

Agenda

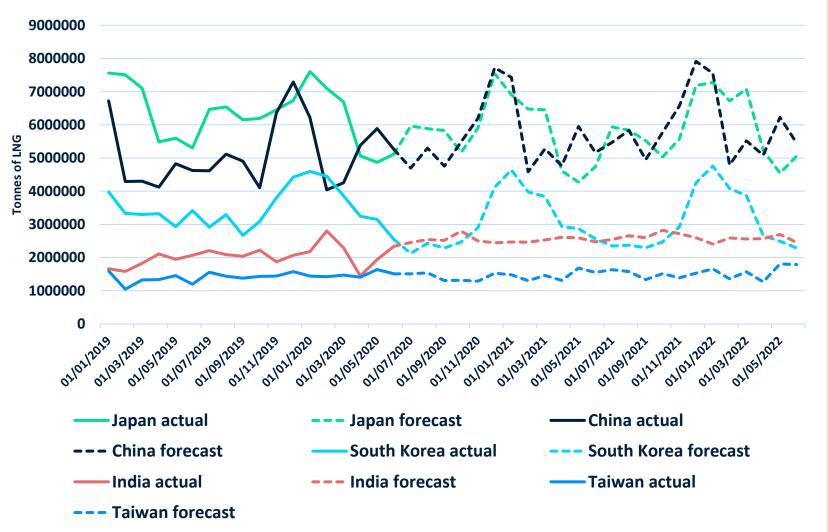


- **01** Asian LNG demand in a low-price environment
- **02** China by far the hottest market
- **03** India growth but infrastructure challenges
- 04 Japan, South Korea LNG getting squeezed

China and India to lead Big Five LNG growth







1%

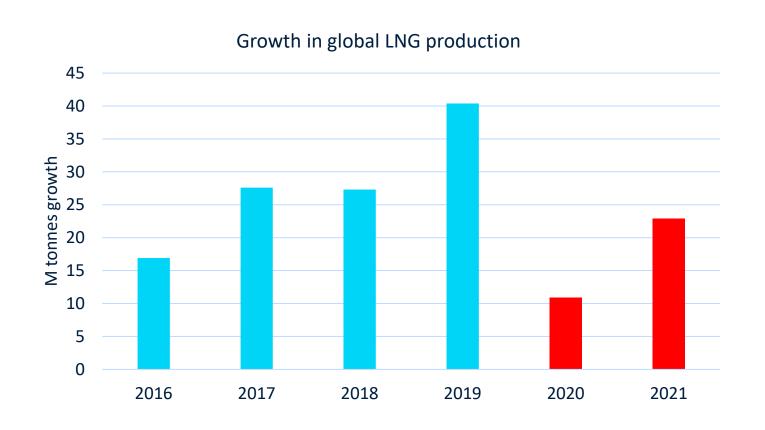
LNG demand across the top 5 Asian importers to grow 1% in 2020

China

China LNG demand is forecast to rise by 6% in 2020

Cuts in US LNG production hit global growth

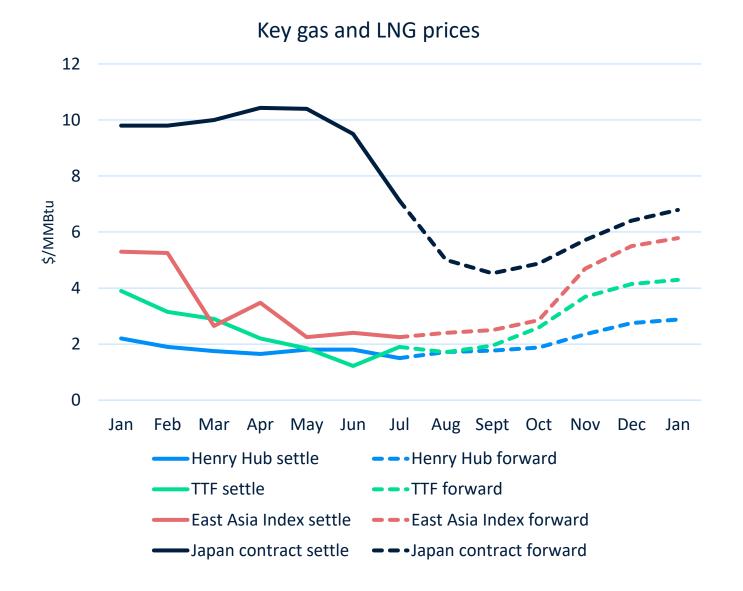




- Lowest LNG production growth since 2015
- July US LNG production down 60% from March
- Q4 spread to Europe/ Asia better for US LNG producers but what about next year?

Oil-indexed winter LNG prices falling closer to spot



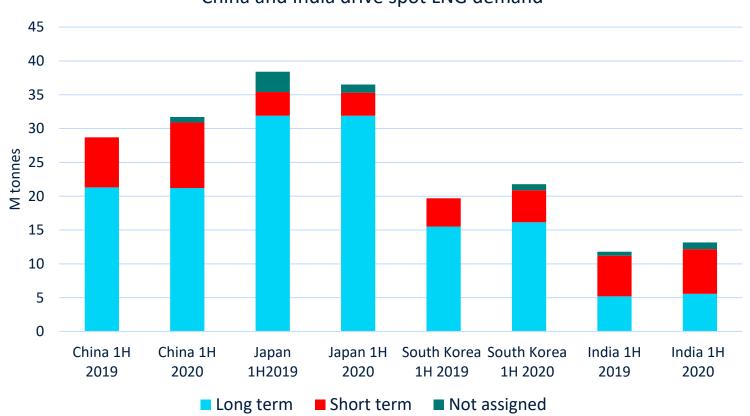


- Cheaper oil-linked LNG prices filter through in Q3
- Tight EAX/ TTF spreads to continue
- Window opens for US LNG exports
- Limited winter contango outturn prices could look different!

China and India drive global spot LNG demand







6.6

Indian short-term LNG demand hit 6.6m tonnes in 1H 2020

33%

Of the largest four Asian buyers, 33% was on a short-term basis in 1H 2020

China

China



Game-changers for China LNG imports:

- Cut in domestic gas production target
- Ability to limit pipe gas imports
- Spot LNG prices driving switching

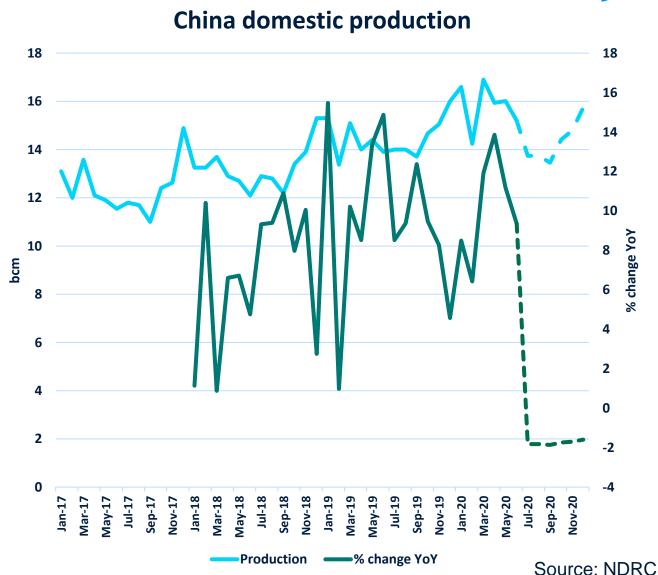
Market uncertainties:

- Speed of government-led market reform
- Prospect of W-recovery in gas consumption



Production

- Beijing has slashed 2020 domestic production targets to 180.9bcm, up just 4.3% year on year
- Lowest annual increase since 2016
- H1 '20 gas production was up 10% year on year
 - ICIS had expected full year production increase of 8%
- Interpreted as deliberate attempt to centrally balance the market
- To hit new annual target H2 '20 production needs to fall by 2%
 - But will production actually fall?

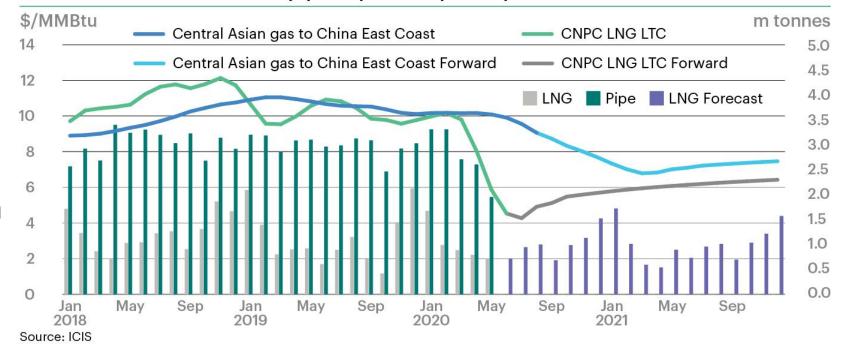


Pipe imports



- CNPC has cut pipeline imports
- H1 '20 imports 18% lower than expected
 - Russian and Kazakh volumes should have been higher year on year
- Actual year-on-year H1
 '20 imports down by 7%

CNPC slashes Central Asian pipe imports as price spreads widen



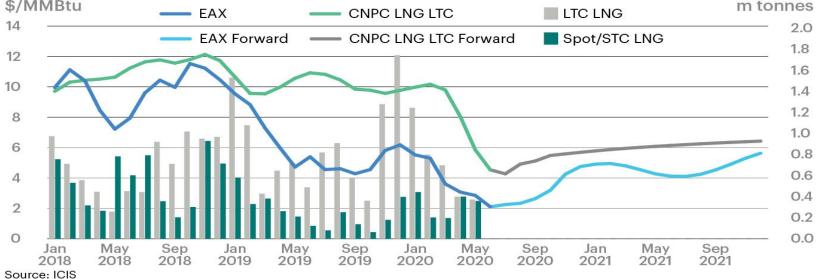
- Force majeure issued but price now the major influencing factor
 - But lower off-take from pipe imports will not last

Cheap spot LNG



- Greater activity from 2nd tier Chinese buyers as spot LNG undercuts passed-on costs from Big Three
 - Both in pipeline gas and trucked-LNG
 - BP has signed two re-gas deals this month
- Impact of 2019's regasification slot re-sale from CNOOC
- Big Three increasingly sharing infrastructure





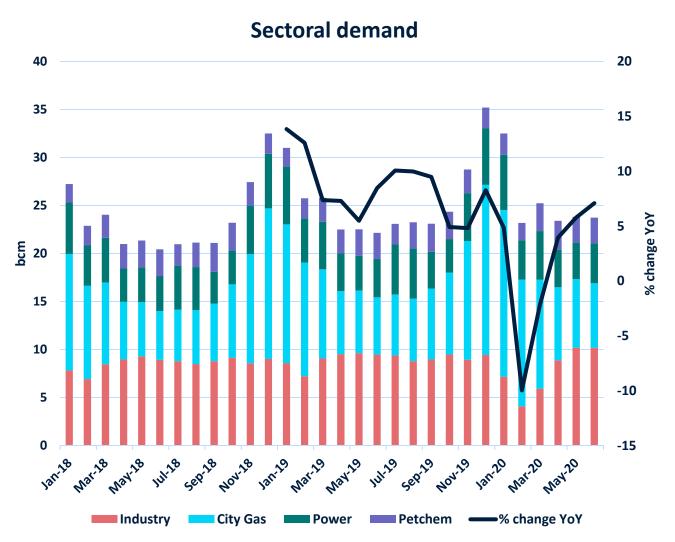
Uncertainties ahead in the short/medium-term



- Limited storage capacity on China, which may already be close to full
 - Likely to lead to particularly weak Q3 '20 LNG flows
- Mandate to build more conventional and LNG storage
 - o Sinopec's Wen 23's commissioning is absorbing 4.3bcm this year
 - CNPC's Xiangguosi expansion partially ready by December 20
- Commissioning of planned extensions of Power of Siberia
 - Link to Beijing in November 20
- ChinaPipe's creation to lead to yet more third-party access at terminals
- Relaxing regulation of city-gas prices
- Reform of upstream sector

Demand recovery





- Industrial sector's recovery is key
- Any sign of a W recovery will resonate through China gas market and onto international market
- Overall coal-to-gas switching in industry could have importance diminished during recovery

- Power sector backfilled coal in Q1 '20, but this may not last
- City gas demand was boosted early on, but that was in the winter

Source: CQGPX, ICIS assumptions

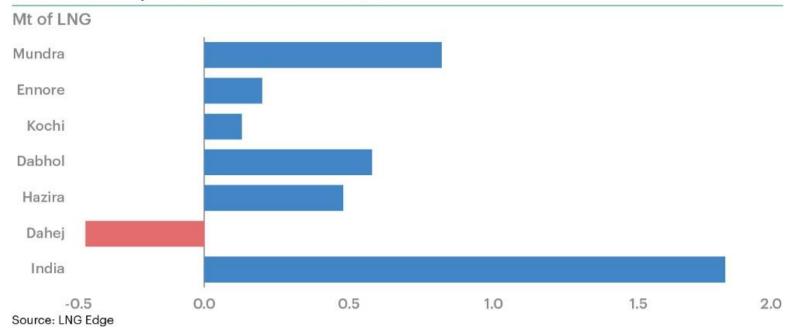


India

Indian LNG imports up by almost 2m tonnes



Indian LNG Imports YoY difference H1 2020



16%

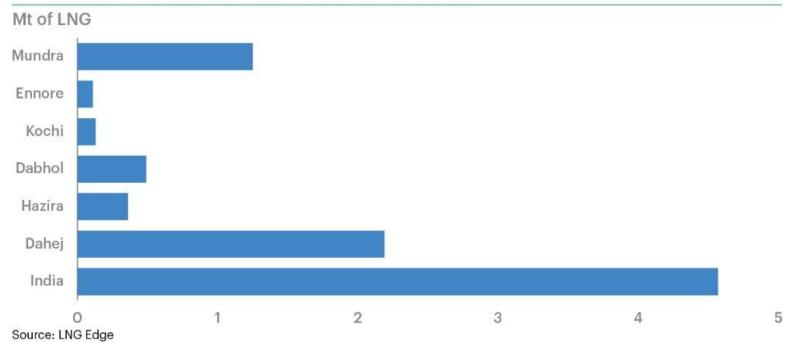
Indian LNG imports increased by 16% YoY in the first six months of 2020

- The Dahej terminal took the biggest hit from the Covid lockdown in Q2
- Commissioned in January, the Mundra terminal has received near 1m tonnes
- Indian imports reached record-highs in February, buoyed by high spot buying

Dahej terminal back on growth track



Indian LNG Imports YoY difference 2020 Forecast



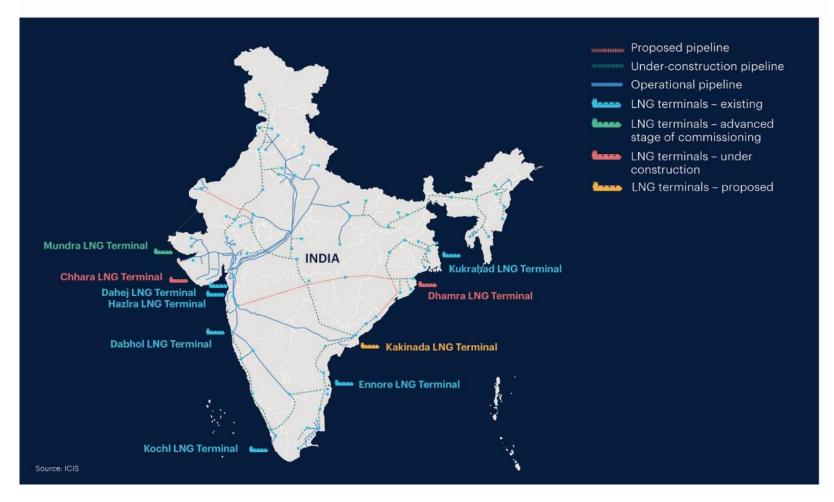
4_m

Indian LNG imports are expected to increase by 4m tonnes in 2020

- Dahej utilisation highest in Q3, while Dabhol remains closed
- New pipeline connections and expansion projects pushing demand higher

India Gas Pipeline Map







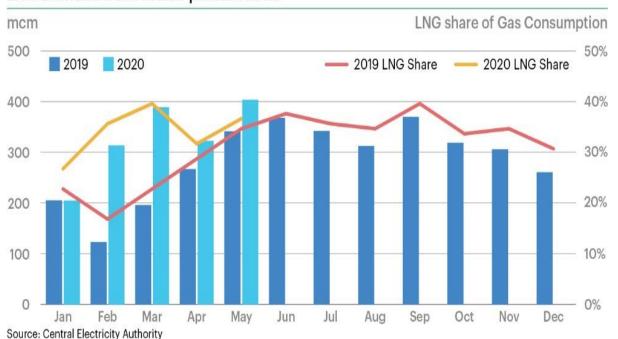
The Kochi-Mangalore pipeline is expected to start commercial operations in early August 2020

Other pipeline projects are also underway to develop untapped markets in the north, northeast and southeast.

Gas-fired power generation – Growth trajectory continues



LNG Demand from Indian power sector



- LNG consumption in the Indian power sector increased by 44% in the first five months of 2020
- Regasified LNG consumption reached over 400mcm in May, about 90% of which was based on spot deals
- Spot buying activity has started to pick up again in low price environment

Japan & South Korea

Decline setting in for Japan and South Korea



- Weak economy and low power consumption weighing on Japanese LNG demand despite lower nuclear
- South Korea moving from high growth in Q1 2020 to weak outlook for rest of year
- Coal restrictions in Q1 resulting in higher availability later in the year
- High storage inventories in both Japan and South Korea

2.1m

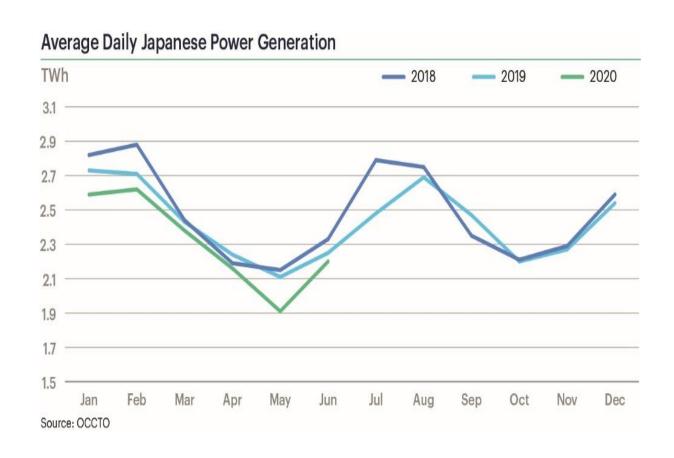
Japanese LNG imports were down by 2.1m tonnes in H1 2020

3.8mt

Instead of drawing down through winter, April LNG stocks were at a 2020 high

Japanese power consumption continues to languish

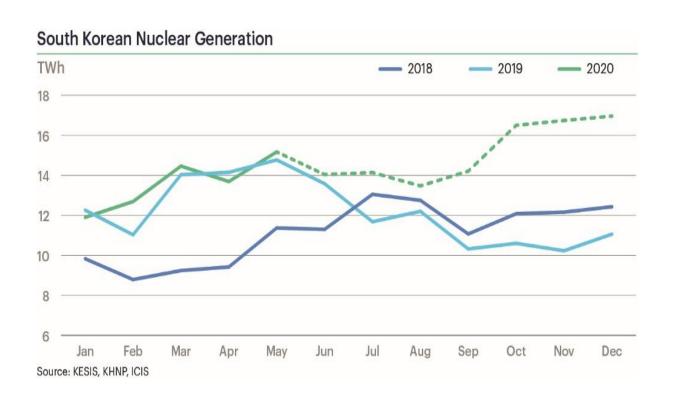




- Japanese nuclear output continues to decline in 2020
- But new coal and weak overall power consumption limits LNG demand
- Kansai Electric could re-start idled nuclear reactors in September

South Korean nuclear generation set for new high





- South Korean nuclear generation is forecast to reach a record 170TWh in 2020.
- 1.4GW Shin Kori 4 started commercial operations last year
- 1.4GW Shin Hanul 1 scheduled to start commercial operations in October, not included in forecast

Conclusion



- Positive structrual gas and LNG demand outlook from China
- Developing Indian LNG/ gas infrastructure will support growth
- Spot LNG winter curve is competitive

- Structural weakness for Japanese LNG demand
- Concerns over impact of second coronavirus wave
- Mild winters often lead to a weak Q2
- Plenty of supply can turn on if prices rise

LNG Edge Forecasts

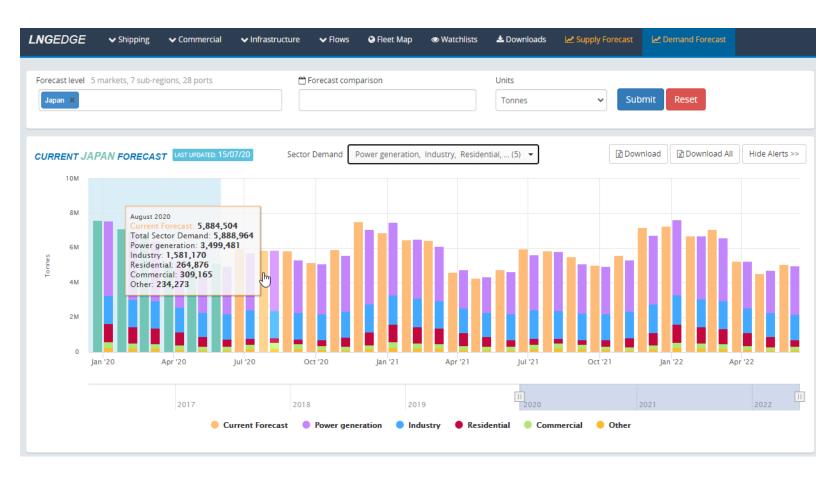


24-month rolling view

Supply: Global

Demand: Japan, South Korea, Taiwan, China, India

Coming soon: SE Asia, Europe, LatAm



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Thank you

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