Equity Research

February 4, 2021

BSE Sensex: 50614

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Sector update

Oil & Gas and Petrochemicals

GGL (BUY)
Target price: Rs442

GSPL (BUY)
Target price: Rs297

GAIL (HOLD)
Target price: Rs145

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INDIA

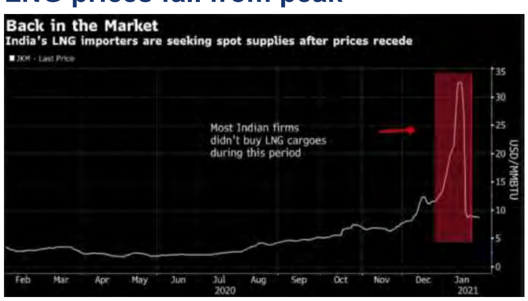
Oil & Gas update

Indian users back in market after spot LNG falls from peak

JKM spot LNG prices have plunged from US$32.5/mmbtu on 12-Jan'21 due to milder weather, end of panic buying by Northeast Asian users and more suppliers offering spot cargoes; global LNG liquefaction utilisation remains at just over 70%. Price for prompt LNG delivery in Feb-Mar'21 is down from peak of US$39.3-13.7/mmbtu to US$8.0-6.9/mmbtu. The spot LNG and oil price surge has improved GAIL's FY21E and FY22E gas marketing EBITDA outlook. We reiterate HOLD on GAIL. Press reports suggest that Indian users, who stopped buying spot LNG from late-Dec'20 given the price surge, have, after the price plunge, sought cargoes for Feb-Mar'21 delivery. Recent spot LNG fall may mean GGL's Q4FY21E margin may not be as badly hit as earlier expected. Reiterate BUY on GGL.

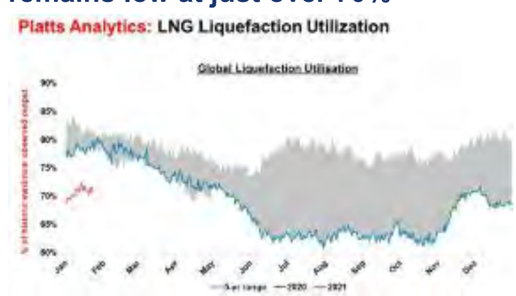
- **Indian consumers buy spot LNG after sharp fall from record highs**: Japan Korea Marker (JKM) spot LNG prices, which had surged ~18x from May'20 lows to an all-time high of US$32.5/mmbtu on 12-Jan'21, are down sharply due to milder weather, end of panic buying by Northeast Asian users and more suppliers offering spot cargoes. Price of cargo for prompt delivery on 11-15 Feb'21 touched a peak of US$39.3/mmbtu on 12-Jan'21, but a tender on 21-Jan'21 received much lower bids of US$9.58-8.0/mmbtu for delivery during 21-26 Feb'21. Spot LNG futures for Mar'21 delivery touched a peak of US$13.7/mmbtu on 13-Jan'21 while tender closing on 26-Jan'21 received bids of US$7.34-6.86/mmbtu for delivery on 11-19 Mar'21 and 24-25 Mar'21 respectively. Press reports suggest that Indian users, who stopped buying spot LNG from late-Dec'20 given the price surge, have now issued at least eight tenders seeking spot supplies for Feb-Mar'21 delivery; at least four of these have been awarded. Spot LNG futures are down to US$8.365-6.1/mmbtu (US$13.7-6.8/mmbtu at peak) for Mar-Jun'21 delivery given the seasonal fall in demand in summer and that global liquefaction utilisation is still just over 70%.

Indian users back in market after spot LNG prices fall from peak



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

Global LNG liquefaction utilisation remains low at just over 70%



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

- **Upside to GAIL's FY21E-FY22E EPS due to oil & spot LNG surge:** The surge in spot LNG and oil prices, has dramatically improved GAIL's gas marketing outlook *vs* Rs8.9bn loss incurred in H1FY21. **Upside to GAIL's FY21E EPS would be 4-31%** if sale of 2.5mmt of LNG in Q4 was locked in when spot LNG futures were at US$11-19.1/mmbtu (See Table 5) vs US$10/mmbtu assumed in the base case; its gas marketing EBITDA would be Rs14.6bn-32.6bn in H2FY21E, Rs11.5bn-29.5bn in Q4 and Rs5.7bn-23.7bn in FY21E *vs* just Rs3bn factored in our FY21E EPS. The surge in FY22E Brent futures to US$56.8/bbl (spot at US$58.6/bbl) may mean GAIL's gas marketing EBITDA would be Rs23.3bn *vs* Rs19.2bn in our estimates**, implying 5% upside to FY22E EPS**.
- **Spot LNG fall may mean GGL's Q4 margin may not be as badly hit as earlier thought:** Indian users did not buy spot LNG after it surged in late-Dec'20, but are now buying after its steep fall. This suggests GGL's Q4FY21E margin may not be as badly hit as one thought earlier. GSPL's transmission volumes, which were down by ~15% due to surge in spot LNG prices, should also recover given steep fall in spot LNG prices and likely rise in KG-D6 gas output, 80% of which GSPL may transport.

Please refer to important disclosures at the end of this report

Indian users back in market as spot LNG corrects

Spot LNG surged to all-time high of US$32.5/mmbtu on 12-Jan

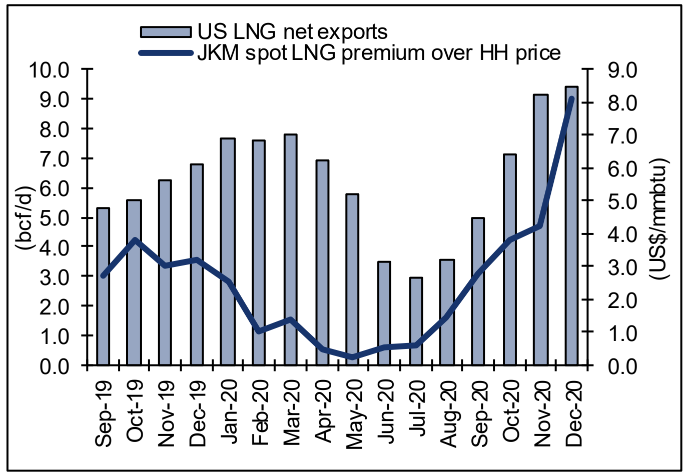
Spot LNG hit all-time low of US$1.85/mmbtu in May'20 hit by Covid

In May'20 JKM spot LNG prices touched an all-time low of US$1.85/mmbtu (implied slope of just 6% given Brent price of US$31/bbl at the 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 touched US$29/mmbtu on 15-Jan'21; down to US$8.4/mmbtu on 29-Jan

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 ~18x from May'20 lows to all-time high of US$32.5/mmbtu

JKM spot LNG recovered from US$2.1/mmbtu in early-Jul'20 to US$4.9/mmbtu in end-Sep'20 as several US LNG cargoes were cancelled as they were unviable in Asia given low JKM spot LNG prices. Spot LNG stood at US$6.2/mmbtu in Oct'20, US$6.8/mmbtu in Nov'20, US$10.7/mmbtu in Dec'20 and US$18.5/mmbtu in Jan'21 and surged ~18x from May'20 lows to an all-time high of US$32.5/mmbtu on 12-Jan'21. **Trafigura bought a cargo for prompt delivery in China at a record price of US$39.3/mmbtu.**

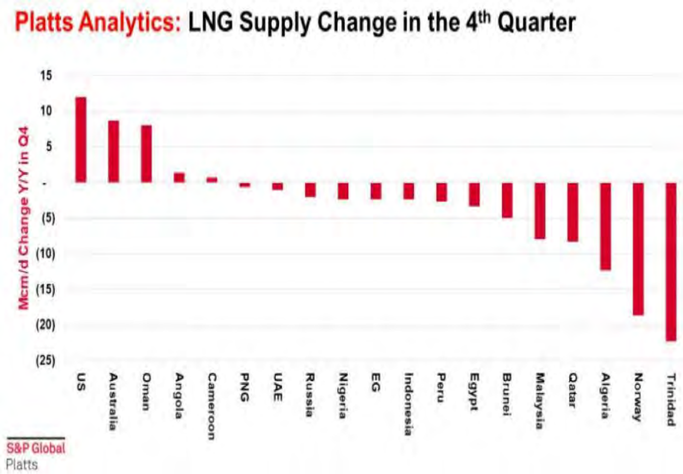
Spot LNG surged on severe winter boosting demand & supply outages

Spot LNG prices have been boosted by:

- **Outages at liquefaction plants** in Qatar, Australia, Malaysia, Indonesia, Trinidad, Norway and Nigeria. S&P Global Platts estimates that LNG exports by 14 of 19 exporters were down YoY in Q4CY20.

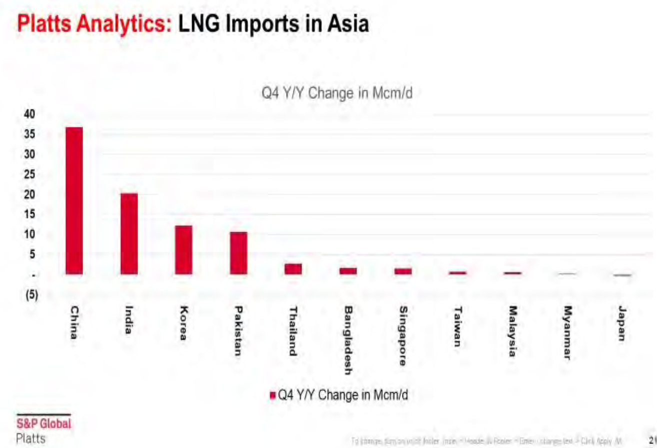
- **Severe winter in Japan, South Korea and China forcing utilities to bid aggressively for LNG cargoes for prompt delivery**. Coldest winter in decades in Northeast Asia has boosted demand for power, spot LNG, power prices in Japan and prices of spot LNG.

Chart 3: LNG exports down YoY for 14 of 19 exporters in Q4CY20 hit in many cases by outages



Source: S&P Global Platts

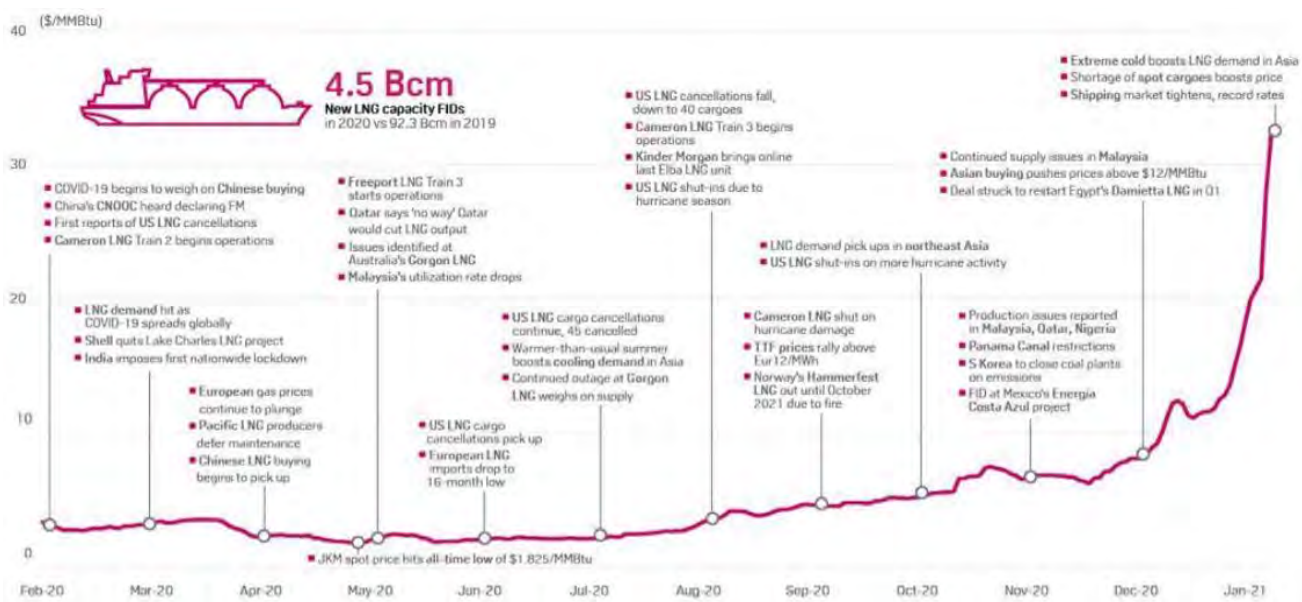
Chart 4: LNG imports up YoY in most of Asia in Q4CY20 driven by China, India and Korea



Source: S&P Global Platts

- **Rise in demand in Brazil as drought hit hydro power generation.**
- **Transit delays for US cargoes at the Panama Canal and LNG carrier shortage curbing supply have boosted spot LNG prices**. Transit delays in the Panama Canal are due to seasonal backlog of container ships, which has been aggravated by strong demand for consumer goods during the pandemic. LNG carriers trying to avoid transit delays at the Panama Canal and taking the longer route to Asia around the Cape of Good Hope end up adding 17 days to their voyage from the US Gulf Coast to Tokyo. The longer time taken to transport LNG from US to Asia has led to shortage of LNG carriers and surge in charter rates to a multi-year high of US$300k/day in Jan'21.

Chart 5: Spot LNG surged from lows of US$1.85/mmbtu in May'20 to US$32.5/mmbtu on 12-Jan'21



Source: S&P Global Platts

Spot LNG has plunged from all-time high on 12-Jan'21

Spot LNG plunged on mild weather, end of panic buying & supply rise

JKM spot LNG prices, which touched all-time highs on 12-Jan'21, have since plunged as follows:

- Tender on 21-Jan'21 received bids of US$9.58/mmbtu for delivery on 21-22 Feb'21 and US$8/mmbtu for delivery on 25-26 Feb'21 *vs* futures for Feb'21 delivery touching high of US$32.5/mmbtu and price of cargo for prompt delivery on 11-15 Feb'21 touching a peak of US$39.3/mmbtu on 12-Jan'21.

Table 1: Tender on 21-Jan'21 received bids of US$9.58-8.0/mmbtu for delivery on 21-22 Feb'21 and 25-26 Feb'21

Tender (21-Jan close)	21-22 Feb delivery	25-26 Feb delivery
Brent Link	19.5%	16.3%
US$/mmbtu	9.58	8.00
Supplier	Vitol	Qatar

Source: Bloomberg, I-Sec research

- Tender closing on 26-Jan'21 received bids of US$7.34/mmbtu for delivery on 11-19 Mar'21 and US$6.86/mmbtu for delivery on 24-25 Mar'21 *vs* spot LNG futures for Mar'21 delivery touching a peak of US$13.7/mmbtu on 13-Jan'21.

Table 2: Tender on 26-Jan'21 received bids of US$7.34-6.86/mmbtu for delivery on 11-19 Mar'21 and 24-25 Mar'21

Tender (26-Jan close)	11-12 Mar delivery	18-19 Mar delivery	24-25 Mar delivery
Brent Link	13.6%	13.6%	12.7%
US$/mmbtu	7.34	7.34	6.86
Supplier	ENI	ENI	Qatar

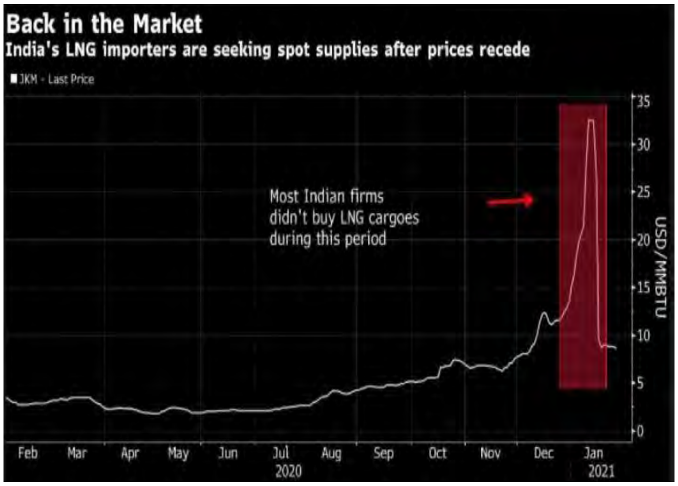
Source: Bloomberg, I-Sec research

Spot LNG plunged on mild weather, end of panic buying & supply rise

Spot LNG prices are down sharply due to:

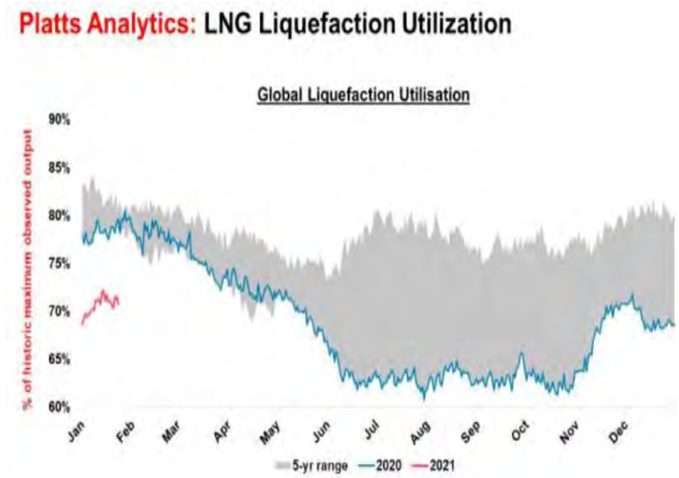
- **Milder weather in Northeast Asia later in Jan'21 and early-Feb'21.** In the first week of Jan'21, Beijing recorded lowest temperatures since 1966 and other provinces in northern China hit the lowest temperatures on record. Temperatures in Seoul in South Korea dropped to their lowest in 35 years in early-Jan'21.
- **End of panic buying by Northeast Asian users.** Coldest winter in decades until mid-Jan'21 boosted demand for power and power prices in Japan and power demand to a wintertime high in South Korea. Korea has also shut several (9-16) coal-based power plants since Dec'20 (to be restarted in Mar'21) to curb pollution. Surge in power demand due to cold weather forced utilities to bid aggressively for LNG cargoes for prompt delivery and thereby drove a surge in spot LNG prices. However, with weather turning mild and cargoes being tied up in early-Jan'21, panic buying stopped later in Jan'21.
- **More suppliers offering spot cargoes.** World's largest LNG exporter Qatar, which had shut some trains for maintenance in late-CY20, bid aggressively in some recent tenders for delivery in Feb-Mar'21 to emerge as lowest bidder. Shell's 3.6mmtpa Prelude floating LNG plant in Australia, which was shut in Feb'20, restarted exports on 6-Jan'21. **Global liquefaction utilisation is still just over 70%.**

Chart 6: Indian users back in market after spot LNG fall from peak



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

Chart 7: Global LNG liquefaction capacity remains just over 70%

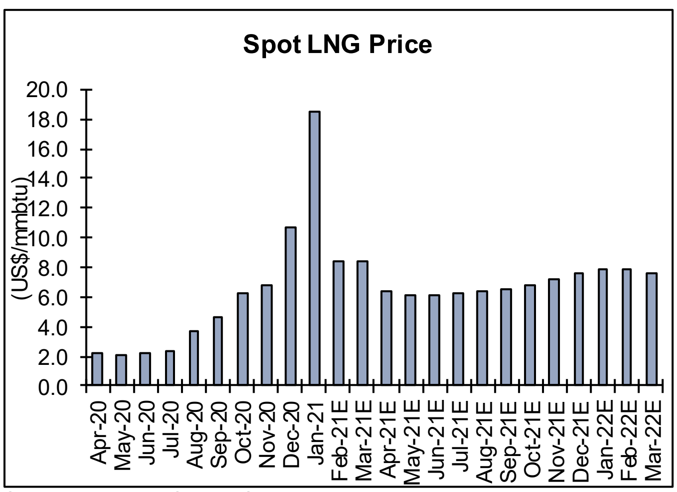


Source: S&P Globall Platts, I-Sec research

Indian consumers seek spot LNG after sharp fall from record highs

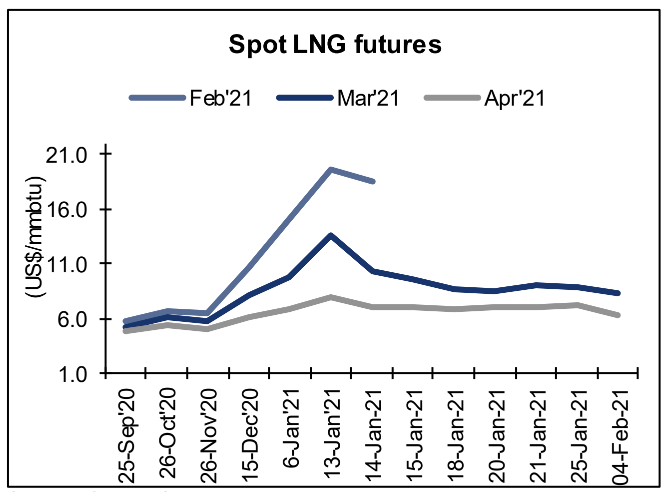
Press reports suggest that Indian users stopped buying spot LNG from late-Dec'20 given the surge in spot LNG prices in the first fortnight of Jan'21. However, Indian users such as GSPC and IOC have now issued at least eight tenders seeking spot supplies for Feb-Mar'21 delivery. Four of these tenders have been awarded.

Chart 8: Spot LNG prices up from US$2.0/mmbtu in May'20 to US$18.5/mmbtu in Jan'21



Source: Reuters, CME, I-Sec research

Chart 9: Feb-Apr'21 spot LNG futures peaked on 13-Jan'21; corrected on warmer weather forecast



Source: CME, I-Sec research

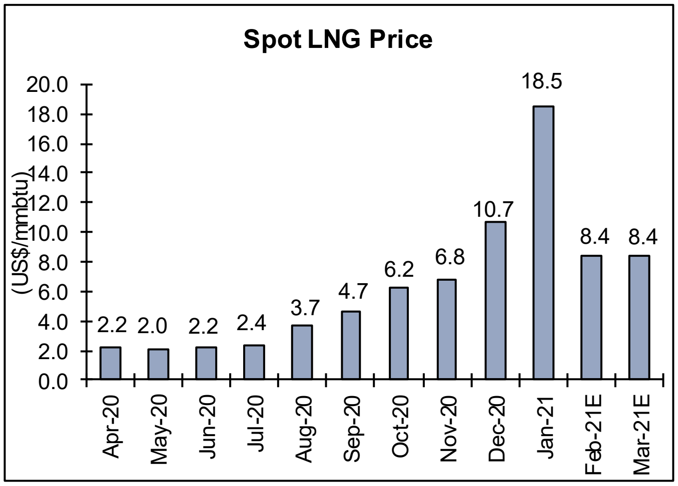
Spot LNG futures for Mar-Jun'21 down sharply from peak on 13-Jan'21

Spot LNG futures for Mar-Jun'21 delivery are down from peak on 13-Jan'21 as follows:

- Spot LNG futures for Mar'21 delivery are at US$8.365/mmbtu on 4-Feb'21, down from a peak of US$13.67/mmbtu on 13-Jan'21.

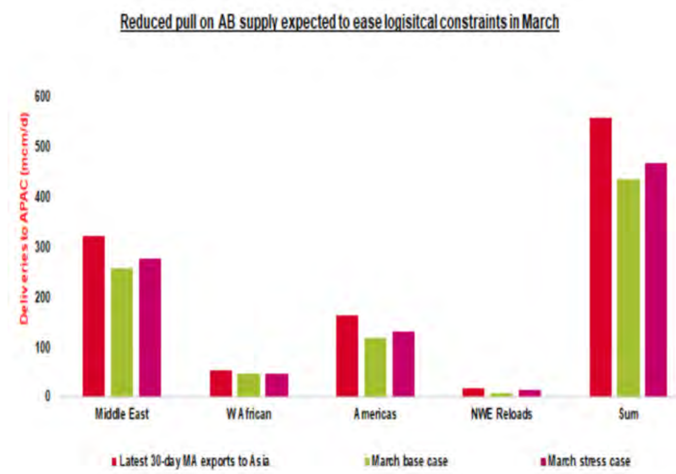
- Spot LNG futures for Apr'21 delivery are at US$6.325/mmbtu on 4-Feb'21, down from a peak of 7.85/mmbtu on 13-Jan'21.

Chart 10: Spot LNG prices up from US$2.0/mmbtu in May'20 to US$18.5/mmbtu in Jan'21



Source: Reuters, CME, I-Sec research

Chart 11: Asian LNG supply to exceed demand in Mar'21 in base as well stress case



Source: Reuters, CME, I-Sec research

Prices corrected as demand is set to fall in summer and supply rise

Spot LNG prices for Mar'21 delivery are much lower than for Feb'21 delivery as demand declines seasonally post-winter and supply rises. Supply of LNG to Asia is expected to exceed demand in base case as well as stress case in Mar'21 with global liquefaction capacity utilisation at just over 70%. Supply rise would be driven by:

- **LNG capacities in Qatar, Australia and Malaysia restarting.**

- **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 6.5bcf/d in CY20 (6.1bcf/d up to Nov'20), but have surged to a new high of 9.8bcf/d in Dec'20 (earlier high was 9.2bcf/d in Nov'20). 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. Given higher oil and spot LNG prices and rise in capacity, US LNG exports may be up 40-55% YoY at 9-10bcf/d in CY21E.

- **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.

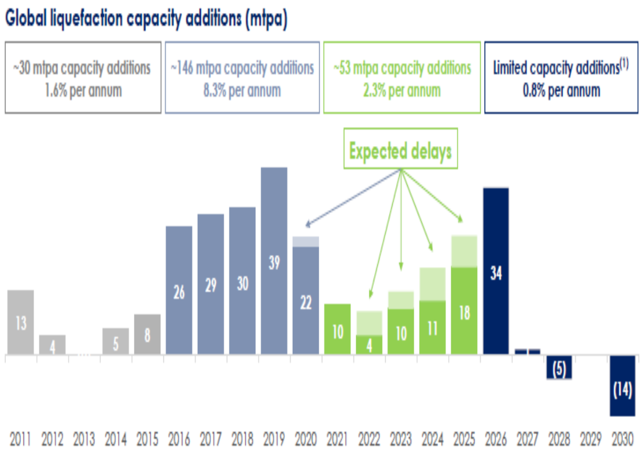
- **Rise in Russian gas exports to Europe on completion of 55bcm capacity Nord Stream 2 pipeline, which may be commissioned in Q2CY21.** However, the risk of US sanctions looms.

Three nuclear reactors are expected to restart in Japan in mid-Feb'21, which together with expected milder weather is likely to help cool spot LNG prices.

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

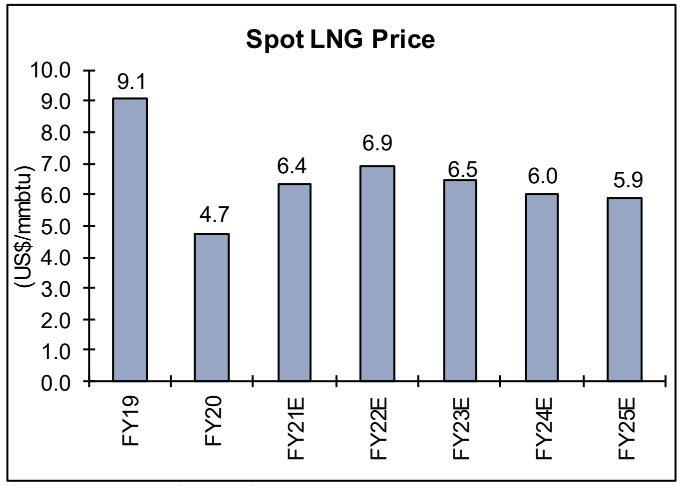
Modest liquefaction capacity additions – 75mmtpa in CY20-CY25E *vs* 124mmtpa in CY16-CY19 – are likely to keep spot LNG prices higher in FY22E-FY26E than US$4.7/mmbtu in FY20. Spot LNG futures are currently at US$6.9-6.5/mmbtu in FY22E-FY23E and US$6.0-5.9/mmbtu in FY24E-FY26E.

Chart 12: LNG liquefaction capacity addition at 75mmtpa in CY20-CY25 *vs* 124mmtpa in CY16-19



Source: Tellurian

Chart 13: Spot LNG at US$6.9-5.9/mmbtu in FY22E-FY25E 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 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 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 59% from the lows in end-Oct'20 to over US$58/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 EBITDA is not only back in the black in Q3 and Q4FY21, but improves dramatically.

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

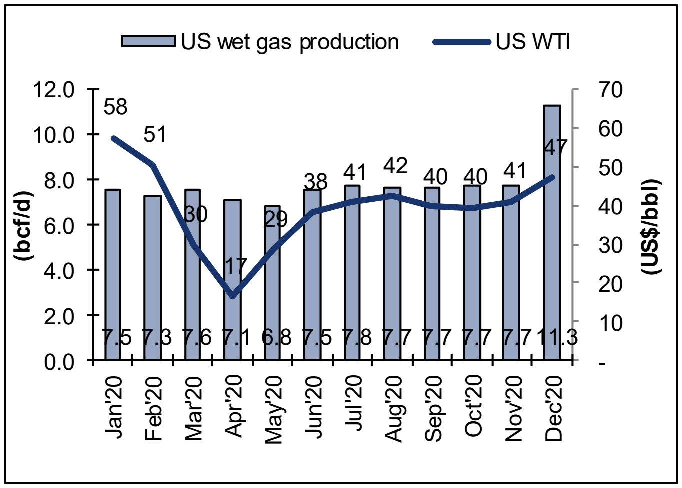
Henry Hub prices, which were briefly above US$3.0/mmbtu in late-Oct'20 and early-Nov'20, have corrected mainly due to:

- Mild weather in the US resulting in Nov'20 gas consumption being down 11% YoY (steepest fall in CY20). Mild weather continued in Dec'20 as well as most of Jan'21.

- 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.

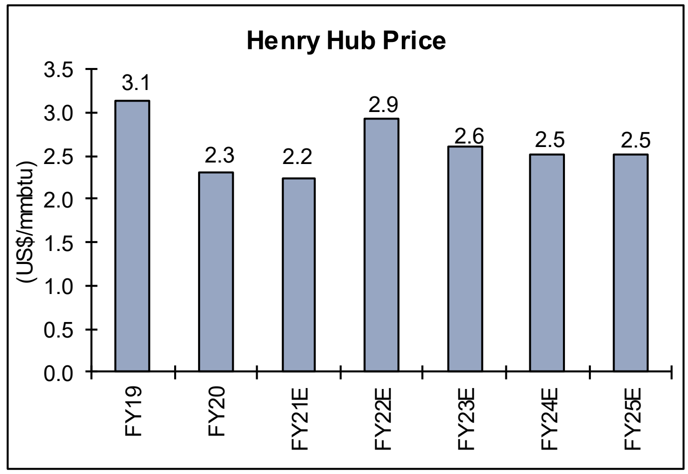
HH futures for Q4FY21E, which were at US$3.4/mmbtu on 25-Sep'20, are now at US$2.7/mmbtu probably due to the surge in WTI price, US oil rig count and, consequently, the expected rise in US oil and associated gas production.

Chart 14: Surge in WTI boosted US wet gas production to a high of 11.3bcf/d in Dec'20



Source: EIA, Bloomberg, I-Sec research

Chart 15: Henry Hub futures trend shows prices declining in FY22E-FY24E



Source: EIA, CME, I-Sec research

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

Surge in oil from lows on 30-Oct'20 led to rise in US oil rig count, expectation of rise in US oil and associated gas output and, consequently, led to fall in Henry Hub (HH) gas prices and futures. HH is down to US$2.78/mmbtu on 3-Feb'21 from US$3.03/mmbtu on 30-Oct'20 while Brent is up from US$36.9/bbl to US$58.6/bbl during the same period. 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$58.6/bbl, HH futures for Q4FY21E are down to US$2.74/mmbtu and for FY22E-FY24E down to US$2.93-2.51/mmbtu. Thus, while Brent is up by 47%, HH futures for Q4FY21E and FY22E-FY24E are down by 1-17% from levels on 26-Oct'20.

Table 3: Brent is up 47% while Henry Hub futures are down 1-17% from 26-Oct'20 levels

		Henry Hub futures for			
	Brent	Q4FY21E	FY22E	FY23E	FY24E
4-Feb'21	58.55	2.7	2.9	2.6	2.5
26-Oct'20	39.81	3.3	3.1	2.7	2.5
Change	47%	-17%	-4%	-4%	-1%

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$4.8/mmbtu in Q4 *vs* loss of US$2.8-4.0/mmbtu in Q1-Q2FY21.

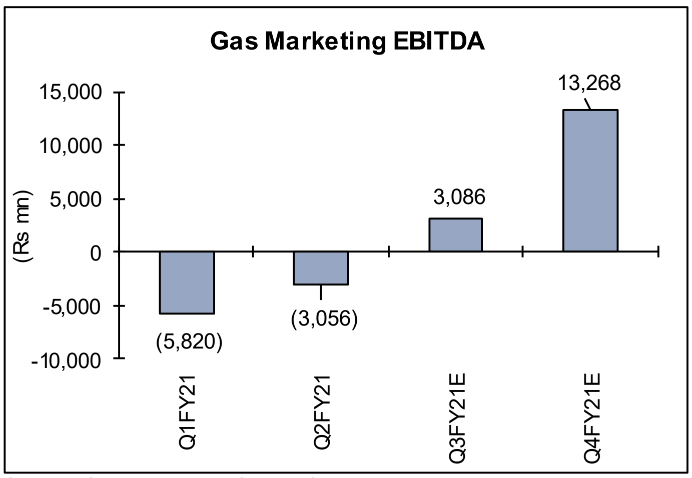
- At oil price linked prices would lead to a loss of US$1.0/mmbtu in Q3 and US$0.4/mmbtu in Q4FY21 *vs* loss of US$0.8-1.1/mmbtu.

At futures, Q3-Q4 marketing EBITDA in the black at Rs3bn-13bn

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 as of 4-Feb'21, we estimate GAIL's gas marketing EBITDA to be:

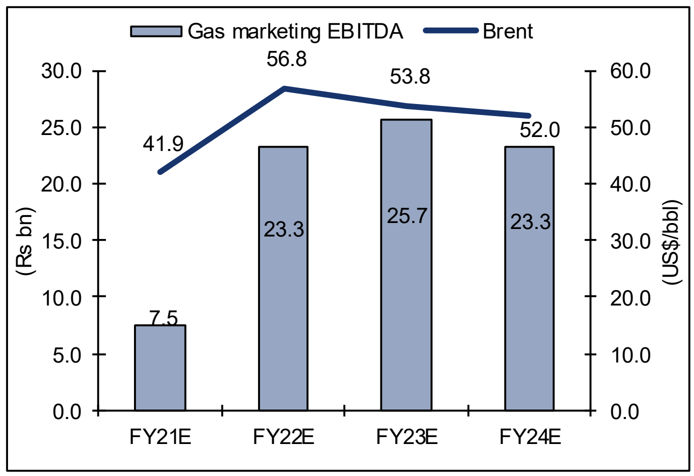
- In the black in Q3FY21 at Rs3.1bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil-linked prices.
- In the black in Q4FY21 at Rs13.3bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil-linked prices.
- In the black at Rs16.4bn in H2FY21E *vs* minus Rs8.9bn in H1FY21.
- In the black at Rs7.5bn in FY21E.

Chart 16: Gas marketing EBITDA estimated at Rs3bn-13bn in Q3-Q4 and Rs7.5bn in FY21E



Source: Company data, CME, I-Sec research

Chart 17: Gas marketing EBITDA at Rs23.3bn-25.7bn in FY22E-FY24E at futures prices

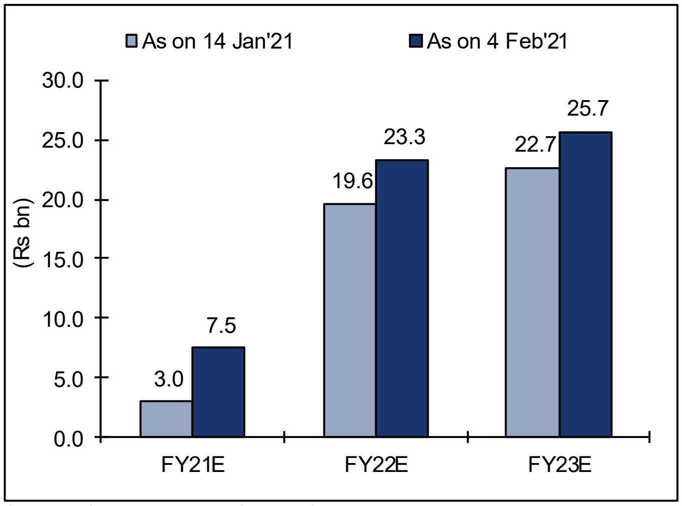


Source: Company data, CME, I-Sec research

7% upside to FY21E 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 4-Feb'21 works out to Rs7.5bn *vs* Rs3.0bn factored in our FY21E earnings estimates, which was based on futures as of 14-Jan'21. The upside to GAIL's FY21E EPS would be 7% to Rs11.66/share if its FY21E gas marketing EBITDA is indeed Rs7.5bn.

Chart 18: Upside of Rs4.5-3.0bn to FY21E-FY23E gas marketing EBITDA as oil higher and HH lower



Source: Company data, CME, I-Sec research

Table 4: Upside to GAIL's FY21E gas marketing EBITDA mainly driven by surge in spot LNG

	As of		
	4-Feb'21	**14-Jan'21**	**Change**
Q4FY21E gas marketing EBITDA based on			
Spot LNG futures (US$/mmbtu)	**11.8**	**10.0**	**1.8**
Brent futures (US$/bbl)	49.6	49.2	0.3
HH futures (US$/mmbtu)	2.7	2.7	(0.0)
Marketing EBITDA (Rs bn)	**13.3**	**8.8**	**4.5**
FY21E gas marketing EBITDA (Rs bn)	**7.5**	**3.0**	**4.5**

Source: Company data, CME, I-Sec research

Upside to FY21E EPS 4-31% at Q4 spot LNG of US$11-19.1/mmbtu

FY21E gas marketing EBITDA estimate of Rs7.5bn is based on spot LNG futures of US$11.8/mmbtu and Brent futures of US$49.6/bbl in Q4FY21E as of 4-Feb'21. Spot LNG futures peaked at US$19.1/mmbtu for Q4FY21E on 13-Jan'21. Our FY21E gas marketing EBITDA estimate of Rs3.0bn on the other hand is based on spot LNG futures of US$10/mmbtu and Brent futures of US$49.2/bbl in Q4FY21E as of 14-Jan'21. If GAIL has locked in Q4FY21E US LNG volumes at spot LNG futures of US$11-19.1/mmbtu:

- GAIL's Q4FY21E gas marketing EBITDA would be Rs11.5-29.5bn.
- GAIL's FY21E gas marketing EBITDA would be Rs5.7-23.7bn.
- Upside to GAIL's FY21E gas marketing EBITDA would be Rs2.7bn-20.7bn.
- Upside to GAIL's FY21E EPS would be 4.1-31.5%.

Table 5: Upside of 4-31% to our FY21E EPS estimate for GAIL if US LNG sale in Q4FY21E is locked in at spot LNG futures of US$11-19.1/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$10/mmbtu – Base case	8.8	3.0	0.0	0.0%
US$11/mmbtu	11.5	5.7	2.7	4.1%
US$11.8/mmbtu (futures as of 4-Feb'21)	13.3	7.5	4.5	6.8%
US$13.2/mmbtu (futures as of 6-Jan'21)	16.0	10.2	7.2	10.9%
US$15.1/mmbtu (futures as of 8-Jan'21)	20.5	14.7	11.7	17.7%
US$16.2/mmbtu (futures as of 14-Jan'21)	23.3	17.5	14.5	22.0%
US$16.6/mmbtu (futures as of 11-Jan'21)	24.4	18.6	15.6	23.7%
US$19.1/mmbtu (futures as of 13-Jan'21)	29.5	23.7	20.7	31.5%

Source: Company data, CME, I-Sec research

Gas marketing EBITDA at Rs23.3bn at FY22E futures

At Brent futures of US$56.8/bbl and Henry Hub futures at US$2.9/mmbtu for FY22E, we estimate GAIL's gas marketing EBITDA at Rs23.3bn. We are estimating:

- Entire US LNG being sold at oil-linked prices.
- Profit on sale of US LNG at oil-linked prices at US$0.2/mmbtu.
- Profit 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.

5% upside to FY22E EPS at EBITDA based on 4-Feb'21 futures

GAIL's FY22E gas marketing EBITDA based on Brent and HH futures as of 4-Feb'21 works out to Rs23.3bn while that based on futures as of 14-Jan'21 worked out to Rs19.6bn. Upside to GAIL's FY22E EPS would be 5% in this scenario. The main driver of this rise in gas marketing EBITDA is that FY22E Brent futures are at US$56.8/bbl as of 4-Feb'21 while they were at US$55.2/bbl as of 14-Jan'21. FY22E HH futures were up marginally to US$2.92/mmbtu as of 4-Feb'21 *vs* US$2.89/mmbtu as of 14-Jan'21.

FY22E gas marketing EBITDA at Rs6.0-31.3bn at Brent of US$50-60/bbl

GAIL's gas marketing EBITDA will be in the red at minus Rs6.7bn with Brent at US$45/bbl, but will be in the black at Rs6.0-31.3bn if Henry Hub is US$2.9/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 Rs19.3bn if Brent is at US$40/bbl.

Gas marketing EBITDA at Rs25.7bn at FY23E futures

At Brent futures of US$53.8/bbl and Henry Hub futures of US$2.6/mmbtu for FY23E, we estimate GAIL's gas marketing EBITDA at Rs25.7bn. We are estimating:

- Entire US LNG being sold at oil-linked prices.
- Profit on sale of US LNG at oil-linked prices at US$0.2/mmbtu.
- Profit on sale of US LNG at oil-linked prices at Rs3.6bn.
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs22bn.

Gas marketing EBITDA Rs16bn-41bn at Brent of US$50-60/bbl in FY23

GAIL's gas marketing EBITDA would be higher at Rs16.1-41.4bn if Brent is higher at US$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs3.5bn if Brent is at US$45/bbl.

Table 6: Gas marketing EBITDA to be Rs6.0bn-43.5bn at Brent of US$50-60/bbl and at Henry Hub at US$2.9-2.5/mmbtu in FY22E-FY24E

Rs bn	Brent Price (US$/bbl)					
	Base case	40	45	50	55	60
GAIL's gas marketing EBITDA in						
FY22E (Futures at US$56.8/bbl)	23.3	(19.3)	(6.7)	6.0	18.6	31.3
FY23E (Futures at US$53.8/bbl)	25.7	(9.2)	3.5	16.1	28.8	41.4
FY24E (Futures at US$52.0/bbl)	23.3	(7.1)	5.5	18.2	30.8	43.5

Source: CME, I-Sec research

Gas marketing EBITDA at Rs23bn at FY24E futures

At Brent futures prices of US$52.0/bbl and Henry Hub futures of US$2.5/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs23.3bn. We are estimating:

- Entire US LNG being sold at oil-linked prices.
- Profit on sale of US LNG at oil-linked prices at US$0.1/mmbtu.
- Profit on sale of US LNG at oil-linked prices at Rs1.8bn.
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs21.5bn.

Gas marketing EBITDA Rs18bn-43bn at Brent of US$50-60/bbl in FY24

GAIL's gas marketing EBITDA would be higher at Rs18.2-43.5bn if Brent is higher at US$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs5.5bn if Brent is at US$45/bbl.

Spot LNG correction to bring relief for GGL and GSPL

Q4FY21E EBITDA margin may not be as badly hit as thought earlier

We estimate GGL's EBITDA margin to decline sharply to Rs4.04/scm in Q3FY21E due to surge in spot LNG price to US$7.9/mmbtu from US$3.5/mmbtu in Q2. Q4FY21E spot LNG price is QoQ higher at US$11.8/mmbtu based on futures as of 4-Feb'21 and was even higher based on futures as of 6-13 Jan'21. However, GGL's Q4FY21E EBITDA margin may not be as badly hit by surge in spot LNG prices as earlier thought by us. This is because according to press reports **Indian users including GSPC, who sources spot LNG for GGL, did not buy spot LNG after it surged in late-Dec'20, but are now buying the same for Feb-Mar'21 delivery after its steep fall**. Spot LNG has been offered under recent tenders for delivery on 25-26 Feb'21 at US$8/mmbtu, on 11-19 Mar'21 at US$7.34/mmbtu and on 24-25 Mar'21 at US$6.86/mmbtu. Use of cheap KG-D6 gas (0.6mmscmd at US$4.23/mmbtu) since end-Dec'20 and cut in discount for Morbi customers by Rs4/scm in end-Dec'20 would also limit hit to GGL's EBITDA margin from surge in spot LNG prices.

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

JKM spot LNG futures for Q1FY22E at US$6.18/mmbtu as of 4-Feb'21 are down by US$4.9/mmbtu QoQ and US$1.7/mmbtu lower than spot LNG in Q3FY21. Not passing on the full benefit of QoQ fall in gas cost would boost GGL's margins in Q1FY22E.

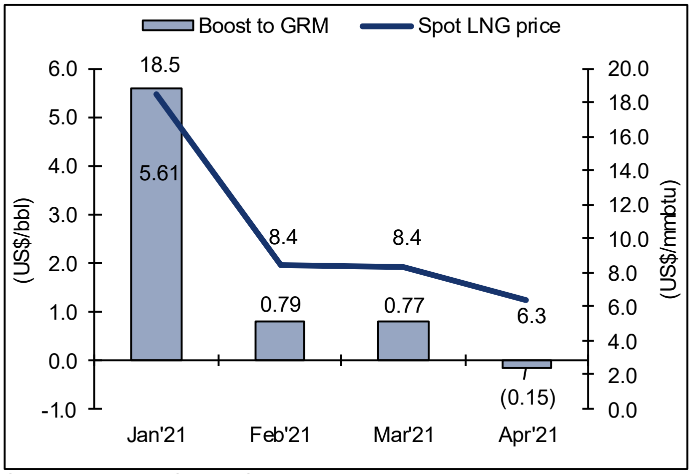
GSPL's Q4FY21E gas transmission volumes may recover

GSPL's transmission volumes went down by ~15% since mid-Dec'20 as the economics of coke gasifiers of its largest customer had improved due to spot LNG price surge and it had consequently cut gas consumption sharply. However, GSPL is likely to see rise in volumes from current lows driven by:

- **Steep fall in spot LNG price that hurts petcoke gasifier economics:** The boost to GRM from petcoke gasifier works out to US$5.61/bbl at spot LNG futures of US$18.5/mmbtu in Jan'21, **US$0.79/bbl at spot LNG price of US$8.4/mmbtu in the first week of Feb'21, US$0.77/bbl at Mar'21 spot LNG futures of US$8.365/mmbtu, and minus US$0.15/bbl at Apr'21 spot LNG futures of**

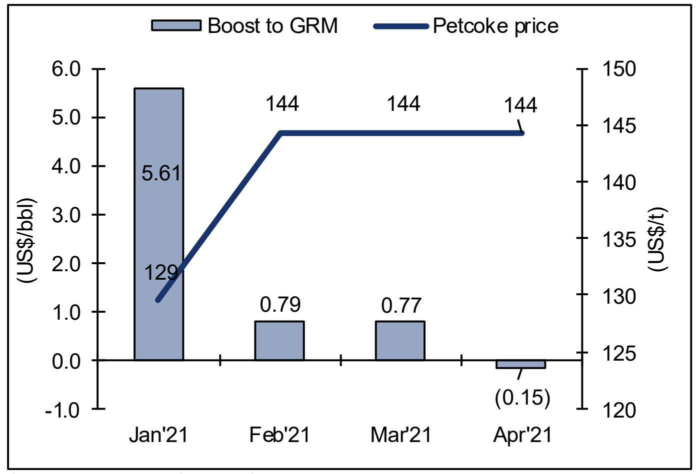
US$6.325/mmbtu. Thus, the petcoke gasifier economics is set to substantially worsen at much lower spot LNG prices in Feb-Mar'21 (*vs* that in Jan'21) and incur loss at spot LNG futures and petcoke prices of US$144/t in Apr'21 (*vs* US$129/t in Jan'21). Deteriorating petcoke gasifier economics is likely to lead to GSPL's largest customer raising gas consumption, which boosts GSPL's transmission volumes.

Chart 19: GRM rise from petcoke gasifier sharply down in Feb-Mar; in the red in Apr on spot LNG fall



Source: Reuters, CME, I-Sec research

Chart 20: Petcoke price rise & spot LNG price plunge to mean gasifier would hurt GRM in Apr'21

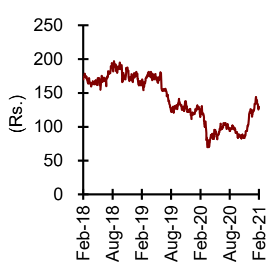


Source: Reuters, CME, I-Sec research

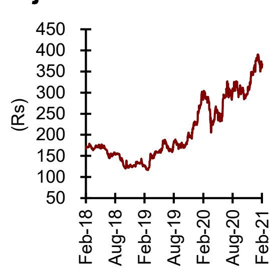
- **KG-D6 gas output ramp-up by 7.5mmscmd in FY22E:** 80% of KG-D6 gas, which was auctioned in Nov'19 and started production from Dec'20, is transported by GSPL in Gujarat. Bidding for another 7.5mmscmd of gas from KG-D6 was scheduled for 22-Jan'21, but the auction is now expected on 5-Feb'21. ~80% of this incremental gas volume, when its starts producing, is also expected to be transported by GSPL for supply to consumers in Gujarat.

Price charts

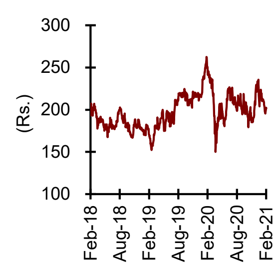
GAIL



Gujarat Gas



GSPL



Source: Bloomberg

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