

Oil & Gas and Petrochemicals

GGL (BUY)

Target price: Rs442

GAIL (HOLD)

Target price: Rs129

MGL (REDUCE)

Target price: Rs925

IGL (SELL)

Target price: Rs378

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INDIA

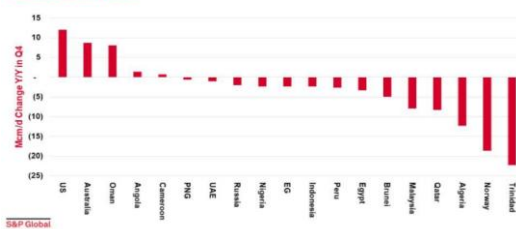
Oil & Gas update

GAIL to gain, but CGD may be hit by spot LNG surge

JKM spot LNG price is up ~8x from lows in May'20 to US\$14.6/mmbtu as LNG exports by 14 of 19 exporters are down YoY in Q4CY20 due to outages, while cold weather boosted demand in Northeast Asia. Vaccines for Covid has led to 46% jump in Brent from lows of end-Oct'20 to ~US\$54/bbl. Surge in oil and spot LNG, but Henry Hub (HH) prices remaining subdued, may mean GAIL's H2FY21E gas marketing EBITDA may be as high as Rs19.1bn vs loss of Rs8.9bn in H1. Outlook for FY22E-FY23E has improved more modestly. We reiterate HOLD on GAIL. Spot LNG surge may hit GGL's H2FY21E margin most among CGD players unless it has tied up spot LNG at lower levels, or hikes prices to pass on cost to industrial consumers. Reiterate BUY on GGL given its strong volume-driven growth.

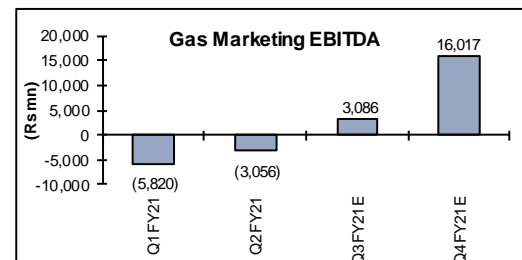
- **Spot LNG price highest since 2014 as outages hit supply and demand rises in Asia:** In May'20, Japan Korea Marker (JKM) spot LNG price touched an all-time low of US\$1.85/mmbtu hit by fall in demand due to Covid. Gradual demand recovery and supply hit by cancellation of many US LNG cargoes (unviable for export to Asia and Europe) led to recovery in JKM spot LNG to US\$4.9/mmbtu in end-Sep'20. Spot LNG has now surged ~8x from May'20 lows to its highest level since 2014 of US\$14.6/mmbtu, while futures are trading at US\$15.1/mmbtu for Feb'21 delivery. Trafigura has bought cargo at US\$20.8/mmbtu for prompt delivery to South Korea during 4-8 Feb'21, but has bid lower at US\$17.25-14/mmbtu for delivery in 10-14 Feb'21 and 26-Feb to 2-Mar'21 respectively. Prices were boosted by outages at several liquefaction plants amidst seasonal demand rise in North Asia. S&P Global Platts estimates that LNG exports by 14 of 19 exporters were down YoY in Q4CY20.

LNG exports by 14 of 19 exporters down YoY in Q4CY20

Platts Analytics: LNG Supply Change in the 4th Quarter

Source: S&P Global Platts, I-Sec research

GAIL's gas marketing Q3-Q4FY21E EBITDA at Rs.3.1bn-16.0bn at futures



Source: Company data, CME, I-Sec research

- **Upside to GAIL's FY21E EPS due to oil & spot LNG surge:** While spot LNG and oil prices have surged, HH gas prices remain subdued due to mild winter in the US and high oil prices boosting associated gas output. This has dramatically improved GAIL's gas marketing outlook for H2FY21E vs Rs8.9bn loss in H1. Its gas marketing EBITDA may be as high as Rs16bn in Q4, Rs19.1bn in H2FY21E and Rs10.2bn in FY21E based on Brent, HH and spot LNG futures as of 6-Jan'21 vs just Rs342mn factored in our FY21E EPS based on futures as of 15-Dec'20. **Upside to GAIL's FY21E EPS would be 4-16% if Q4 spot LNG is locked in at US\$10-13.2/mmbtu.**
- **Surge in spot LNG prices may hit GGL's H2FY21E margins:** Industrial segment accounts for ~80% of GGL's volumes and spot LNG for 54-58% of its LNG imports. Thus, if GGL has to buy spot LNG at prevailing Q4 futures of US\$13.2/mmbtu, its Q4FY21E EBITDA margin would plunge despite cutting discounts on Morbi volumes by Rs4/scm in end-Dec'20 and using 0.6mmcmd of KG-D6 gas, which may cost just US\$4.1/mmbtu (8.6% of preceding three months Brent). GGL's Q4 margin may not decline and may even rise QoQ if it either tied up spot LNG when futures were much lower, or hikes prices to pass on gas cost rise fully to industrial consumers. Its margins may rise QoQ in Q1FY22E as spot LNG price falls post-winter. MGL and IGL's margins would rise in H2FY21E as gain from not fully passing on fall in domestic gas price to its main CNG consumers would more than make up for any fall in margins on industrial volumes due to surge in spot LNG.

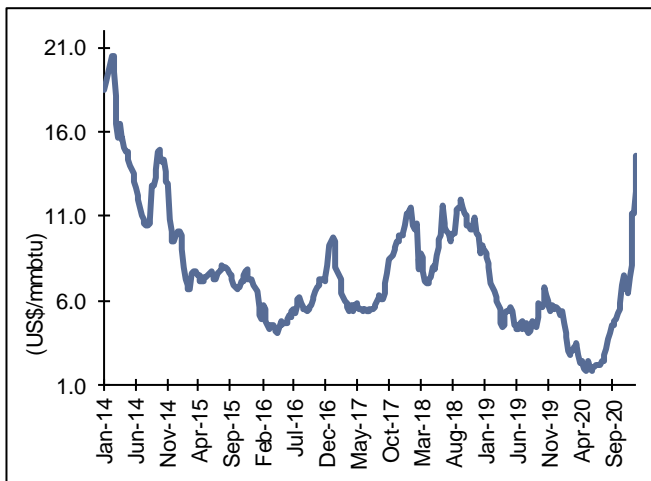
Spot LNG surge to benefit GAIL, may hurt CGD

Spot LNG price at highest since 2014 at US\$14.6/mmbtu

Spot LNG hit all-time low of US\$1.85/mmbtu in May'20 hit by covid-19

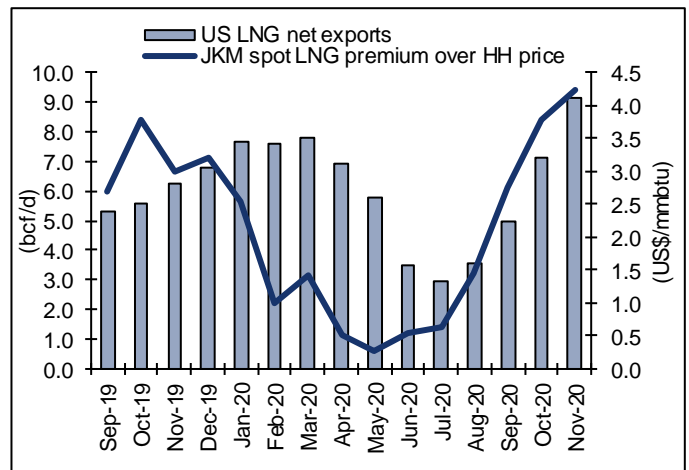
In May'20 JKM spot LNG price touched an all-time low of US\$1.85/mmbtu (implied slope of just 6% given Brent price of US\$31/bbl at that time) hit by fall in demand due to Covid-induced lockdown of 4bn of the world's population. Previous low was US\$4/mmbtu in Apr'16 when Brent was at US\$42/bbl implying a slope of 9.5%.

Chart 1: Spot LNG prices up from US\$2.1/mmbtu in Q1FY21 to US\$14.6/mmbtu for Jan'21 delivery



Source: Reuters, I-Sec research

Chart 2: US LNG net exports fell in Apr-Jul'20 as low JKM spot LNG prices made imports unviable



Source: EIA, Bloomberg, Reuters, I-Sec research

Spot LNG up to US\$4.9/mmbtu in end-Sep as US cargoes cancelled

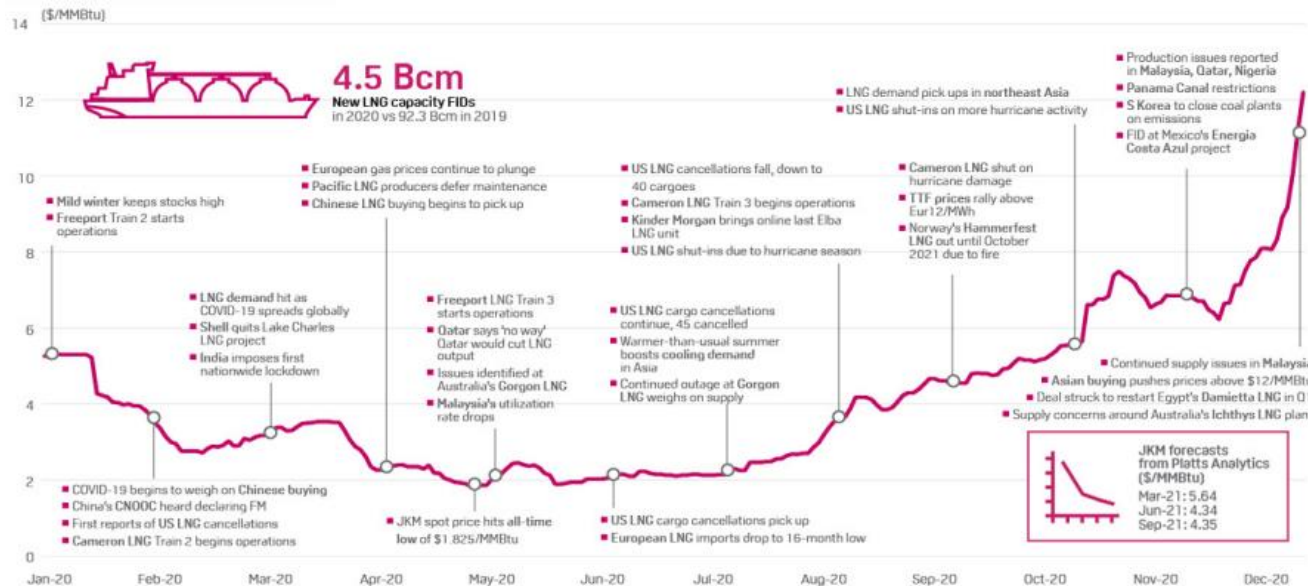
JKM spot LNG recovered from US\$2.1/mmbtu in early-Jul'20 to US\$4.9/mmbtu in end-Sep'20. Price recovery was driven by gradual demand recovery and supply decline due to cancellation of 40-45 US LNG cargoes each month in Jul'20 and Aug'20 (20-30 cargoes were cancelled in Jun'20) and 25-26 cargoes in Sep'20. 177 US LNG cargoes are estimated to have been cancelled in CY20 with 175 cancelled during Apr-Nov'20 (none in Dec'20). Cargoes were cancelled as premium of spot LNG price over Henry Hub gas price, which was US\$2.7-3.8/mmbtu in Sep-Dec'19 and US\$1.0-2.6/mmbtu in Jan-Mar'20, plunged to US\$0.3-0.6/mmbtu in Apr-Jul'20. US LNG freight cost to Asia is US\$1.5-2.0/mmbtu, thus making US LNG imports unviable. Customers can cancel cargoes 45-60 days before delivery date by paying liquefaction fee of US\$2.5-3.5/mmbtu; if loss by taking delivery is higher, customers cancel cargoes. Premium of spot LNG to Henry Hub recovered to US\$1.4-2.8/mmbtu in Aug-Sep'20. US LNG exports, which bottomed out at 3bcf/d in Jul'20, recovered to 3.5-5.0bcf/d in Aug-Sep'20.

Spot LNG up ~8x from lows in May'20 to US\$14.6/mmbtu in end-Dec'20

Spot LNG stood at US\$6.2/mmbtu in Oct'20, US\$6.8/mmbtu in Nov'20 and US\$10.7/mmbtu in Dec'20. It has now surged ~8x from May'20 lows to highest level since 2014 of US\$14.6/mmbtu in end-Dec'20 while futures for Feb'21 delivery are at US\$15.1/mmbtu. **Trafigura had bid US\$18.15/mmbtu for prompt delivery to South**

Korea during 4-8 Feb'21, but eventually purchased a cargo from Gunvor at record price of US\$20.8/mmbtu. Trafigura's bids were lower at US\$17.25/mmbtu and US\$14/mmbtu for delivery in 10-14 Feb'21 and 26-Feb to 2-Mar'21 respectively. This suggests spot LNG prices may peak out in early-Feb'20.

Chart 3: Spot LNG surged from lows of US\$1.8/mmbtu in May'20 to US\$14.6/mmbtu in end-Dec'20



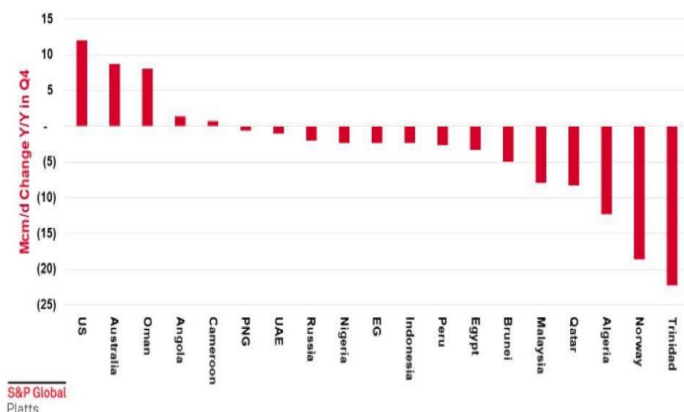
Source: S&P Global Platts

Supply outages and seasonal demand rise boosted spot LNG prices

Spot LNG prices have been boosted by outages at liquefaction plants in Qatar, Australia, Malaysia, Indonesia, Trinidad, Norway and Nigeria amidst seasonal rise in demand in North Asia and in Brazil as drought hit hydro power generation. S&P Global Platts estimates that LNG exports by 14 of 19 exporters were down YoY in Q4CY20.

Chart 4: LNG exports down YoY for 14 of 19 exporters in Q4CY20 hit in many cases by outages

Platts Analytics: LNG Supply Change in the 4th Quarter

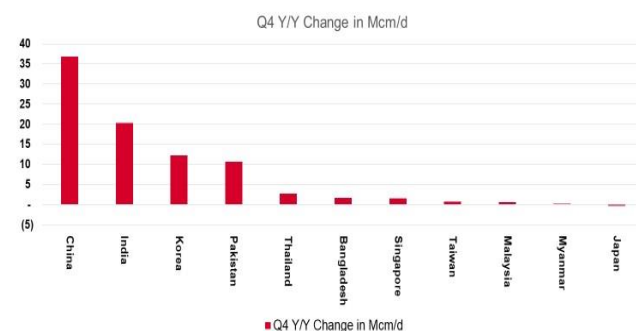


S&P Global
Platts

Source: S&P Global Platts

Chart 5: LNG imports up YoY in most of Asia in Q4CY20 driven by China, India and Korea

Platts Analytics: LNG Imports in Asia



S&P Global
Platts

Source: S&P Global Platts

LNG up on outages, demand rise & transit delay in Panama Canal

The rise in spot LNG prices has been driven by:

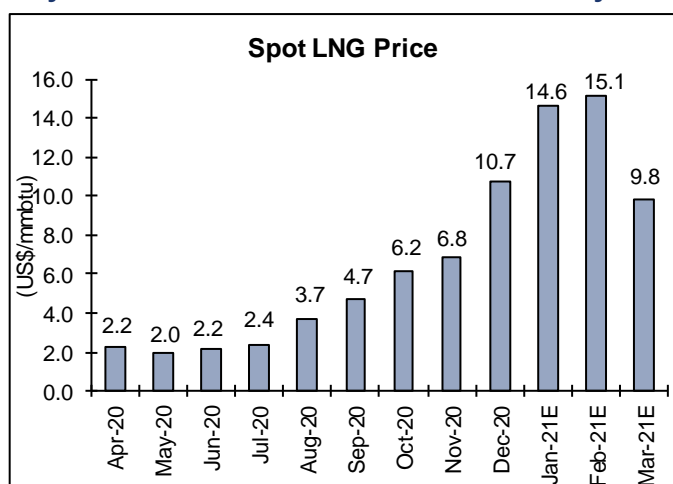
- **Qatargas' 7.8mmtpa capacity train 4 being shut for unplanned maintenance on 19-22 Nov'20.** Train 5 with similar capacity was also shut in Nov'20 for planned maintenance. **As per S&P Global Platts podcast on LNG on 16-Dec'20, train 4 was ramping up while train 5 was still shut but was expected to come back.**
- **Gorgon's 5.2mmtpa train 2 in Australia being shut from 23-May'20 to Nov'20. Shutdown of 5.2mmtpa train 1 for inspection and repairs began as soon as train 2 restarted.** Gorgon has previously indicated that train 1 may remain shut for 45-90 days and **once it restarts, train 3 is likely to be shut for repairs and inspection.**
- **Shutdown of 3.6mmtpa Prelude floating LNG project in Australia since Feb'20 due to power failure. It may restart only in Q1CY21.**
- **Shutting down of 5.75mmtpa (contracts of 4.14mmtpa) Hammerfest LNG plant in Norway in Sep'20 due to a fire. It is likely to restart only in Oct'21.**
- **~10% YoY decline in LNG production at Trinidad and Tobago's 14.8mmtpa capacity Atlantic liquefaction plant in 9MCY20. It is set to decline further in CY21 due to natural gas shortage.** Its 3mmtpa train will undergo turnaround but will be kept in operations-ready mode in CY21-CY22 awaiting supply of adequate natural gas.
- **Transit delays at the Panama Canal for US LNG cargoes to Asia, which may continue until early-Mar'21.** Surge in US LNG cargoes to Asia together with seasonal fog and added Covid safety procedures has led to waiting period for crossing the Panama canal rising to 10-15 days vs 4-5 days earlier. Cargoes can be transported via the Cape of Good Hope instead of the Panama Canal, but costs US\$1.2/mmbtu and 1.6/mmbtu higher for transporting cargoes to South Korea and Japan respectively.
- **Surge in spot charter rates for US LNG cargoes to Northeast Asia to US\$169k/day vs US\$108k/day in early-Dec'20 and US\$107k/day in Dec'19.** LNG carrier capacity has failed to keep pace with rise in US LNG exports. US LNG exports in Nov'20 at 9.2 bcf/d exceeded the previous high of 7.8bcf/d in Mar'20 and could be ~11bcf/d or higher in Dec'20.
- **Rise in LNG demand in Japan, Korea and China due to colder than normal temperatures** and in Brazil due to drought causing reduction in hydroelectric power generation. **Asian LNG imports are estimated at record high of 27mmt (up 14% YoY) in Dec'20 driven mainly by 8.1mmt imports by Japan and 9.0mmt by China.**
- **Rise in South Korea's LNG demand due to announced closure of 9-16 coal fired power plants in Dec'20-Feb'21 to curb pollution.**

Prices to correct as demand falls in summer and supply rises

We expect spot LNG prices to correct from Mar'21 as demand declines seasonally post-winter and supply rises. Supply rise would be driven by:

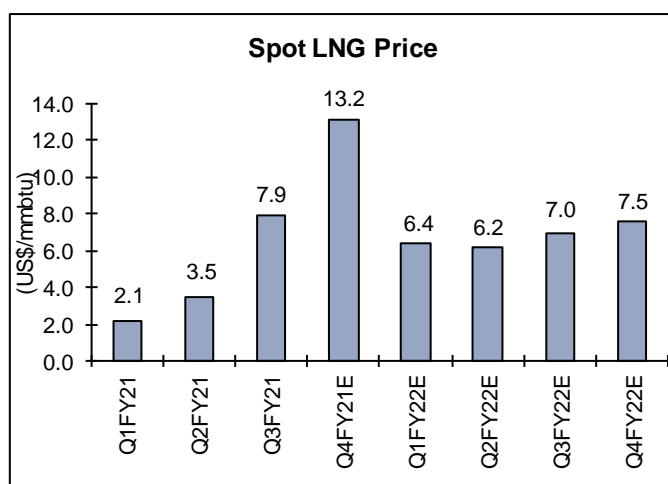
- **LNG capacities in Qatar, Australia and Malaysia restarting.** Loading from Malaysia's Bintulu LNG plant is normalising after a brief disruption recently. Qatargas' 7.8mmtpa capacity train 4 has restarted in Dec'20 and train 5 is also likely to restart. Shell's Prelude 3.6mmtpa floating LNG plant, which was shut earlier in CY20, is likely to start operations in Q1CY21.
- **Surge in US LNG exports as capacities rise and high JKM spot LNG and oil prices ensure LNG exports to Asia are viable.** US LNG exports are estimated at 6.5 bcf/d in CY20 (6.1 bcf/d up to Nov'20), but have surged to all-time high of 9.2 bcf/d in Nov'20 and were at 11.0-11.2 bcf/d in the first two weeks of Dec'20 as per EIA's weekly data. US LNG liquefaction capacity is estimated to rise by 4.5mmtpa to 72.3mmtpa in Q1CY21E on commissioning of train 3 of Corpus Cristi project. Spot LNG futures peak at US\$14.3/mmbtu in Feb'21 and the average for CY21E is at US\$8.3/mmbtu vs US\$4.3/mmbtu in CY20. Thus, given higher oil and spot LNG prices and rise in capacity, US LNG exports may be up 40-70% YoY at 9-11 bcf/d.
- **Gas exports by Trans Adriatic Pipeline (TAP) from the Shah Deniz gas field in Azerbaijan's sector of the Caspian Sea to Turkey (6bcm), Bulgaria (2bcm), Greece (2bcm) and finally Italy (8bcm).** This pipeline was commissioned on 15-Nov'20 and the first gas reached Greece, Bulgaria and Italy by end-Dec'20.
- **Rise in Russian gas exports to Europe on completion of 55bcm capacity Nord Stream 2 pipeline, which may be commissioned in Q2CY21.** However, the risk of US sanctions looms.

Chart 6: Spot LNG prices up from US\$2.0/mmbtu in May'20 to US\$15.1/mmbtu for Feb'21 delivery



Source: Reuters, CME, I-Sec research

Chart 7: Spot LNG prices up from US\$2.1/mmbtu in Q1FY21 to US\$7.9/mmbtu in Q3FY21

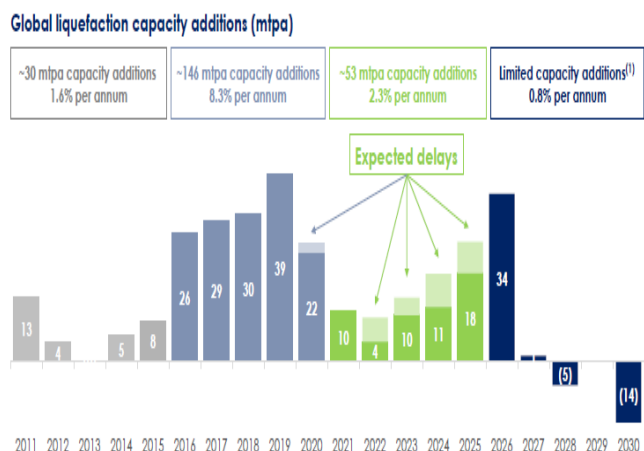


Source: Reuters, CME, I-Sec research

Spot LNG prices to be higher in FY22E-FY26E than in FY20

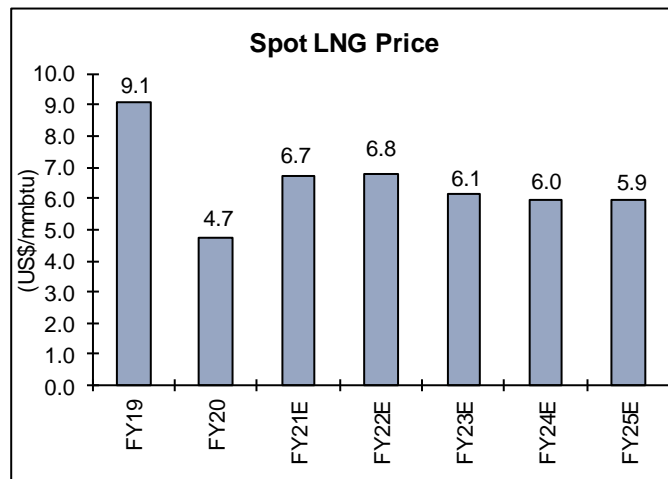
Modest liquefaction capacity additions – 75mmtpa in CY20-CY25E vs 124mmtpa in CY16-CY19 – are likely to keep spot LNG prices higher in FY22-FY26E than US\$4.7/mmbtu in FY20. Spot LNG futures are currently at US\$6.8-6.1/mmbtu in FY22-FY23E, US\$6.0/mmbtu in FY24 and US\$5.9/mmbtu in FY25-FY26.

Chart 8: LNG liquefaction capacity addition at 75mmtpa in CY20-CY25 vs 124mmtpa in CY16-19



Source: Tellurian

Chart 9: Spot LNG at US\$6.8-5.9/mmbtu in FY22-FY25 higher than the US\$4.7/mmbtu in FY20



Source: Reuters, CME, I-Sec research

GAIL's H2FY21 marketing outlook better on oil & spot LNG surge

Gas marketing EBITDA in the red in H1 hit by low oil & spot LNG prices

GAIL's H1FY21 consolidated EPS was down 37% YoY hit by gas marketing EBITDA in the red at minus Rs8.9bn vs Rs11.2bn in H1FY20. Lockdowns globally due to Covid globally hit oil and gas demand and led to plunge in oil and spot LNG prices. Sale of Henry Hub linked US LNG at low spot LNG prices and at oil-linked prices pushed gas marketing EBITDA in the red. We estimate loss on sale of Henry Hub linked US LNG:

- At spot LNG prices at US\$4/mmbtu in Q1 and US\$2.8/mmbtu in Q2FY21
- At oil price linked prices at US\$0.8/mmbtu in Q1 and US\$1.1/mmbtu in Q2FY21

H2 gas marketing outlook far better on oil & spot LNG surge

Announcement of multiple high-efficacy vaccines in Nov'20, start of vaccinations in several countries, Saudi Arabia announcing decision to voluntarily cut output by 1m b/d in Feb-Mar'21 and most other OPEC+ members not raising output in Feb-Mar'21 has led to surge in oil prices by 46% from the lows in end-Oct'20 to US\$54/bbl now. There has also been spike in spot LNG prices driven by temporary LNG liquefaction capacity outages, strong demand in Asia and Brazil, and transit delays for US cargoes to Asia through the Panama Canal. Weak US gas demand (mild winter) and high oil prices boosting US associated gas output has led to correction in Henry Hub prices, which also augurs well for GAIL's gas marketing outlook. The surge in oil and spot LNG prices and fall in Henry Hub gas prices is likely to mean GAIL's gas marketing is not only back in the black in Q3 and Q4FY21, but it improves dramatically.

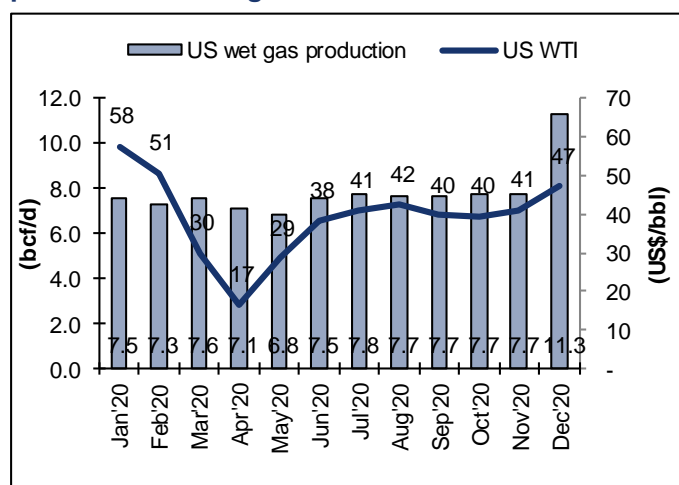
Henry Hub corrected on weak demand in Nov'20 and gas output surge

Henry Hub prices, which were briefly above US\$3.0/mmbtu in late-Oct'20 and early-Nov'20, have corrected mainly due to:

- Mild weather in the US resulting in Nov'20 gas consumption being down 13% YoY (steepest fall in CY20-TD).
- Rising associated gas production on the back of rising US oil production, oil prices and oil rig count. Vaccine newsflow in Nov'20 boosted oil prices, which in turn boosted US oil rig count, US oil and associated gas production. Associated gas production is up from 7.7 bcf/d in Nov'20 to 11.5 bcf/d during 26-Nov'20 to 2-Dec'20, and 11.2 bcf/d during 3-9 Dec'20.

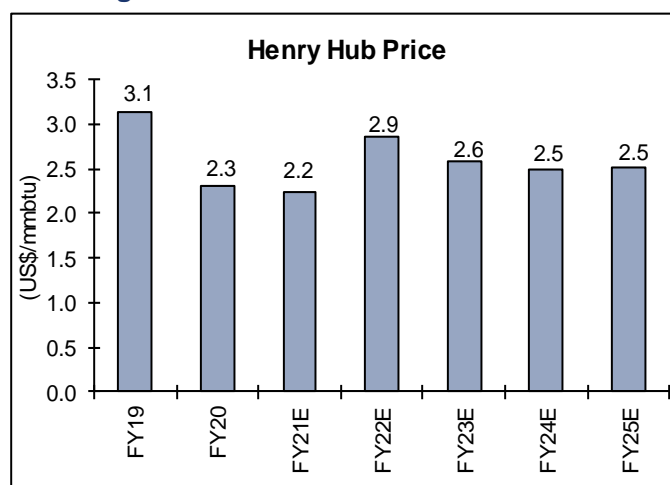
HH futures for Q4FY21E, which were at US\$3.4/mmbtu on 25-Sep'20, are now at US\$2.7/mmbtu probably due to the surge in WTI price, US oil rig count and, consequently, the expected rise in US oil and associated gas production.

Chart 10: Surge in WTI has boosted US wet gas production to a high of 11.3bcf/d in Dec'20



Source: EIA, Bloomberg, I-Sec research

Chart 11: Henry Hub futures trend shows prices declining in FY22E-24E



Source: EIA, CME, I-Sec research

HH futures have declined while oil price has surged since end-Oct'20

Vaccines boosting oil prices from lows on 30-Oct'20 has led to rise in US oil rig count, expectation of rise in US oil and associated gas production and, consequently, led to fall in Henry Hub (HH) gas prices and futures. HH gas price, which was at US\$3.03/mmbtu on 30-Oct'20, is down to US\$2.7/mmbtu on 5-Jan'20 while Brent, which was at US\$36.9/bbl on 30-Oct'20, is up to US\$50.4/bbl on 5-Jan'20. HH futures for Q4FY21E were at US\$3.3/mmbtu and FY22E-FY23E futures were at US\$3.1-2.7/mmbtu on 26-Oct'20 when Brent was at US\$39.8/bbl. Now, with Brent up at US\$50.4/bbl, HH futures for Q4FY21E are down to US\$2.7/mmbtu and for FY22-FY24 down to US\$2.9-2.5/mmbtu. Thus, while Brent is up by 36% from levels on 26-Oct'20, HH futures for Q4FY21E and FY22-FY23E are down by 5-19%.

Table 1: While Brent is up 36% from levels on 26-Oct'20, Henry Hub futures for Q4FY21E and FY22-FY23E are down 2-19%

	Brent	Henry Hub futures for			
		Q4FY21E	FY22E	FY23E	FY24E
6-Jan'21	54.0	2.7	2.9	2.6	2.5
26-Oct'20	39.81	3.3	3.1	2.7	2.5
Change	36%	-19%	-6%	-5%	-2%

Source: Bloomberg, CME, I-Sec research

US LNG sale at spot prices profitable now; at oil prices still in the red

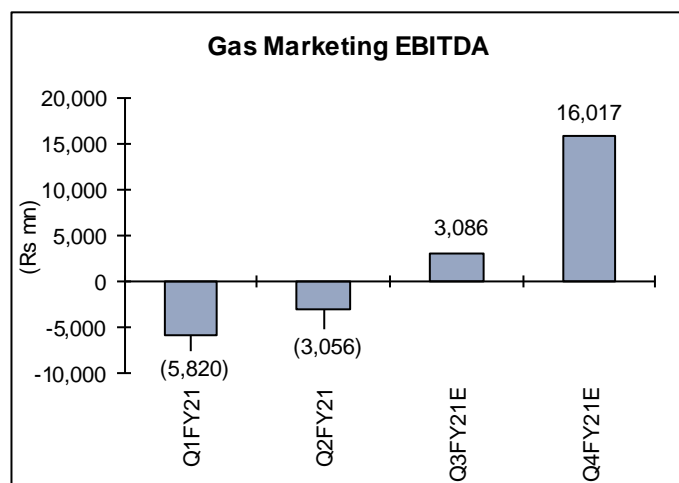
Sharp recovery in spot LNG prices and weakening of Henry Hub prices has meant US LNG sales at spot LNG prices may no longer incur a loss in Q3-Q4FY21E. However, sale of US LNG at oil linked prices would still incur a loss. Based on JKM spot LNG, HH and Brent prices and futures, we estimate sale of Henry Hub linked US LNG:

- At spot LNG prices would generate profit of US\$1.3/mmbtu in Q3 and US\$6.3/mmbtu in Q4 vs loss of US\$2.8-4.0/mmbtu in Q1-Q2FY21
- At oil price linked prices would lead to a loss of US\$1.0/mmbtu in Q3 and US\$0.6/mmbtu in Q4FY21 vs loss of US\$0.8-1.1/mmbtu

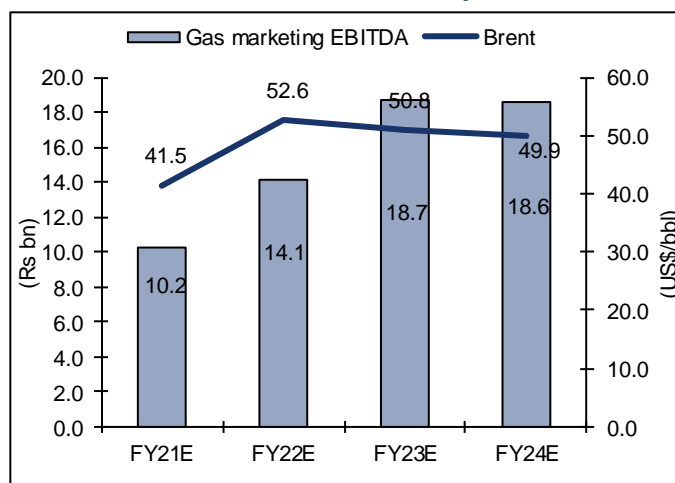
At futures prices, Q3-Q4 marketing EBITDA in the black at Rs3bn-16bn

Surge in oil and spot LNG prices and weakening of Henry Hub prices has improved GAIL's gas marketing EBITDA outlook for Q3-Q4FY21. At Brent, Henry Hub and JKM spot LNG futures prices, we estimate GAIL's gas marketing EBITDA to be:

- In the black in Q3FY21 at Rs3.1bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil-linked prices.
- In the black in Q4FY21 at Rs16.0bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil-linked prices.
- In the black at Rs19.1bn in H2FY21E vs minus Rs8.9bn in H1FY21.
- In the black at Rs10.2bn in FY21E.

Chart 12: Gas marketing EBITDA estimated at Rs3bn-16bn in Q3-Q4 and Rs10.2bn in FY21E

Source: Company data, CME, I-Sec research

Chart 13: Gas marketing EBITDA at Rs14.1bn-18.7bn in FY22E-FY24E at futures prices

Source: Company data, CME, I-Sec research

Gas marketing EBITDA at Rs14.1bn at futures prices in FY22E

At Brent futures prices of US\$52.6/bbl and Henry Hub futures at US\$2.8/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs14.1bn. We are estimating:

- Entire US LNG being sold at oil-linked prices.
- Loss on sale of US LNG at oil-linked prices at US\$0.2/mmbtu.
- Loss on sale of US LNG at oil-linked prices at Rs4.6bn.
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs18.7bn.

FY22E gas marketing EBITDA at Rs7.6-32.9bn at Brent of US\$50-60/bbl

GAIL's gas marketing EBITDA will be in the red at minus Rs5.0bn with Brent at US\$45/bbl, but will be in the black at Rs7.6-32.9bn if Henry Hub is US\$2.8/mmbtu as in the base case but Brent is higher at US\$50-60/bbl. Gas marketing EBITDA will be in the red with EBITDA loss of Rs17.7bn if Brent is at US\$40/bbl.

Gas marketing EBITDA at Rs18.7bn at futures prices in FY23E

At Brent futures prices of US\$50.8/bbl and Henry Hub futures of US\$2.6/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs18.7bn. We are estimating:

- Entire US LNG being sold at oil-linked prices
- Loss on sale of US LNG at oil-linked prices at US\$0.2/mmbtu
- Loss on sale of US LNG oil-linked prices at Rs3.3bn
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs22bn

Gas marketing EBITDA Rs17-42bn at Brent of US\$50-60/bbl in FY23E

GAIL's gas marketing EBITDA would be higher at Rs16.6-41.9bn if Brent is higher at US\$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs3.9bn if Brent is at US\$45/bbl.

Table 2: Gas marketing EBITDA to be Rs7.6-44.1bn at Brent of US\$50-60/bbl and at Henry Hub at US\$2.8-2.5/mmbtu in FY22-FY24E

Rs bn	Brent Price (US\$/bbl)					
	Base case	40	45	50	55	60
GAIL's gas marketing EBITDA in						
FY22E (Futures at US\$52.6/bbl)	14.1	(17.7)	(5.0)	7.6	20.3	32.9
FY23E (Futures at US\$50.8/bbl)	18.7	(8.7)	3.9	16.6	29.2	41.9
FY24E (Futures at US\$49.9/bbl)	18.6	(6.5)	6.1	18.8	31.4	44.1

Source: CME, I-Sec research

Gas marketing EBITDA at Rs18.6bn at futures prices in FY24E

- At Brent futures prices of US\$49.9/bbl and Henry Hub futures of US\$2.5/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs18.6bn. We are estimating:
- Entire US LNG being sold at oil-linked prices
- Loss on sale of US LNG at oil-linked prices at US\$0.2/mmbtu

- Loss on sale of US LNG at oil-linked prices at Rs3.0bn
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs21.5bn

Gas marketing EBITDA Rs19-44bn at Brent of US\$50-60/bbl in FY24E

GAIL's gas marketing EBITDA would be higher at Rs18.8-44.1bn if Brent is higher at US\$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs6.1bn if Brent is at US\$45/bbl.

GAIL to not make loss on US LNG if Brent at US\$54-52 in FY22-FY23

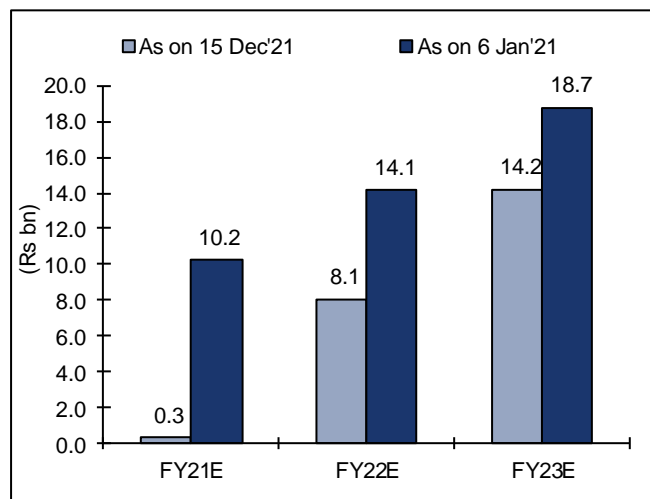
GAIL will not make trading loss on US LNG in:

- FY22E if Brent is at US\$54.39/bbl (based on HH futures at US\$2.8/mmbtu). GAIL's gas marketing EBITDA in such case would be Rs18.7bn.
- FY23E if Brent is at US\$52.17/bbl (based on HH futures at US\$2.6/mmbtu). GAIL's gas marketing EBITDA in such case would be Rs22bn.

16% upside to GAIL's FY21 EPS at marketing EBITDA based on futures

As discussed, the surge in spot LNG and oil prices and decline in HH prices has improved outlook for GAIL's gas marketing EBITDA in FY21E-FY23E. GAIL's FY21E gas marketing EBITDA based on Brent, HH and spot LNG futures as of 6-Jan'21 works out to Rs10.2bn vs Rs342mn factored in our FY21E earnings estimates, which was based on futures as of 15-Dec'20. The upside to GAIL's FY21E EPS would be 16% to Rs12.1/share if its FY21E gas marketing EBITDA is indeed Rs10.2bn.

Chart 14: Upside to FY21E-FY23E gas marketing EBITDA Rs9.9-4.6bn as oil higher and HH lower



Source: Company data, CME, I-Sec research

Chart 15: Upside to GAIL's FY21E gas marketing EBITDA mainly driven by surge in spot LNG

	As of		
	6-Jan'21	15-Dec'20	Change
Q4FY21E gas marketing EBITDA based on			
Spot LNG futures (US\$/mmbtu)	13.2	9.0	4.2
Brent futures (US\$/bbl)	47.8	47.5	0.3
HH futures (US\$/mmbtu)	2.7	2.6	0.0
Marketing EBITDA (Rs bn)	16.0	6.3	9.8
FY21E gas marketing EBITDA (Rs bn)			
	10.2	0.3	9.9

Source: Company data, CME, I-Sec research

Upside to FY21E EPS 4-16% at Q4 spot LNG of US\$10-13.2/mmbtu

FY21E gas marketing EBITDA estimate of Rs10.2bn is based on spot LNG futures of US\$13.2/mmbtu and Brent futures of US\$47.8/bbl in Q4FY21E as of 6-Jan'21. Our FY21E gas marketing EBITDA estimate of Rs342mn on the other hand is based on spot LNG futures of US\$9/mmbtu and Brent futures of US\$47.5/bbl in Q4FY21E as of 15-Dec'20. GAIL's FY21E gas marketing EBITDA being higher than our estimate of

Rs342mn appears imminent, but it may not be as high as Rs10.2bn. This may be because GAIL may have tied up US LNG volumes and hedged to lock in its trading profit when spot LNG futures were much lower than they currently are. If GAIL has locked in Q4FY21E US LNG volumes at spot LNG futures of US\$9-13.2/mmbtu, upside to its FY21E:

- Gas marketing EBITDA would be Rs0.2-9.9bn.
- FY21E EPS would be 0.3-15.7%

Table 3: Upside to our FY21E EPS estimate of GAIL 4-16% if US LNG sale in Q4FY21E is locked in at spot LNG futures of US\$10-13.2/mmbtu

	Gas marketing EBITDA (Rs bn) in		Upside to FY21E	
	Q4FY21E	FY21E	Gas marketing EBITDA (Rs bn)	FY21E EPS
If GAIL has locked in Q4 US LNG sales at spot LNG of				
US\$9/mmbtu	6.3	0.6	0.2	0.3%
US\$10/mmbtu	8.7	2.9	2.5	4.0%
US\$11/mmbtu	11.0	5.2	4.9	7.7%
US\$12/mmbtu	13.3	7.5	7.2	11.4%
US\$13.2/mmbtu (futures as of 6-Jan'21)	16.0	10.2	9.9	15.7%

Source: Company data, CME, I-Sec research

8% upside to FY22E EPS at EBITDA based on 6-Jan'21 futures

GAIL's FY22E gas marketing EBITDA based on Brent and HH futures as of 6-Jan'21 works out to Rs14.1bn while that based on futures as of 15-Dec'20 worked out to Rs8.1bn. Upside to GAIL's FY22E EPS would be 8% in this scenario. The main driver of this rise in gas marketing EBITDA is that FY22E Brent futures are at US\$52.6/bbl as of 6-Jan'21 while they were at US\$49.9/bbl as of 15-Dec'20. FY22E HH futures were up marginally to US\$2.85/mmbtu as of 6-Jan'21 vs US\$2.82/mmbtu as of 15-Dec'20.

1% downside to FY22E EPS at EBITDA based on 6-Jan'21 HH futures

Our FY22E EPS is based on gas marketing EBITDA of Rs8.2bn, which assumes Brent at US\$50/bbl and HH futures of US\$2.82/mmbtu as of 15-Dec'20. Downside to FY22E EPS would be 1% if gas marketing EBITDA is based on Brent of US\$50/bbl and HH futures as of 6-Jan'21 of US\$2.85/mmbtu.

11% downside to FY23E EPS at EBITDA based on 6-Jan'21 futures

Downside to FY23E EPS would be 11% if gas marketing EBITDA is based on Brent and HH futures as of 6-Jan'21 of US\$50.8/bbl and US\$2.60/mmbtu respectively.

Surge in spot LNG may hurt CGD players, especially GGL

GGL may be hit by surge in spot LNG as it is ~54-58% of its imports

Surge in spot LNG prices may hurt EBITDA margins of GGL in H2FY21 given that:

- Industrial volumes account for ~80% of its volumes
- Spot LNG would account for 54-58% of its LNG imports

Morbi price hike by Rs4/scm & cheap KG-D6 gas tied up to give relief

While GGL would be adversely impacted by rise in spot LNG prices, it would gain from:

- The cut in discount offered to Morbi consumers by Rs4/scm to Rs28/scm w.e.f. 24-Dec'20. Price for Morbi customers, which was Rs28.5/scm until May'20, was cut to Rs26.5/scm in early-Jun'20 and to Rs24/scm from early-Sep'20 by offering discounts.
- 0.6mmscmd cheap KG-D6 gas supply contracted by GGL. Start of gas production from the 'R' series fields in the KG-D6 block was announced on 18-Dec'20. GGL has contracted 0.6mmscmd of this volume at price, which is 8.5-8.6% of preceding three months' average Brent price. 'R' series gas price based on Brent price in Oct-Dec'20 and Jan-Feb'21 futures works out to just US\$4.1/mmbtu for Q4FY21E, which is much lower than spot LNG futures for Q4FY21E.

Q4FY21E EBITDA margin to plunge unless prices hiked or cost lower

We estimate GGL's EBITDA margin to decline sharply to Rs4.18/scm in Q3FY21E due to surge in spot LNG price to US\$7.9/mmbtu from US\$3.5/mmbtu in Q2. Based on futures as of 4-Jan'21, Q4FY21E spot LNG price works out to US\$13/mmbtu implying US\$5.1/mmbtu rise QoQ. We estimate that the net impact of rise in spot LNG price, use of cheap KG-D6 gas and cut in Morbi discount by Rs4/scm in Dec'20 would still be decline in EBITDA margin by Rs3.5/scm QoQ in Q4FY21E. Margins may not decline or decline less QoQ or in fact rise QoQ if:

- GGL has contracted spot LNG for Q4FY21E at prices much lower than futures as of 4-Jan'21 of US\$13/mmbtu. Q4FY21E spot LNG futures were at US\$9/mmbtu as of 15-Dec'20. **GGL's Q4 EBITDA margin would in fact rise by Rs1/scm QoQ if it has booked spot LNG at US\$9/mmbtu in Q4FY21E.**

And/or

- GGL hikes gas price for industrial consumers in Q4FY21E to pass on impact of rise in gas cost partly or fully. **We estimate Rs4.4/scm increase in gas price for all industrial consumers would help make up for the rise in gas cost and ensure EBITDA margin is flat QoQ.**

Spot LNG fall post winter may bring gains if cost fall not passed on

JKM spot LNG futures for Q1FY22E at US\$6.66/mmbtu as of 4-Jan'21 are down by US\$6.38/mmbtu QoQ. Not passing on the full benefit of QoQ fall in gas cost would boost GGL's margins in Q1FY22E.

MGL's margins to rise QoQ in Q3FY21E driven by CNG margin rise

MGL may also be hit by surge in spot LNG prices, but gain from not passing on fall in domestic gas price to its main CNG consumers would more than make up for any fall in margins on industrial and commercial volumes; MGL only uses spot LNG though it has also contracted 0.3mmscmd of KG-D6 gas. We estimate that in Q3FY21E MGL's EBITDA margin would:

- Fall of Rs1.2/scm QoQ due to the hit from rise in price of spot LNG supplied to industrial and commercial consumers exceeding the gain from rise in price realisation linked to fuel oil and non-subsidised LPG prices.
- Rise of Rs2.2/scm QoQ due to the full benefit of fall in domestic gas price not being passed on to CNG and residential PNG consumers.

Thus, the net impact is estimated to be Rs1/scm QoQ rise in EBITDA margin to Rs12.6/scm in Q3FY21E.

MGL's margins to fall QoQ in Q4FY21E hit by QoQ rise in spot LNG

We estimate that in Q4FY21E MGL's EBITDA margin would decline by Rs1.3/scm QoQ to Rs11.3/scm as hit from rise in spot LNG price QoQ is estimated to exceed gain from rise in price realisation linked to fuel oil and non-subsidised LPG prices.

IGL's margins to also rise QoQ in Q3FY21E driven by CNG margin rise

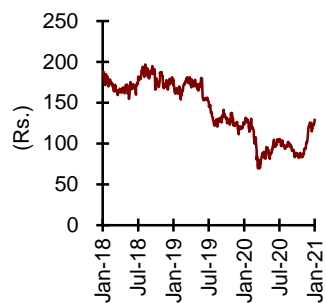
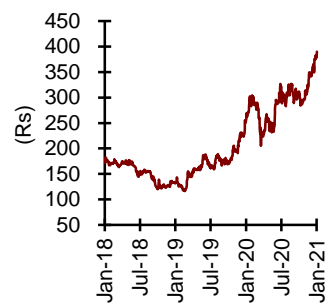
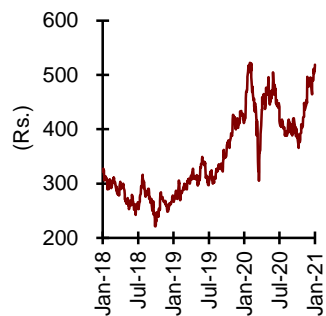
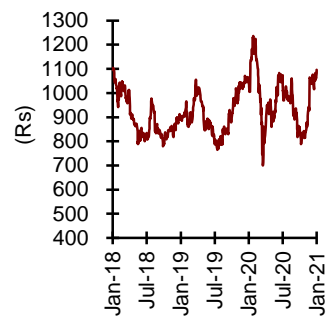
Unlike MGL, which entirely uses spot LNG, IGL largely uses contracted oil price linked LNG and only a small quantity of spot LNG (estimated to be 10% of LNG volumes used). IGL's hit from surge in spot LNG prices would therefore be modest. Its gain from not passing on fall in domestic gas price to its main CNG consumers would be far higher. We estimate that in Q3FY21E IGL's EBITDA margin would:

- Fall by Rs0.25/scm QoQ due to the hit from rise in price of spot LNG supplied to industrial and commercial consumers exceeding the gain from rise in price realisation linked to fuel oil and non-subsidised LPG prices.
- Rise by Rs1.62/scm QoQ due to the full benefit of fall in domestic gas price not being passed on to CNG and residential PNG consumers.

Thus, the net impact is estimated to be Rs1.37/scm QoQ rise in EBITDA margin to Rs9.42/scm in Q3FY21E.

IGL's margins to fall modestly QoQ in Q4FY21E hit by rise in spot LNG

We estimate that in Q4FY21E IGL's EBITDA margin would decline by Rs0.26/scm QoQ to Rs9.16/scm as hit from rise in spot LNG price QoQ is estimated to exceed gain from rise in price realisation linked to fuel oil and non-subsidised LPG prices.

Price charts**GAIL****Gujarat Gas****IGL****MGL**

Source: Bloomberg

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