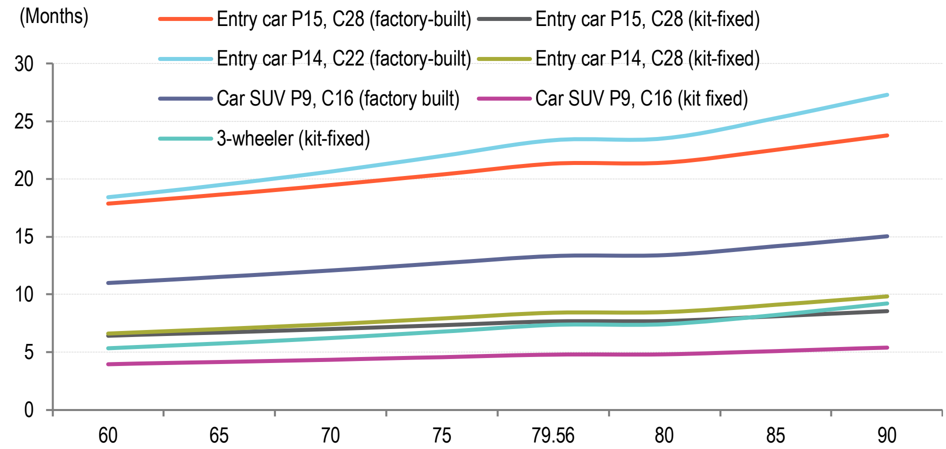
Fig 4 – Simple payback analysis for shift to CNG option for the same model

Parameters	Maruti Swift		Maruti Swift		Car SUV		3Wheeler	
	Petrol	CNG	Petrol	CNG	Petrol	CNG	Petrol	CNG
Fuel competitiveness								
Fuel efficiency (km/ unit fuel)	**15**	**28**	**14**	**22**	**9**	**16**	**28**	**38**
Cost of fuel (Rs/l or Rs/kg)	96.7	79.6	96.7	79.6	96.7	79.6	96.7	79.6
Effective fuel cost (Rs/km)	**6.4**	**2.8**	**6.9**	**3.6**	**10.7**	**5.0**	**3.5**	**2.1**
Daily use (km)	50	50	50	50	50	50	80	80
Monthly use (km)	1300	1300	1300	1300	1300	1300	2400	2400
Monthly fuel costs (Rs'000)	8.4	3.7	9.0	4.7	14.0	6.5	8.3	5.0
Monthly savings for CNG vehicle (Rs '000)	**-**	**4.7**	**-**	**4.3**	**-**	**7.5**	**-**	**3.3**
Factory built	**-**	-	-	-	-	-	-	-
Incremental capital cost (Rs'000)	-	100	-	100	-	100	-	-
Payback period (months)	**-**	**21.3**	**-**	**23.4**	**-**	**13.3**	**-**	**-**
External kit	**-**	-	-	-	-	-	-	-
Incremental capital cost (Rs'000)	-	36	-	36	-	36	-	24
Payback period (months)	**-**	**7.7**	**-**	**8.4**	**-**	**4.8**	**-**	**7.4**

Source: Kirit Parikh Committee Report, Maruti, BOBCAPS Research

For Maruti Swift car assuming on-road fuel efficiency of 14km/l for Petrol and 22km/kg for CNG vehicle, payback period would reduce to 21 months if CNG price is brought down to Rs 70/kg.

Fig 5 – Sensitivity of payback period to change in CNG price



Source: BOBCAPS Research

Looking at a more comprehensive analysis to compare total cost of ownership (TCO) including upfront capex, annual running and maintenance costs across select car models under a mid-range segment, we highlight that a CNG car is competitive against EV, petrol, diesel and auto LPG at current CNG price of Rs 79.6/kg. Here we use the assumptions used by Crisil M&A Consulting as published in the IRM DRHP. This analysis is done at a lower usage of 1,000km per month against 1,300km in the previous analysis.

- While fuel competitiveness of CNG vehicle was -78% worse than EV vehicle, total cost of ownership was 6% better for CNG vehicles in absolute terms, and 16% better in present value terms.
- Against petrol vehicle, fuel competitiveness of CNG vehicle is 62% better, TCO absolute is 12% better and TCO PV is 7% better.
- Against diesel vehicle, fuel competitiveness of CNG vehicle is 18% better, TCO absolute is 19% better and TCO PV is 19% better.

Fig 6 – Comparison of total cost of ownership

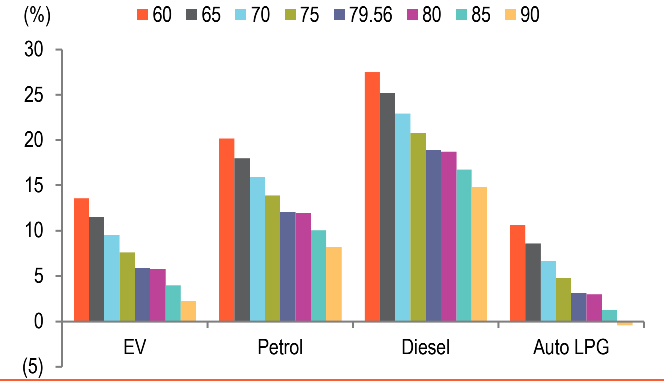
Parameters	EV	Petrol	Diesel	Auto LPG	CNG
Fuel competitiveness					
Cost of fuel	6.0	96.7	89.6	62.8	79.6
Unit of cost of fuel	Rs/kWh	Rs/l	Rs/l	Rs/kg	Rs/kg
Fuel efficiency (km/ unit fuel)	7.4	16.5	21.0	14.6	22.0
Effective fuel cost (Rs/km)	0.8	5.9	4.3	4.3	3.6
CNG vehicle fuel competitiveness	**-78**	**62**	**18**	**19**	**0**
Analysing total cost of ownership (TCO) assuming 12,000km annual run and 8 years of useful life					
On road price (Rs mn)	1.3	0.9	1.1	0.9	0.9
Annual fuel cost (Rs'000)	9.7	70.4	51.2	51.6	43.4
Annual maintenance cost (Rs'000)	5.0	6.0	9.0	6.0	7.5
Salvage value @8% of vehicle value	0.1	0.1	0.1	0.1	0.1
TCO- absolute (Rs mn)					
Total cost of ownership (Rs mn)	1.3	1.4	1.5	1.3	1.3
CNG vehicle competitiveness	**6**	**12**	**19**	**3**	**0**

Parameters	EV	Petrol	Diesel	Auto LPG	CNG
TCO- PV (Rs mn)					
Total cost of ownership (Rs mn)	1.4	1.3	1.4	1.2	1.2
CNG vehicle competitiveness	**16**	**7**	**19**	**2**	**0**

Source: IRM Energy DRHP, CRISIL M&A Consulting, BOBCAPS Research | Notes: (1) Present petrol, diesel and CNG prices. (2) Average price of hatchbacks such as Tata's Nexon, Tiago, Tigor and Maruti's Brezza considered. CNG retrofit cost Rs 55,000 considered over the on-road petrol price. (3) Price of LPG kit: Rs 40,000. Fuel efficiency considered based on Maruti Suzuki WagonR Duo model. (4) Salvage value: 8% of on-road price for all categories

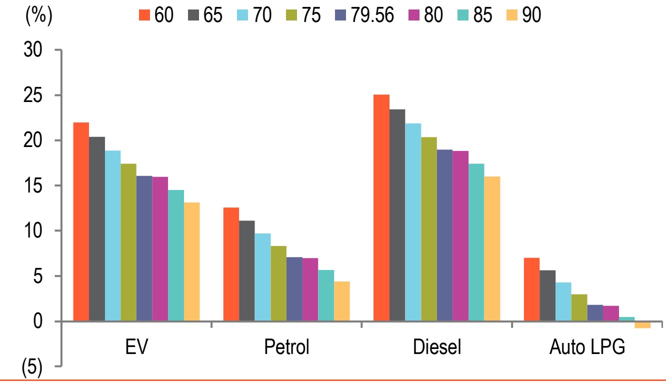
Total cost of ownership (PV) of CNG vehicle would be 19% better than EV, 10% better than petrol and 22% better than diesel, if CNG price drops to Rs 70/kg.

Fig 7 – Sensitivity of TCO (absolute) of CNG vehicle to change in CNG price (Rs/kg)



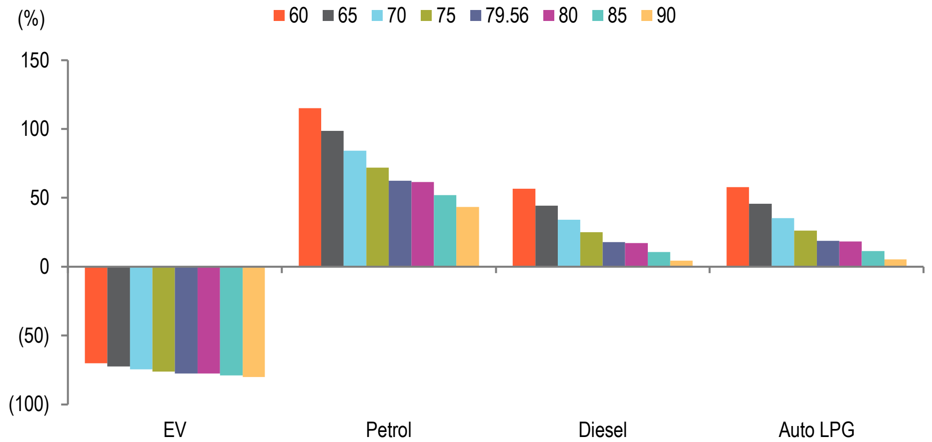
Source: BOBCAPS Research

Fig 8 – Sensitivity of TCO (PV) of CNG vehicle to change in CNG price (Rs/kg)



Source: BOBCAPS Research

Fig 9 – Sensitivity of fuel competitiveness of CNG vehicle to change in CNG price (Rs/kg)



Source: BOBCAPS Research

Government push towards adoption of cleaner fuels, pollution control

- The regulatory push for cleaner fuel and the government's plans to connect new cities to the CGD network are likely to raise demand from the industrial sector. A ban on coal gasifiers, pet coke and other fuels should boost gas volumes.
- The NGT in Jul'20 directed the Central Pollution Control Board (CPCB) to ensure that states and union territories ban the use of pet coke and furnace oil as fuels in industries and switch to cleaner alternatives.
- The Commission for Air Quality Management (CAQM) was formed in 2021. This statutory body has issued orders to ban the use of coal in industrial, domestic and other miscellaneous applications in the Delhi-NCR (National Capital Region) from 1 Oct 2022 where PNG infrastructure is available, and from 1 Jan 2023 elsewhere. CQM has recently prohibited the use of liquid fuels such as furnace oil for industrial consumption from 1 Oct 2022.
- The government's stance on limiting the use of subsidised LPG cylinders coupled with improving gas infrastructure availability is likely to improve the consumption of PNG (domestic).
- In large cities such as Delhi and Mumbai, the government is encouraging CNG use through regulations to combat pollution. More public transportation fleets are being shifted from conventional fuels to CNG. This includes state-owned transportation, auto rickshaws and national or local cab aggregators.

CGD demand evolution

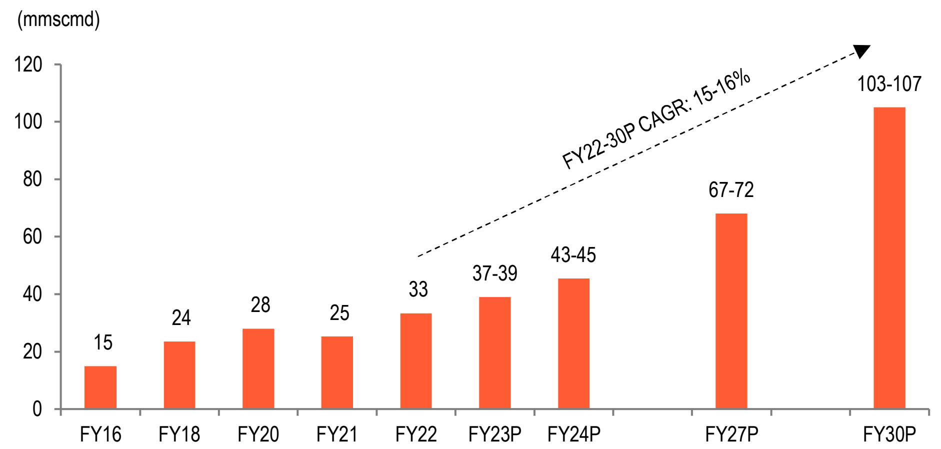
We capture below the CGD demand forecast as published in IRM Energy DRHP (Draft Red Herring Prospectus) in Dec'22 as assessed by Crisil Market Intelligence & Analytics. The study expects natural gas demand from the CGD sector to log a 15-16% CAGR between FY22 and FY30, growing to 103-107mmscmd, led by the CNG and PNG segments.

Fig 10 – CGD demand forecast

CAGR (%)	Demand (mmscmd)				Demand CAGR (%)			
	FY20	FY22	FY27	FY30	FY20-22	FY22-27	FY27-30	FY22-30
CGD	28	33	67-72	103-107	8.6	15-17	14-15	15-16
By segments								
CNG	12	14	36-38	58-60	39.6	20-22	17-18	19-20
Domestic PNG	3.7	4.6	10-11	16-17	11.5	17-19	17-19	17-19
Industrials and commercial	12	15	23-24	29-30	9.4	8-10	7-8	8-9

Source: IRM Energy DRHP, BOBCAPS Research

Fig 11 – CGD – Natural gas demand outlook, FY22-FY30P

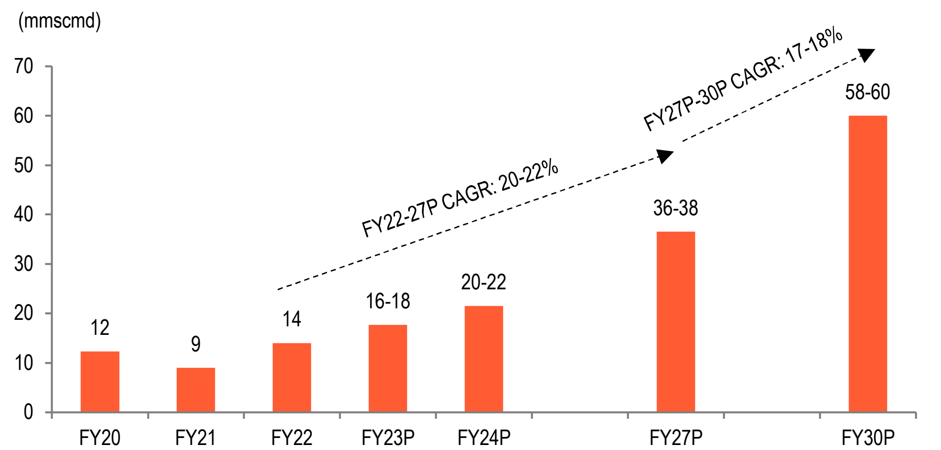


Source: MoPNG, PPAC, IRM Energy DRHP

CNG segment to maintain healthy momentum

The CNG segment is expected to register a healthy CAGR of 20-22% between FY22 and FY27, driven by the cost competitiveness of CNG vis-à-vis petrol.

Fig 12 – CNG – Natural gas demand outlook, FY22-FY30P



Source: IRM Energy DRHP, BOBCAPS

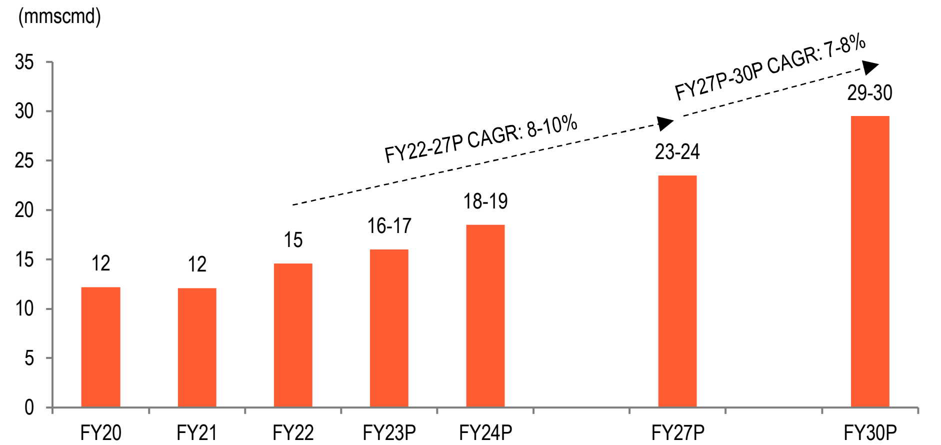
Growth in household PNG due to increasing penetration

Demand from the domestic segment is projected to log a 17-19% CAGR over FY22-FY30. This is driven by surge in household PNG connections from ~7.8mn as of FY21 to 19-20mn by FY26 with increasing CGD penetration. The growth is projected to continue as CGD network coverage widens to the states of Andhra Pradesh, Tamil Nadu, Telangana, and West Bengal between FY25 and FY30. (Source: IRM Energy DRHP)

Industrial demand to have lower share in newer GAs

Industrial PNG demand is projected to clock 8-10% CAGR over FY22-FY27, with demand stabilising at a 7-8% CAGR between FY27 and FY30. (Source: IRM Energy DRHP) Growth in Industrial demand is likely to be lower than that in CNG and domestic PNG segment as Newer GAs are likely to have a lower share in industrial demand over the long term, as the major industrial regions, such as Gujarat, Maharashtra and Delhi, have already shifted to PNG. However, long-term demand growth from the commercial segment could remain healthy.

Fig 13 – Industrials – Natural gas demand outlook, FY22-FY30P

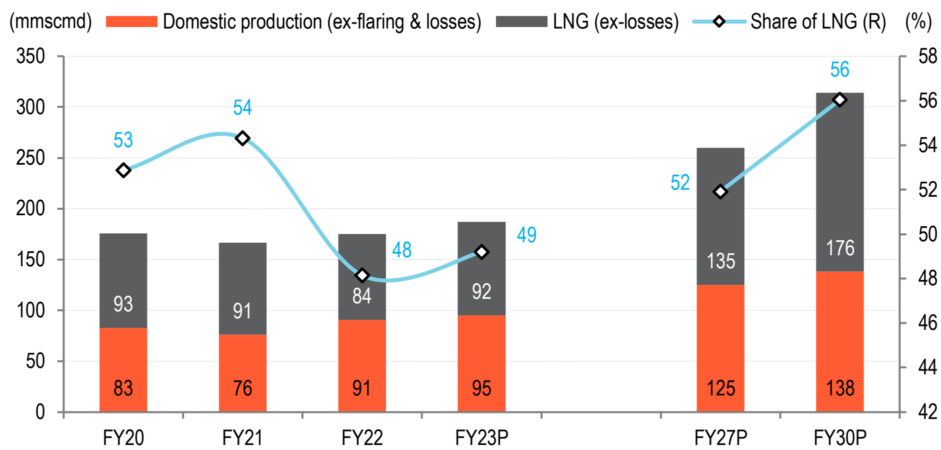


Source: IRM Energy DRHP, BOBCAPS

Natural gas supply outlook

We also capture domestic natural gas production outlook published in IRM Energy DRHP. Natural gas production is projected to increase from 95mmscmd in FY23 to 123-128mmscmd by FY27 led by new production from ONGC's Daman and KG fields as well as ONGC and RIL's deep-water fields on the eastern offshore. This will include KG basin production from the Vashistha, KG-D5, R-cluster and satellite fields (part of the KG-D6 field).

Fig 14 – India natural gas supply outlook



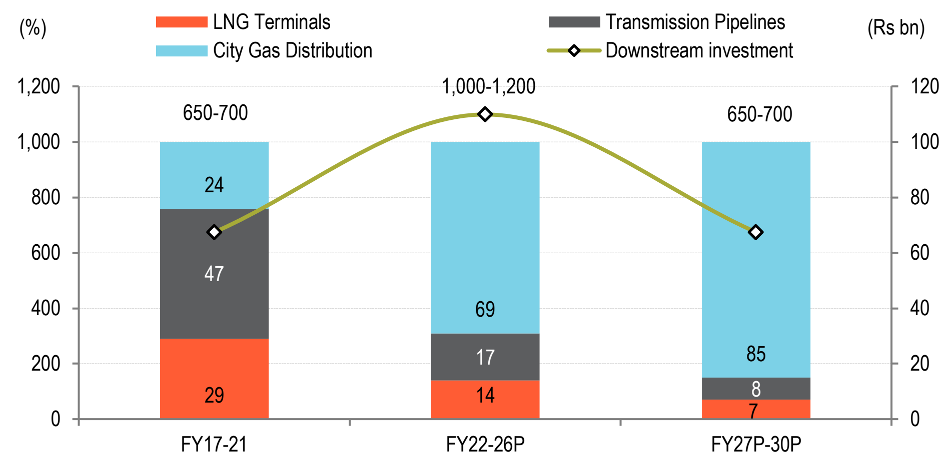
Source: IRM Energy DRHP, BOBCAPS

Demand is expected to outpace supply and dependence on LNG imports is likely to continue, but their share in the supply mix should moderate.

Investment outlook for gas value chain

Investments in the gas value chain started picking up from FY18 because of the government's push for infrastructure development and cleaner fuel. Per IRM Energy DRHP, investments in downstream gas infrastructure is likely to improve in the medium term as the continued policy thrust on cleaner fuel leads to investment opportunities in the sector, visible in the recent CGD bid rounds, development of gas trunk pipelines and setup of new regasification capacities (planned and under-construction).

Fig 15 – Investment outlook for gas downstream infrastructure



Source: IRM Energy DRHP, BOBCAPS

Major entities in the CGD market

India's CGD market primarily comprises of 10-15 players. Of these, the top five players hold 136 (46%) of the 295 GAs allotted so far in various CGD bidding rounds (11A). ATGL (Adani Gas) is the largest player on a standalone basis (33 GAs), followed by IOCL (28 GAs). Also, ATGL is the largest entity in terms of a combined GA count at 52, including those held through a JV with IOCL. Participation by foreign investors has increased over the past decade, with forays by Atlantic Gulf & Pacific Company (AG&P) and Think Gas from Singapore, Total Energies from France, I Squared Capital from US and Osaka Gas from Japan.

Marketing exclusivity – not easy to take away in practice

Note as per a recent media report (The Economic times, 27 December 2022), Government is contemplating taking some power into its own hands from PNGRB to tackle distribution of new forms of energy like hydrogen. This may entail reviving common career aspects of a city distribution network. We believe such move, if implemented in its entirety, can pose a significant challenge to the viability of extant business model of CGD companies. That said, we believe, replacing existing CGD players as marketer of gas to end consumer is unlikely given gas allocation policy. Additionally, unless a new player puts forth a specific value proposition, which cannot be replicated by the incumbent, such move is unlikely to impact CGD's existing business model adversely.

Valuation methodology

Forecasts

We expect IGL's EBITDA to grow from Rs 18.8bn in FY22 to Rs 26.2bn in FY25, a 10.1% CAGR, driven by an 11.4% CAGR in volumes over this period.

Margin drivers – We assume EBITDA margin to remain in the range of Rs7.3-7.5/scm, the average we have seen over FY21-22.

- We assume that the government implements recommendations of Kirit Parekh committee and APM gas price is set at US$6.5/MMbtu in FY24 and increases by $0.5/MMbtu in FY25
- We assume that spot LNG market remains tight till FY25 till the next wave of LNG terminals come through.

Growth drivers

- CNG has been the key driver of growth for IGL. With assumption of reduction in APM gas price, we expect CNG competitiveness to be restored against petrol and diesel, and CNG penetration in cars and commercial vehicles to continue and co-exist with EV over next 5-10 years. To account for gradual shift to electric buses in Delhi, we are assuming slowdown in CNG growth from FY25. We assume that IGL will be able to offset part of this loss by capturing floating volume from neighbouring region as it scales up long-haul buses with Type-4 cylinders.
- We expect commercial/ domestic growth to continue at a healthy double digit as IGL continues to expand in more difficult areas in NCT Delhi and accelerate connections in newer GAs.
- NGT ban on use of polluting fuels in NCT Delhi will aid industrial growth from Q4FY23.
- We assume FY25E volumes at 9.7mmscmd, below the exit rate ambition of 10mmscmd by IGL.

Our EBITDA forecasts are +6.7%/ +3.0%/ -3.5% versus consensus for FY23E/ FY24E and FY25E.

Fig 16 – Forecasts

(Rs bn)	Actual	Forecasts			Consensus			Delta to consensus		
	FY22	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	77,100	136,794	146,248	160,454	129,339	137,170	147,214	5.8	6.6	9.0
EBITDA	18,811	21,502	24,712	26,225	20,758	23,993	27,146	3.6	3.0	(3.4)
EBITDA growth YoY (%)	26.8	14.3	14.9	6.1	10.4	15.6	13.1	-	-	-
Net income	15,023	15,868	17,696	18,948	14,633	16,572	18,874	8.4	6.8	0.4

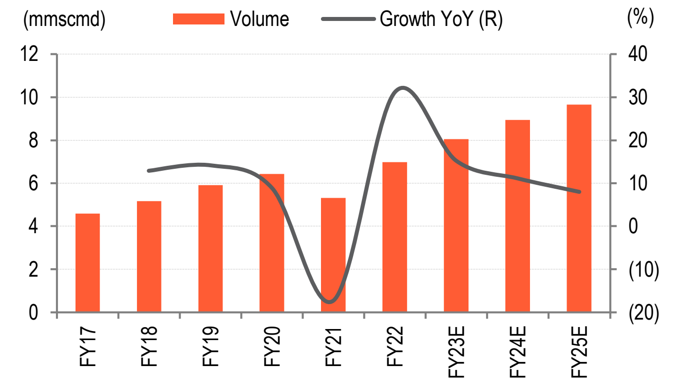
Source: Company, Bloomberg, BOBCAPS Research

Fig 17 – Key business drivers and assumptions

Particulars	FY22	FY23E	FY24E	FY25E	FY22-25E CAGR (%)
Volumes (mmscmd)					
CNG	5.1	6.0	6.7	7.1	-
D-PNG	0.5	0.5	0.6	0.7	-
I+C	1.0	1.0	1.1	1.3	-
Natural gas	0.5	0.5	0.6	0.7	-
Total	**7.0**	**8.1**	**8.9**	**9.7**	**-**
Volume growth (% YoY)					
CNG	36.1	18.6	10.8	6.0	11.7
D-PNG	8.4	4.0	13.5	15.3	10.8
I+C	23.6	5.5	11.3	12.8	9.8
Natural gas	25.9	10.0	12.2	15.3	12.5
Total	**31.2**	**15.2**	**11.1**	**8.0**	**11.4**
Volume mix (%)					
CNG	72.4	74.6	74.3	72.9	-
D-PNG	7.1	6.4	6.6	7.0	-
I+C	13.8	12.6	12.6	13.2	-
Natural gas	6.7	6.4	6.4	6.9	-
Total	**100.0**	**100.0**	**100.0**	**100.0**	**-**
Profitability indicator (Rs/scm)					
Revenue	30.2	46.6	44.7	45.5	-
Gross spread	13.0	13.0	13.4	13.4	-
EBITDA	**7.4**	**7.3**	**7.5**	**7.4**	**-**
PAT	5.2	4.8	4.8	4.8	-
ROE	20.5	19.2	18.7	17.5	-
Key assumptions					
USDINR exchange rate	74.5	80.5	82.5	84.2	-
APM gas price (US$/MMbtu)	2.3	7.3	6.5	7.0	-
Gas price ceiling (US$/MMbtu)	4.9	10.8	11.4	11.2	-
LNG contract price (US$/MMbtu)	11.7	17.3	14.2	11.4	-
LNG spot price (US$/MMbtu)	23.2	33.5	30.0	25.0	-
Priority sector gas bucket (US$/MMbtu)	2.3	8.2	7.4	7.9	-
Industrials and commercials gas bucket (US$/MMbtu)	11.9	18.9	15.5	12.7	-

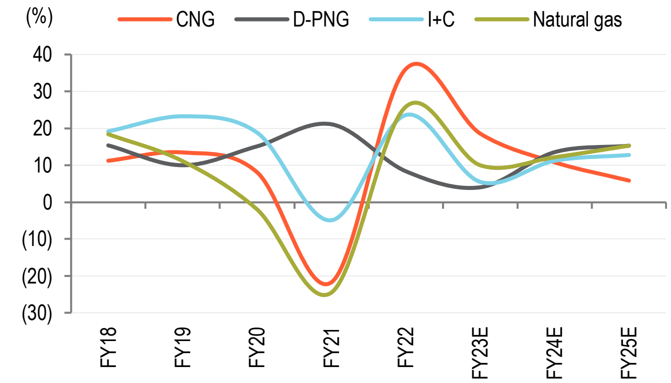
Source: Company, BOBCAPS Research

Fig 18 – Volumes to reach 9.7mmscmd by FY25 with double digit volume growth



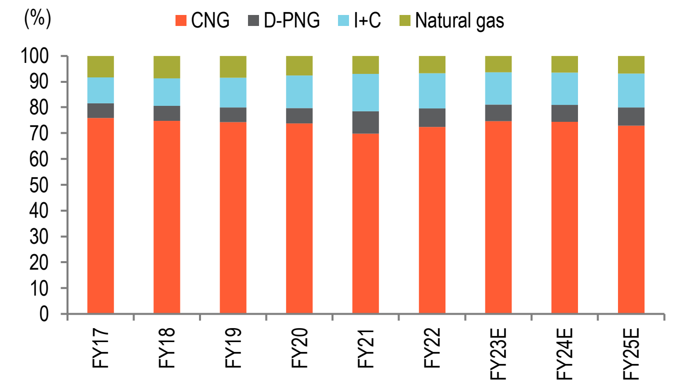
Source: Company, BOBCAPS Research

Fig 19 – Moderation in CNG factoring in EV challenges, domestic/ commercial penetration continues



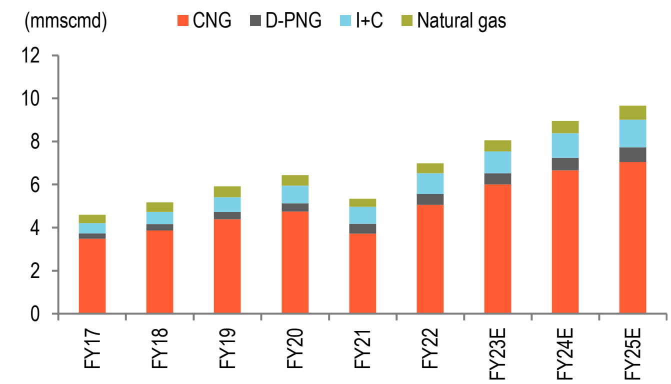
Source: Company, BOBCAPS Research

Fig 20 – CNG dominance reduces only marginally



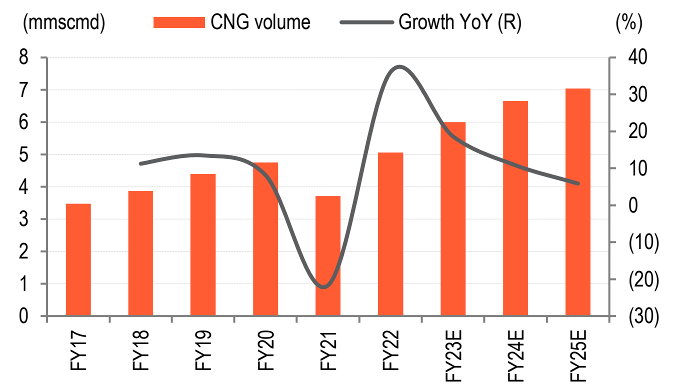
Source: Company, BOBCAPS Research

Fig 21 – Priority sector to be the key volume driver



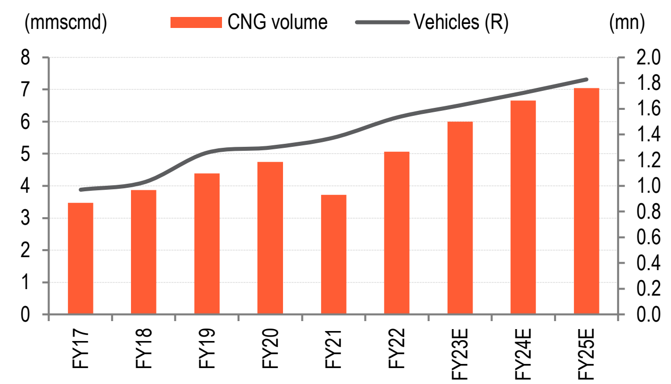
Source: Company, BOBCAPS Research

Fig 22 – CNG volume growth moderation with shift to electric buses



Source: Company, BOBCAPS Research

Fig 23 – CNG volume has recovered from effects of lock-down



Source: Company, BOBCAPS Research

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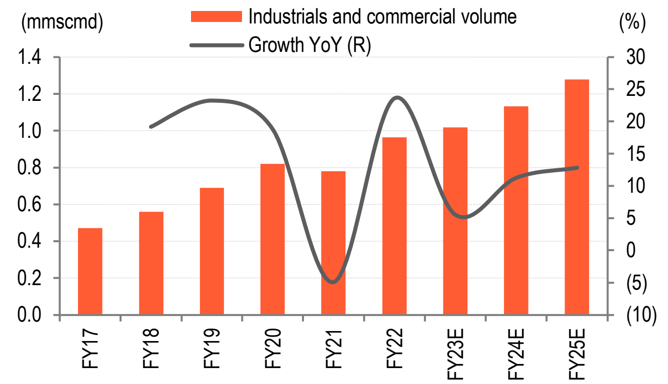
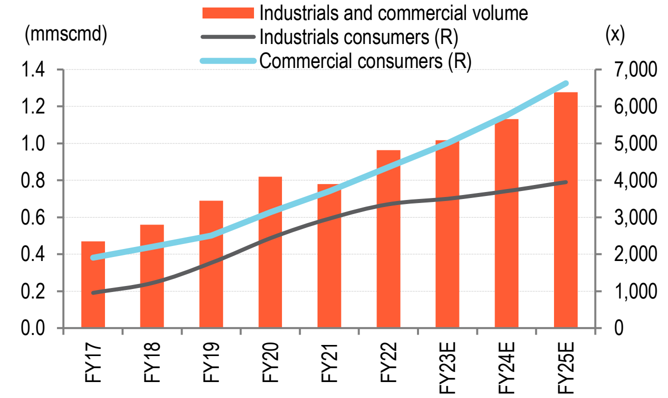
Fig 24 – Industrials supported by shift to cleaner fuels, commercials supported by deepening penetration



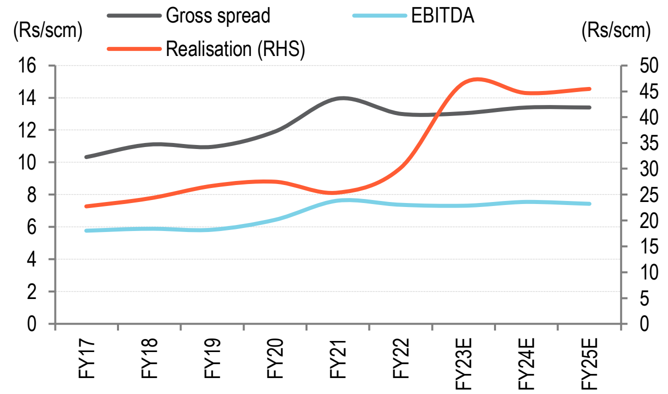
Source: Company, BOBCAPS Research

Fig 25 – Industrials and commercial volumes vs. consumers



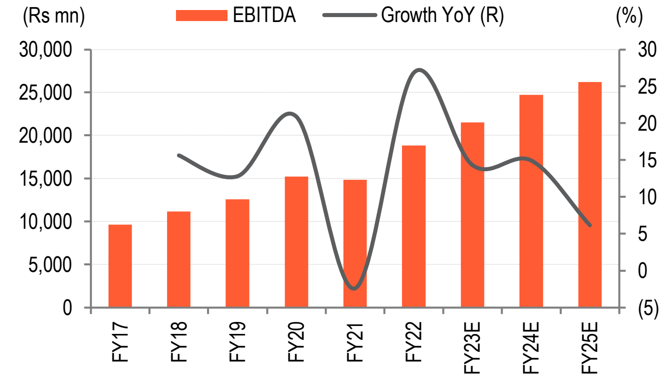
Source: Company, BOBCAPS Research

Fig 26 – We expect EBITDA to stabilise around Rs7.4-7.6 with policy support



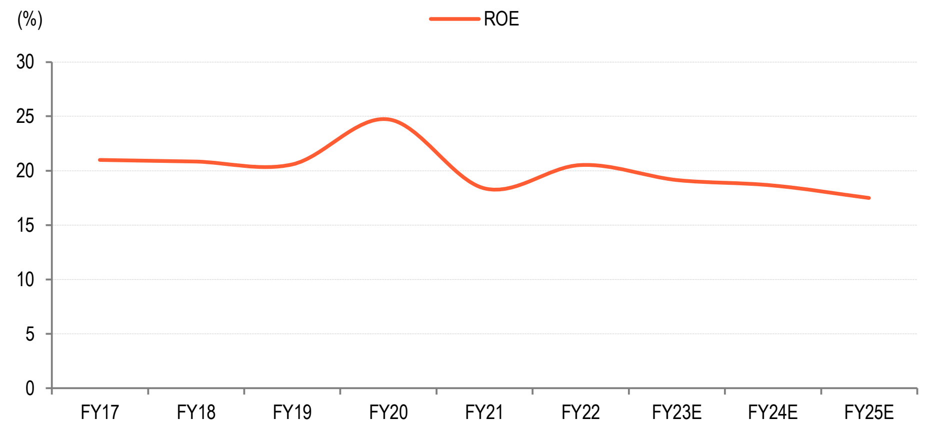
Source: Company, BOBCAPS Research

Fig 27 – We forecast EBITDA growth of 10% CAGR over FY22-FY25E



Source: Company, BOBCAPS Research

Fig 28 – We expect a modest drop in return on equity



Source: Company, BOBCAPS Research

DCF-based target price of Rs 520, BUY

Key assumptions for our DCF-based fair value are cost of equity of 11%, terminal growth of 4%, volume growth CAGR of ~8% and average EBITDA margins of Rs 7.6/scm over explicit and semi-explicit forecast period of FY22-33E. Our DCF-based target price of Rs520 implies target FY24E PE of 20.5x. This is in-line with 5-10Y mean PE of 20.4-20.7x on Bloomberg consensus. As our target price implies 26% upside, we rate IGL as BUY.

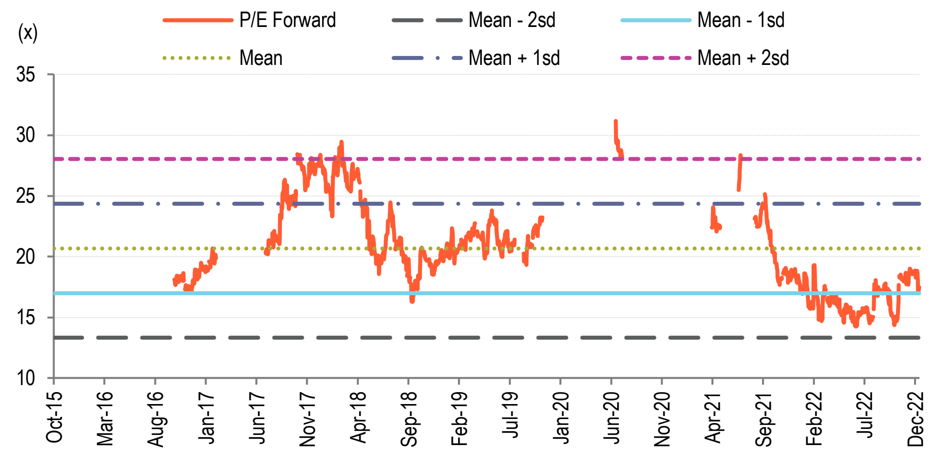
Fig 29 – DCF-based fair value

Valuation parameters	Value (Rs mn)
PV of FCF FY24E-FY34E	98,835
PV of terminal value	171,570
Enterprise Value	270,405
Less: Net Debt FY23E	(30,959)
Equity value Mar'23	**301,364**
NPV – IGL share (Rs)	**431**
NPV – MNGL (Rs)	38
NPV – CUPGL (Rs)	11
Consolidated NPV Mar'23 (Rs)	**479**
Consolidated NPV Dec'23 (Rs)	**518**
Target price as on Dec'23 (rounded off to nearest Rs 5)	**520**

Source: BOBCAPS Research

Over past 5 years, IGL has traded at an average 1-year forward PE of 20.7x with one standard deviation range of 17.0x-24.4x on Bloomberg consensus.

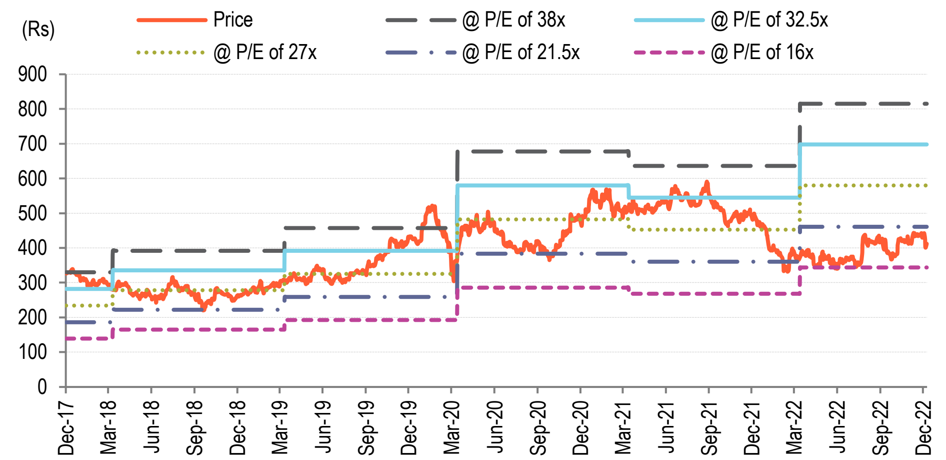
Fig 30 – IGL has traded at an average 1Y forward PE of 20.7x



Source: Bloomberg, BOBCAPS Research

Over past 5 years, IGL has traded at an average LTM PE of 27x with one standard deviation range of 21.5x-32.5x based on actual earnings.

Fig 31 – IGL: Trailing PE Band over past 5 years



Source: Bloomberg, BOBCAPS Research

Key risks

Key downside risks to our estimates are:

- Lower-than-expected margins arising from inability to pass on higher gas purchase cost to consumers. We assume that the government implements recommendations of Kirit Parekh committee and lower APM gas price to US$6.5/MMbtu in FY24.
- Slower volume growth than our assumptions. Faster penetration of EV than our current assumptions is key risk.
- Adverse PNGRB or government regulations that could impact our margin or volume outlook

Sector recommendation snapshot

Company	Ticker	Market Cap (US$ bn)	Price (Rs)	Target (Rs)	Rating
Bharat Petroleum Corp	BPCL IN	8.5	326	450	BUY
GAIL	GAIL IN	5.2	95	160	BUY
Gujarat State Petronet	GUJS IN	1.8	261	270	BUY
Hindustan Petroleum Corp	HPCL IN	4.0	231	410	BUY
Indian Oil Corp	IOCL IN	8.5	75	150	BUY
Indraprastha Gas	IGL IN	3.5	414	520	BUY
Mahanagar Gas	MAHGL IN	1.0	847	750	SELL
Petronet LNG	PLNG IN	3.8	212	330	BUY
Reliance Industries	RIL IN	207.7	2,545	2,670	HOLD

Source: BOBCAPS Research, NSE | Price as of 27 Dec 2022

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Financials

Income Statement

Y/E 31 Mar (Rs mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Total revenue	**49,408**	**77,100**	**136,794**	**146,248**	**160,454**
EBITDA	14,830	18,811	21,502	24,712	26,225
Depreciation	(2,904)	(3,171)	(3,804)	(4,503)	(5,134)
EBIT	11,926	15,641	17,697	20,209	21,091
Net interest inc./(exp.)	(113)	(132)	0	0	0
Other inc./(exp.)	1,148	1,766	949	524	982
Exceptional items	0	0	0	0	0
EBT	12,961	17,275	18,646	20,733	22,073
Income taxes	(2,494)	(4,509)	(4,798)	(5,336)	(5,684)
Extraordinary items	0	0	0	0	0
Min. int./Inc. from assoc.	1,258	2,257	2,020	2,299	2,559
Reported net profit	**11,726**	**15,023**	**15,868**	**17,696**	**18,948**
Adjustments	0	0	0	0	0
Adjusted net profit	**11,726**	**15,023**	**15,868**	**17,696**	**18,948**

Balance Sheet

Y/E 31 Mar (Rs mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Accounts payables	4,186	7,867	8,092	6,733	7,442
Other current liabilities	7,925	9,981	9,981	9,981	9,981
Provisions	3,727	4,295	4,295	4,295	4,295
Debt funds	0	0	0	0	0
Other liabilities	11,318	13,019	14,638	16,304	17,800
Equity capital	1,400	1,400	1,400	1,400	1,400
Reserves & surplus	61,944	74,460	86,055	99,000	112,886
Shareholders' fund	63,344	75,860	87,455	100,400	114,286
Total liab. and equities	**90,500**	**111,022**	**124,461**	**137,712**	**153,804**
Cash and cash eq.	11,323	13,616	12,826	17,276	26,482
Accounts receivables	2,607	5,206	8,995	9,216	10,111
Inventories	456	455	1,199	1,282	1,407
Other current assets	1,552	1,685	1,685	1,685	1,685
Investments	22,884	26,257	26,257	26,257	26,257
Net fixed assets	43,038	49,896	66,628	75,375	82,241
CWIP	8,469	13,786	6,750	6,500	5,500
Intangible assets	171	121	121	121	121
Deferred tax assets, net	0	0	0	0	0
Other assets	0	0	0	0	0
Total assets	**90,500**	**111,022**	**124,461**	**137,712**	**153,804**

Cash Flows

Y/E 31 Mar (Rs mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Cash flow from operations	**17,571**	**21,080**	**16,034**	**21,678**	**24,286**
Capital expenditures	(10,663)	(14,727)	(13,500)	(13,000)	(11,000)
Change in investments	(16,582)	(3,373)	0	0	0
Other investing cash flows	1,148	1,766	949	524	982
Cash flow from investing	**(26,097)**	**(16,334)**	**(12,551)**	**(12,476)**	**(10,018)**
Equities issued/Others	0	0	0	0	0
Debt raised/repaid	0	0	0	0	0
Interest expenses	0	0	0	0	0
Dividends paid	(2,520)	(3,850)	(4,273)	(4,752)	(5,061)
Other financing cash flows	570	1,397	0	0	0
Cash flow from financing	**(1,950)**	**(2,453)**	**(4,273)**	**(4,752)**	**(5,061)**
Chg in cash & cash eq.	**(10,477)**	**2,294**	**(790)**	**4,450**	**9,206**
Closing cash & cash eq.	**11,323**	**13,616**	**12,826**	**17,276**	**26,482**

Per Share

Y/E 31 Mar (Rs)	FY21A	FY22A	FY23E	FY24E	FY25E
Reported EPS	16.8	21.5	22.7	25.3	27.1
Adjusted EPS	16.8	21.5	22.7	25.3	27.1
Dividend per share	3.6	5.5	6.1	6.8	7.2
Book value per share	90.5	108.4	124.9	143.4	163.3

Valuations Ratios

Y/E 31 Mar (x)	FY21A	FY22A	FY23E	FY24E	FY25E
EV/Sales	5.6	3.5	2.0	1.9	1.7
EV/EBITDA	18.6	14.5	12.9	11.2	10.5
Adjusted P/E	24.7	19.3	18.2	16.4	15.3
P/BV	4.6	3.8	3.3	2.9	2.5

DuPont Analysis

Y/E 31 Mar (%)	FY21A	FY22A	FY23E	FY24E	FY25E
Tax burden (Net profit/PBT)	90.5	87.0	85.1	85.4	85.8
Interest burden (PBT/EBIT)	108.7	110.4	105.4	102.6	104.7
EBIT margin (EBIT/Revenue)	24.1	20.3	12.9	13.8	13.1
Asset turnover (Rev./Avg TA)	59.5	76.5	116.2	111.6	110.1
Leverage (Avg TA/Avg Equity)	1.4	1.4	1.4	1.4	1.4
Adjusted ROAE	20.1	21.6	19.4	18.8	17.7

Ratio Analysis

Y/E 31 Mar	FY21A	FY22A	FY23E	FY24E	FY25E
YoY growth (%)					
Revenue	(23.8)	56.0	77.4	6.9	9.7
EBITDA	(2.4)	26.8	14.3	14.9	6.1
Adjusted EPS	(6.1)	28.1	5.6	11.5	7.1
Profitability & Return ratios (%)					
EBITDA margin	30.0	24.4	15.7	16.9	16.3
EBIT margin	24.1	20.3	12.9	13.8	13.1
Adjusted profit margin	23.7	19.5	11.6	12.1	11.8
Adjusted ROAE	20.1	21.6	19.4	18.8	17.7
ROCE	16.5	16.6	16.1	16.0	14.6
Working capital days (days)					
Receivables	16	18	19	23	22
Inventory	8	4	3	4	4
Payables	34	38	25	22	19
Ratios (x)					
Gross asset turnover	1.0	1.3	1.9	1.6	1.6
Current ratio	1.0	0.9	1.1	1.4	1.8
Net interest coverage ratio	105.2	118.4	0.0	0.0	0.0
Adjusted debt/equity	(0.2)	(0.2)	(0.1)	(0.2)	(0.2)

Source: Company, BOBCAPS Research | Note: TA = Total Assets

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Recommendation scale: Recommendations and Absolute returns (%) over 12 months

BUY – Expected return >+15%

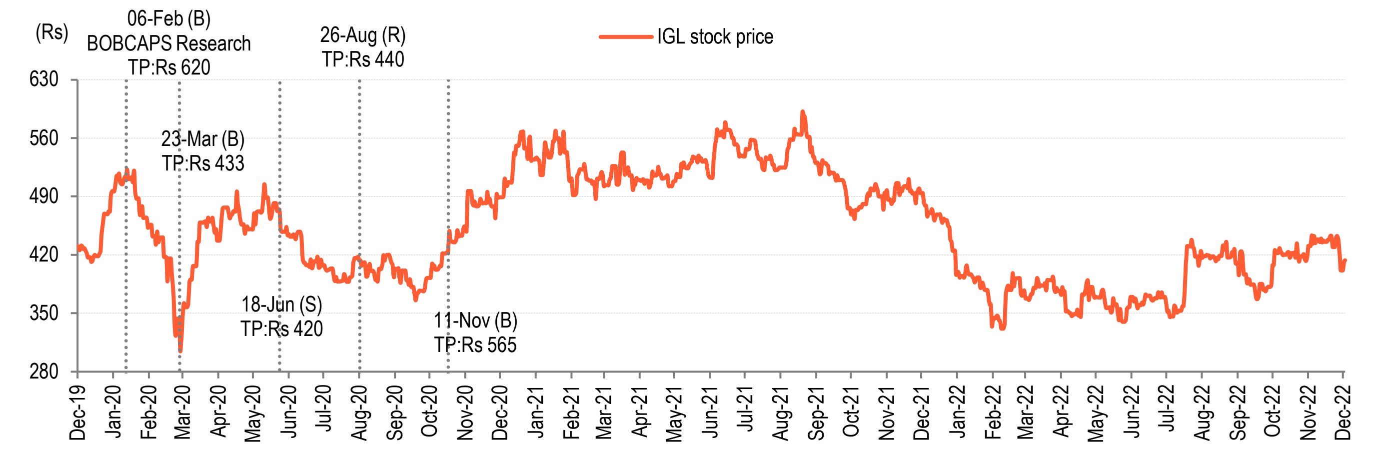
HOLD – Expected return from -6% to +15%

SELL – Expected return <-6%

Note: Recommendation structure changed with effect from 21 June 2021

Our recommendation scale does not factor in short-term stock price volatility related to market fluctuations. Thus, our recommendations may not always be strictly in line with the recommendation scale as shown above.

Ratings and Target Price (3-year history): INDRAPRASTHA GAS (IGL IN)



B – Buy, H – Hold, S – Sell, A – Add, R – Reduce

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