

Our earlier CGD update

MOTILAL OSWAL Sector Update | 8 September 2021

Oil & Gas

India's Gas sector benefiting from pyzygy ahead

- Both India and China have been in the same boat, facing poor availability of domestic natural gas. However, the range of all-weather policies for reducing CO₂ in pipeline infrastructure, and (ii) availability of natural gas has resulted in China's natural gas consumption increasing by 20% CAGR from 2015 to 2020.
- With (i) the National Green Tribunal (NGT) focusing on reducing pollution, (ii) 50% rise in the length of 700 pipelines over the last five years, and (iii) increased availability of LNG (variable capacity 27%) and availability of domestic gas (70%), we expect the expansion of the sector to be higher in India over the next 5-7 years.
- As per our research, IGL, GUL, and GUJGA will be the beneficiaries of the same.

China firmly on its way to raising the share of natural gas in its primary energy mix to 12% by FY20

- As the part of the 14th 5-year plan, natural gas consumption in India at 72mmcmd, was marginally higher than that in China (68mmcmd).
- However, rising focus on reducing emissions in both Transportation and Industrial segments, resulted in China's gas consumption growing to staggering 23% in FY20.
- India, lacking the twin constraints of poor natural gas availability as well as pipeline infrastructure, saw its gas consumption growing to only 2% in the same period, with a 20% CAGR. China's gas consumption has gone to 7.5x that of India, a sorry state for India compared with the marginal rise at the start of the century.

Consumption of natural gas in China: Important observations

- In FY20, China launched a drive to replace vehicles under which the focus was on increasing sales of electric and CNG vehicles in the Transportation sector. As a result, the average annual growth rate in gas consumption rose to 15% in FY20-21, before dipping to 20% in FY21 due to the slowdown on purchasing vehicles prior to the summer Olympics. Other transportation in FY21 is expected to rise a 10-15% for growth in gas consumption, despite a higher base. Natural gas consumption in China grew at 20% CAGR since 2010.
- China launched a pilot program 'Ten Cities, Ten Thousand Vehicles' in FY20, aiming to promote new energy vehicles (NEVs, PHEVs and FCVs). The first round National Plan of Blue Sky Defense, China mandated 20% of new urban vehicles to be NEVs in key regions in FY21. All urban buses in key regions were to be NEVs by FY21. As a result, 80% of the 500,000 new energy buses in China are BEVs and the rest are PHEVs.
- Leading Chinese OEs like Sino Energy (SINO), and China Gas Holdings (CGH) witnessed an 11% and 3% CAGR decline in their CHN and LNG sales, respectively, over the last five years. Their commercial and industrial sales grew by 18% and 20% CAGR, respectively.

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MOTILAL OSWAL Sector Update | 13 September 2021

Oil & Gas

Open access: PNRB re-opens proceedings

- The Petroleum and Natural Gas Regulatory Board (PNGRB) has invited comments on the declaration of GSA as common carrier under Section 2, PNGRB Act, which should be recommended to the Minister for Petroleum and Coal, to be further efforts to introduce open access. www.pngrb.gov.in
- We continue to believe that the provision of transportation of a common carrier would be done, although ensuring the process before the expiry of the last thirteen (13) years from the date of commencement of PNGRB.
- There are divided concerns on the PNGRB's AFM gas to "100% AFM/100% for PNGRB, with a 10% of the 100% for PNGRB, and 90% for PNGRB. PNGRB continue to seek higher single digit commission on selling CNG at their retail rates.
- The strength of electric vehicles which require no storage and safety of the highly flammable and toxic CNG, remain the biggest challenge of PNGRB.
- On the basis of the aforementioned factors, we reiterate our concern for PNGRB's ability to introduce common carrier under the PNGRB Act in FY21 and continue to prefer GUJGA (understand the Nifty by 15% in FY21), the story which has found well over the last year as the market leader.

Multiple concerns on profitable CNG always ahead

- In case of common carrier implementation or evolution of new energy vehicles (NEVs), transportation of common carrier would be key to long-term growth. Thus, we prefer GUJGA over the profitable CNG players. The price of IGL, GUL, and MAHGL, suggest a tentative growth rate of 8.1%, 7.2%, and 4.5%, although GUJGA has more volume growth than IGL. We highlighted action in relation and.
- IGOs with high CNG volumes would face opposition from the government to switch to public transportation systems (like Delhi and Mumbai) in FY21. We expect an important development from China in our next report, which will impact volumes of China Gas and Sino Energy, grow by 20% over the last five years and CNG, their CNG volumes dipped by 3% and 11%, respectively, over the same period.
- The ability to pass on the increase in estimated AFM gas cost for the next two months would be considered a credit of some sort from the past CNG price to normal levels of USD40-45 (or the OPEC's reduced production cuts) - pricing range of CNG to liquid fuels.

Valuations and view: maintain our Buy rating on GUJGA, remain neutral on IGL

- GuJGA has more volume growth drivers and could potentially receive a huge volume boost from NEVs, which would be key to long-term growth. Thus, we prefer GUJGA over the profitable CNG players. Our confidence in its ability to recover volumes and reflect in the dividend is high. We expect a recovery in its CNG-related volumes. We continue to prefer GUJGA as most of its volumes accrue from the industrial segment, which would not be impacted by NEVs. GuJGA is yet to see any directive from the government of the court to mandatorily switch to public transportation from CNG, which would be considered for the CNG segment. www.pngrb.gov.in. Once gas is included under GST, GUJGA.

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MOTILAL OSWAL Sector Update | 24 September 2021

Specialty Chemicals

Genie is out!

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Building India's energy future together

Key business perspectives from the annual reports of IGL, MAHGL, and GUJGA

- With CGD operations set to start in newer geographies, their contribution to total natural gas consumption in India is expected to grow in the coming years from the current 20%.
- The government has taken various measures in FY21, including the start of an Indian Gas Exchange and revision in its transport tariff policy, which would aid growth of the industry and transform India into a vibrant gas market.
- Here are the key takeaways from the annual reports of all listed CGDs:

Companies witness customer additions across all segments

- IGL added 0.3m new PNG connections, which is the highest number of connections provided by any CGD in a single financial year, taking its total number of consumers to 1.7m. Comparatively, MAHGL added 83,198 consumers, taking its total household count to 1.25m. GUJGA added 102,000 households, taking the total number to 1.54m.
- GUJGA's addition of new CNG stations stood at 150 (the highest in its history). For IGL, the same stood at 62, while MAHGL added only 15 CNG stations. This takes IGL's total CNG stations to 612, GUJGA: 546, and MAHGL: 271.
- GUJGA services more than 4,000 Industrial and 12,900 Commercial customers. IGL services over 6,600 Industrial and Commercial consumers. MAHGL services 4,110 Commercial and 82 Industrial consumers.
- In terms of pipeline infrastructure, GUJGA remains way ahead of the other two, with a total network of 30,000km (MDPE/steel), while IGL and MAHGL has a total network of 16,527km and 5,916km, respectively.

EBITDA margin expansion observed across the board

- IGL's gross margin expanded to INR14/scm in FY21 from INR11.9/scm in FY20. MAHGL also raised its gross margin to INR17.4/scm in FY21 from INR13.6/scm in FY20. GUJGA saw an expansion in its gross margins to INR8.4/scm in FY21 from INR7/scm.
- Despite opex/scm increasing by 15%, IGL expanded its EBITDA/scm to INR7.6/scm in FY21 from 6.4/scm in FY20. MAHGL expanded its EBITDA/scm to INR11.6/scm in FY21 from INR9.7/scm in FY20. **Although GUJGA's opex/scm rose ~11% YoY in FY21, its EBITDA/scm expanded by ~30% YoY to INR6.1.**
- GUJGA is pre-dominantly focused on the Industrial segment, while both IGL and MAHGL are CNG-focused players in the CGD space. Volumes for GUJGA remained flattish at 9.4mmcmd in FY21, while volumes for IGL and MAHGL saw a decline of 17% and 26%, respectively. Volumes for IGL and MAHGL stood at 5.3mmcmd and 2.2mmcmd, respectively.

GUJGA remains our top pick among CGDs, remain neutral on IGL

- IGL expects the price differential of CNG and liquid fuel to continue, which would drive the conversion of petrol driven private vehicles to CNG. DTC and DIMTS have plans to add 1,000 and 400 new CNG buses, respectively, to their fleet, which would boost the company's CNG sales.
- MAHGL is foraying into the Raigad district, which would provide additional opportunities for the expansion of its CNG and PNG networks. This would enable the company to increase its customer base by expanding its natural gas distribution network to cater to increasing demand.

- In our recently released [report](#), we had highlighted how two prominent CGDs of China – ENN Energy and China Gas Holdings – have already been seeing a decline of 11%/3% CAGR during the past five years in their CNG/LNG retail sales. This was due to the steps that China started taking way back in CY09 towards Electric Vehicles. On the contrary, their PNG-Industrial/Commercial volumes continued to grow by ~20% CAGR over the same period.
- This reinforces our belief in Gujarat Gas (GUJGA). It remains our preferred pick among CGDs due to its large dominance in the Industrial/Commercial segment. Despite the fact that the stock has suffered in the past few weeks due to high spot LNG prices, which would adversely impact volume as well as margin in the short-term, we reiterate our faith in the stock with a **BUY** rating.

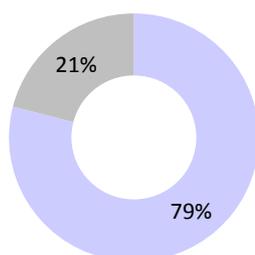
Exhibit 1: Peer comparison – valuation snapshot

Company	Reco	TP (INR)	EPS (INR)			P/E (x)			P/BV (x)			EV/EBITDA (x)			ROE (%)			Div. Yield
			FY21	FY22E	FY23E	FY21	FY22E	FY23E	FY21	FY22E	FY23E	FY21	FY22E	FY23E	FY21	FY22E	FY23E	
Gujarat Gas	Buy	860	18.5	21.7	29.0	33.5	28.6	21.4	9.5	7.3	5.6	20.9	18.1	13.7	32.8	29.0	29.7	0.3
Indraprastha Gas	Neutral	510	14.4	17.3	18.2	36.9	30.7	29.2	6.3	5.5	4.9	24.6	19.8	18.4	18.4	19.2	17.8	0.7
Mahanagar Gas	Buy	1,315	62.7	86.6	80.0	17.5	12.7	13.7	3.4	2.9	2.6	11.2	7.8	8.0	20.0	24.5	19.8	2.1

Source: MOFSL

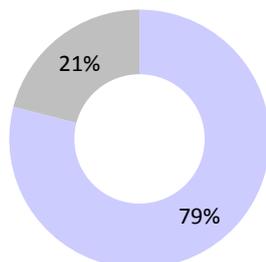
Domestic connections

■ GUJGA ■ Others



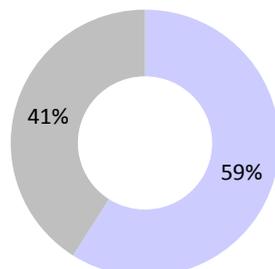
CNG stations

■ GUJGA ■ Others



Commercial connections

■ GUJGA ■ Others



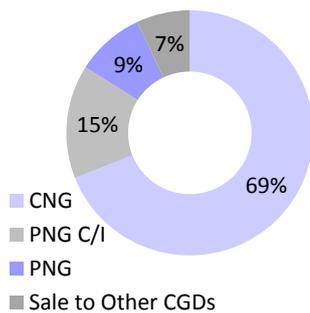
Key highlights from GUJGA's annual report

- PNGRB has approved the transfer of license from GSPL to GUJGA for the GAs of Amritsar (May'15) and Bathinda (May'16) districts in FY21. Natural gas is supplied to over 4,450 Residential, 36 Commercial, and three Industrial customers. In addition, 20 CNG stations were erected/commissioned in these GAs in FY21. The transfer was approved by the board for a cash consideration of INR1,633m, via a slump sale, through a business transfer agreement in Jun'21.
- In FY22, PNGRB is likely to announce the 11th CGD bidding round. It is likely that many new GAs, which are contiguous to GUJGA's existing CGD operations, will also be included. This will provide the company another opportunity to expand its footprint.
- Some pipeline projects outside Gujarat GAs include the Jalore-Sirohi-Pindwara steel pipeline – 54 km laid; Madhya Pradesh EPC contract – steel pipeline – 33km laid; Thane GA – Vasai/Virar and Dahanu – virtual pipeline and domestic connections commissioned during FY21.
- GUJGA added new domestic connections of more than 0.1m in FY21, with 150 new CNG stations erected/commissioned – the highest in its history. It also set up its first LNG/LCNG station in Gujarat at Rajpipla in a record six months.
- The company witnessed moderate growth (1%) in Industrial sales v/s FY20, with average CNG usage decreasing by 12%, and Commercial segment volumes down 31% on account of the COVID-19 outbreak. CNG and Commercial segment volumes recovered during 4QFY21. The management plans to aggressively penetrate PNG (domestic), PNG (Commercial), and CNG (transport) sectors, which are comparatively less volatile.

Key highlights from IGL's annual report

- IGL caters to more than 1.2m lakh CNG vehicles, 1.7m domestic PNG customers, and more than 6,600 Commercial and Industrial customers.
- It added 62 new CNG stations and more than 0.3m new domestic PNG connections – the highest number of connections provided by any CGD in a financial year.

IGL- Current sales volume mix



- The company also added more than 1,100 new Commercial and Industrial customers in FY21. **All industries in NCT Delhi have switched over to natural gas to meet their fuel requirements.**
- With an eye on the future, **IGL has forayed into the Electric Vehicle (EV) space. It plans to set up 50 EV charging stations by FY22-end.** It has already installed and commissioned two fixed EV charging stations in the NCT of Delhi.
- CNG sales declined by 22% YoY to 1,357mmscm in FY21.
- To enhance customer convenience, the company has started a Mobile Refueling Unit (MRU) for delivering CNG.
- IGL recorded PNG sales volumes of 586.74mmscm during FY21, down 5% YoY.
- PNG Industrial segment saw a 4.5% growth in sales volume and Commercial sales of 33.54mmscm in FY21. Its Industrial/Commercial customer base increased to 2,971/3,716 in FY21 from 2,435/3,143 in FY20.
- In the Commercial segment, 1,047 new registrations were completed in FY21 and pipeline laying was started in new areas like Connaught Place, Delhi Cantonment, and Mahipalpur.
- IGL has installed more than 250 connections in defense establishments in the Delhi Cantonment Area.
- The company is also expanding its network to new Geographical Areas (GAs) like Muzaffarnagar, Meerut, and Shamli, Kanpur (other than areas already authorized); Fatehpur and Hamirpur; and Ajmer, Rajsamand, and Pali to cater to demand from the Industrial and Commercial segment.
- IGL is also looking to set up a LNG/LCNG station along the Golden Quadrilateral (GQ) highway in its GAs.
- In FY21, the pilot project of running IOCL's HCNG plant in collaboration with IGL and DTC was completed at the Rajghat DTC depot, where 50 DIMTS buses were fuelled with HCNG.
- **The management is exploring the possibility of setting up a Green Hydrogen generation plant for blending with natural gas. A detailed technical study on the same will be conducted.**

Key highlights from MAHGL's annual report

- MAHGL serves 1.6m domestic customers with its wide range of carbon steel and polyethylene pipeline. It added 83,198 burning customers in FY21, taking its cumulative customer base to more than 1.25m households.
- It added 249 Industrial and Commercial customers in FY21. It now services over 4,110 Commercial establishments and 82 Industrial establishments.
- The company augmented the capacity of 20 stations to serve estimated 0.79m vehicles.
- It propelled current compression capacity to ~36.35 lakh kg/day, an increase in capacity by 1.24 lakh kg/day.
- **MAHGL also expanded its network in Raigad by 18 CNG stations and plans to add more stations in FY22.**
- The company successfully commenced offtake of 3,300mmbtu of gas from RIL's R Cluster gas field (D34, block KG-DWN-98/3, KG D6) from Jan'21.
- It has successfully completed two critical crossings of 8" NB diameter steel pipeline of 987 meters through the HDD method. These would help ion gasification of Ulwe and the proposed Navi Mumbai airport.
 - HDD crossing at Belapur creek for a length of 722 meters.
 - HDD crossing at Kila junction, Belapur for a length of 265 meters.

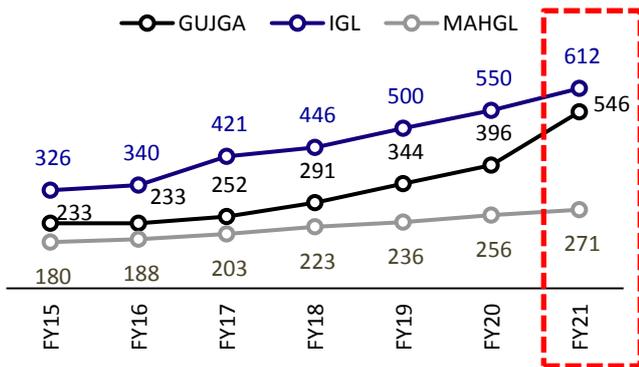
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BCM

The GOI is planning to invest US\$2.86 billion in the upstream oil and gas production to double natural gas production to 60 BCM and drill more than 120 exploration wells by FY2022.

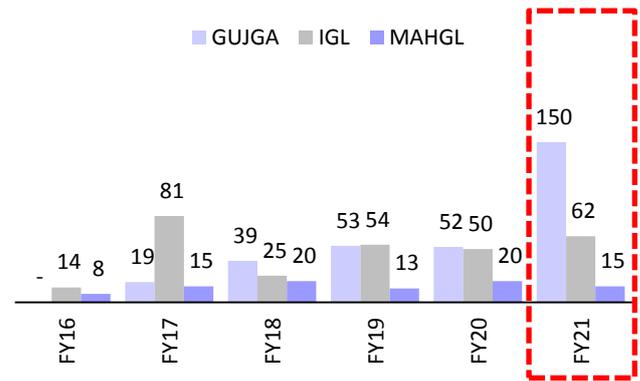
- In FY22, MAHGL plans to add more than 50 new and upgraded CNG stations and provide connectivity to over 0.3m households, while expanding its existing network with more than 41km of steel pipelines and about 163km of MPPE pipelines.
- In the next five years, it has plans to add additional 0.1m households to its customer base, while operating ~400 CNG stations. It plans to expand its steel pipeline network to ~600km and PE pipeline network to 7,600km.

Exhibit 1: CNG stations of CGDs



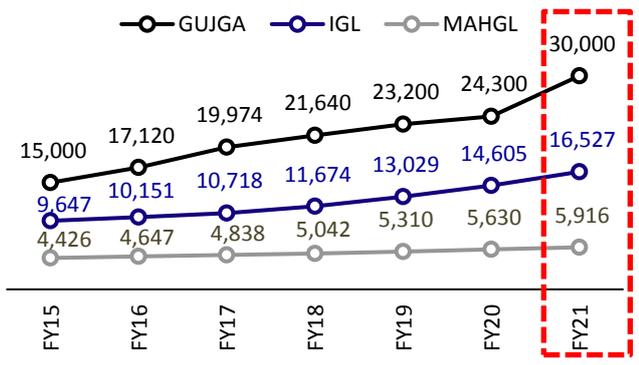
Source: Companies, MOFSL

Exhibit 2: CNG stations of CGDs – net additions



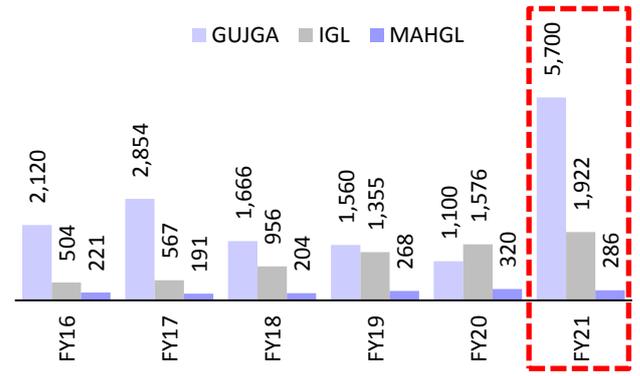
Source: Companies, MOFSL

Exhibit 3: HDPE + steel pipeline (km)



Source: Companies, MOFSL

Exhibit 4: HDPE + steel pipeline (km) – net additions



Source: Companies, MOFSL

Exhibit 5: Status of CGD infrastructure in India

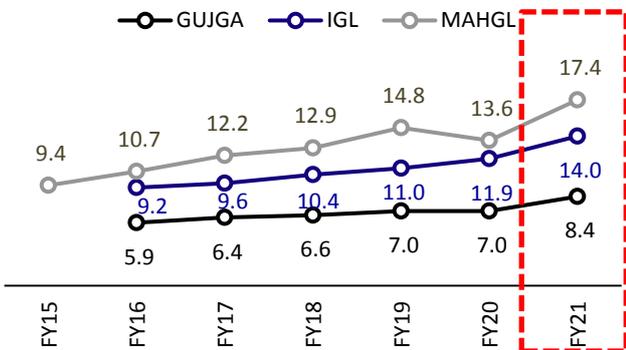
Parameters	FY18	FY19	FY20	FY21
Domestic PNG connections (lakh)	42.02	54.04	55.96	78.2
Commercial PNG connections	27260	28085	28417	32339
Industrial PNG connections	7472	8783	9024	11803
Total PNG connections (lakh)	42.36	54.41	56.34	78.65
CNG stations	1315	1742	1758	3101
Steel pipeline (inch-km)	44362	48715	50216	75224
MDPE pipeline (inch-km)	93648	113277	116158	185111

Figures as of Sep'20

Source: PPAC, MOFSL

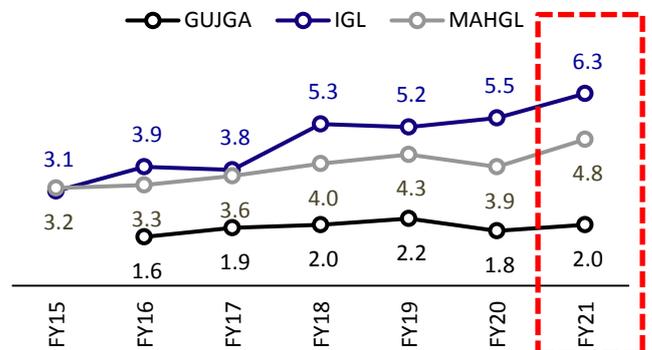
Margin and volume snapshot for FY21

Exhibit 6: Gross margin of CGDs (INR/scm)



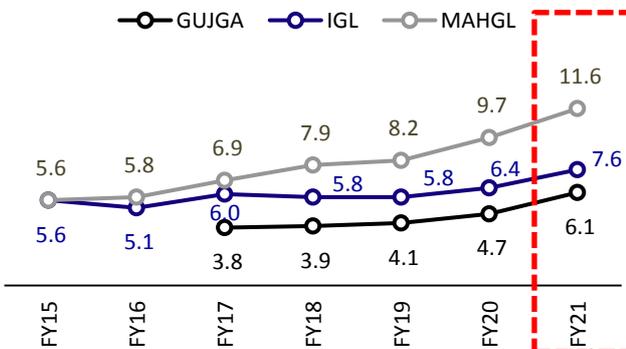
Source: Companies, MOFSL

Exhibit 7: Opex/scm of CGDs (INR/scm)



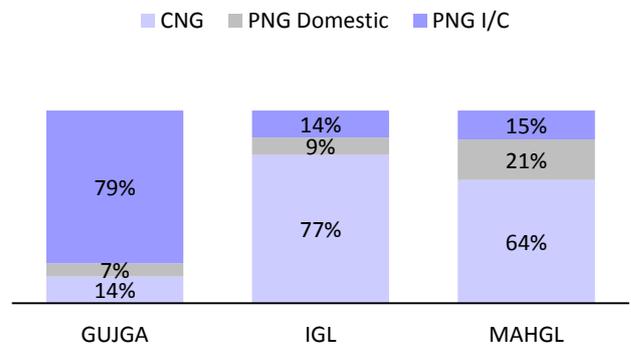
Source: Companies, MOFSL

Exhibit 8: EBITDA/scm of CGDs (INR/scm)



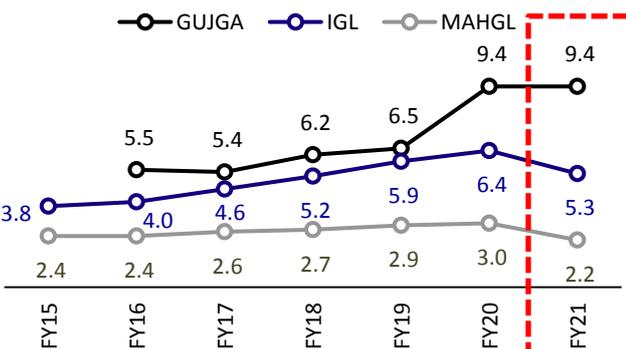
Source: Companies, MOFSL

Exhibit 9: Segmental volume breakdown (FY21)



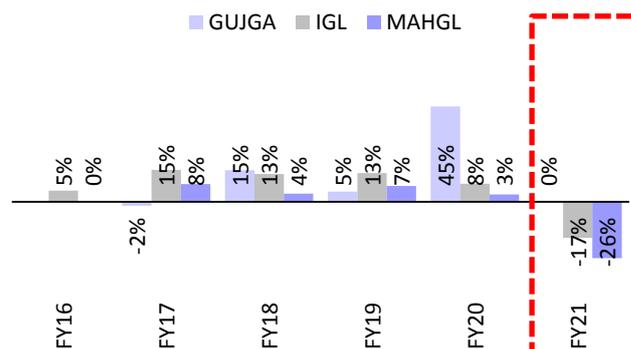
Source: Companies, MOFSL

Exhibit 10: Total volumes (mmscmd)



Source: Companies, MOFSL

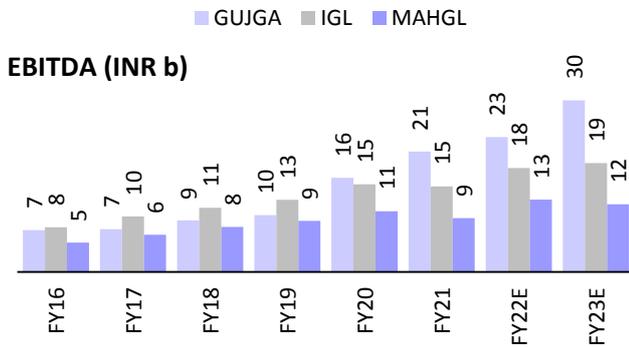
Exhibit 11: Total volume growth (YoY %)



Source: Companies, MOFSL

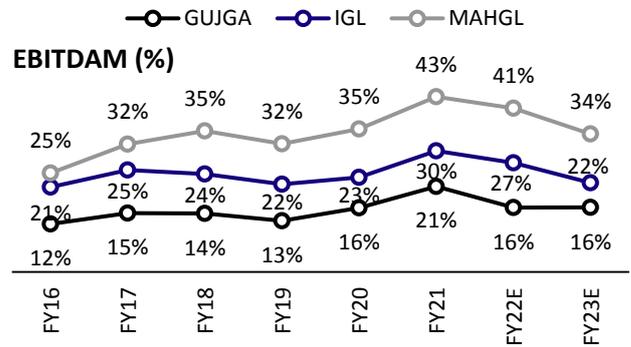
Our model estimates and valuations

Exhibit 12: GUJGA had the highest EBITDA in FY21...



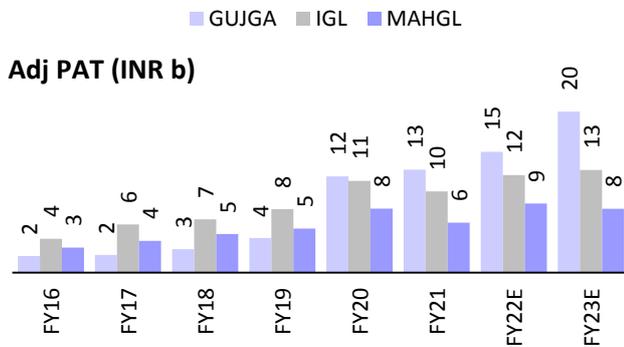
Source: Companies, MOFSL

Exhibit 13: ...while MAHGL had the best EBITDAM in FY21



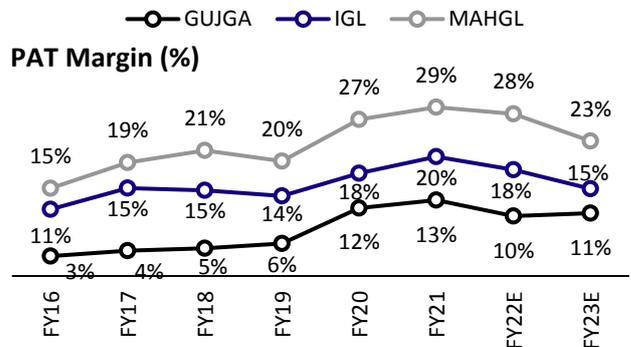
Source: Companies, MOFSL

Exhibit 14: GUJGA was ahead of peers in absolute PAT...



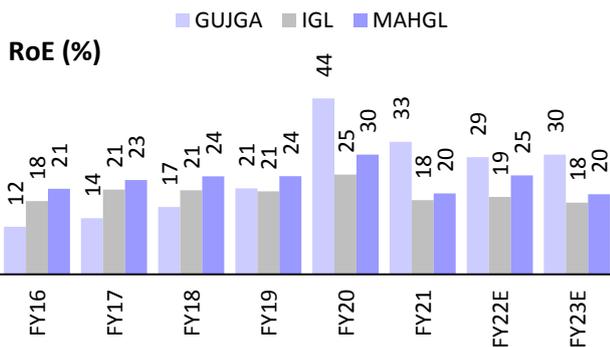
Source: Companies, MOFSL

Exhibit 15: ...MAHGL was way ahead on PAT margin in FY21



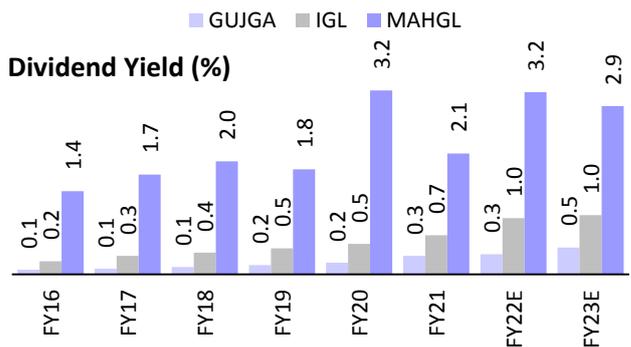
Source: Companies, MOFSL

Exhibit 16: GUJGA has the best RoE profile...



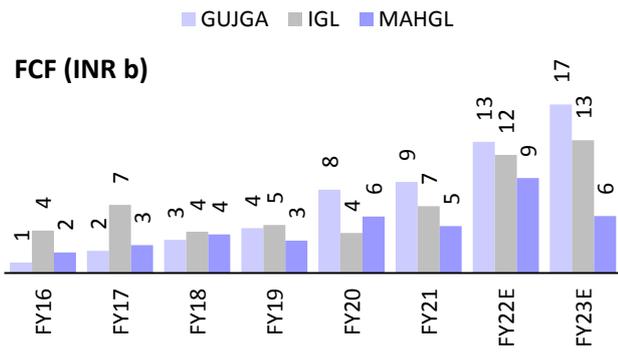
Source: Companies, MOFSL

Exhibit 17: ...while MAHGL has the highest dividend yield



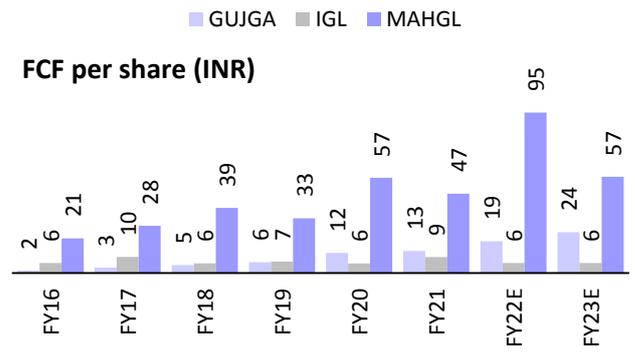
Source: Companies, MOFSL

Exhibit 18: GUJGA set to generate a FCF of INR17b



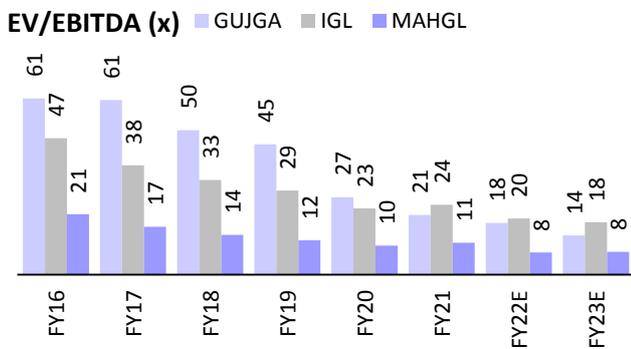
Source: Companies, MOFSL

Exhibit 19: MAHGL to have the highest FCF/share in FY23E



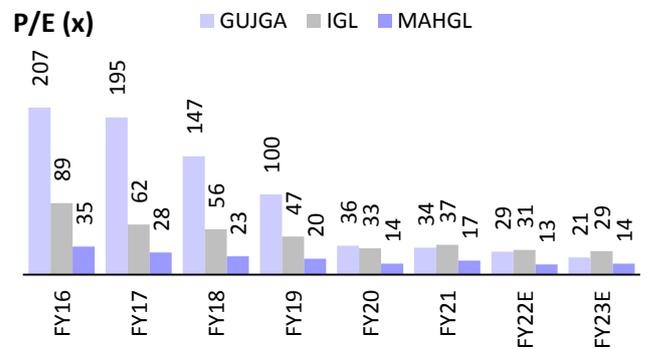
Source: Companies, MOFSL

Exhibit 20: IGL trades at a premium to peers...



Source: Companies, MOFSL

Exhibit 21: ...remains expensive on both EV/EBITDA and P/E



Source: Companies, MOFSL

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

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