

Energy Outlooks

The era of natural gas demand creation



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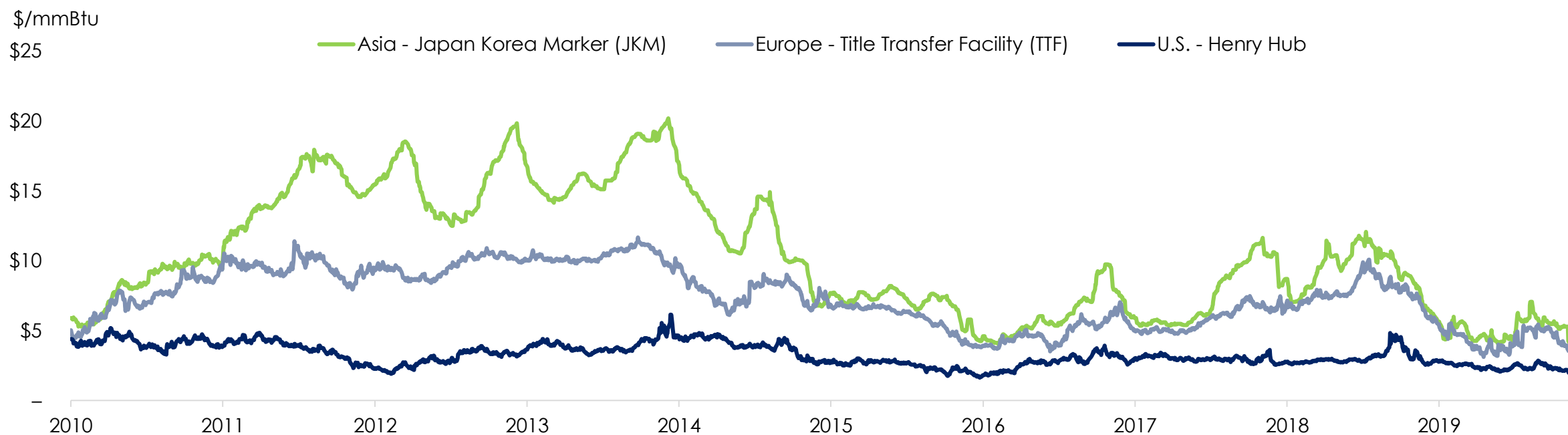
February 19, 2020

TELLURIAN

Demand creation – where will it go?

2010-2014: +2.1% p.a. LNG capacity growth, **supply allocation**

2015-2019: +9.3% p.a. LNG capacity growth, **demand creation**



JKM annual average:

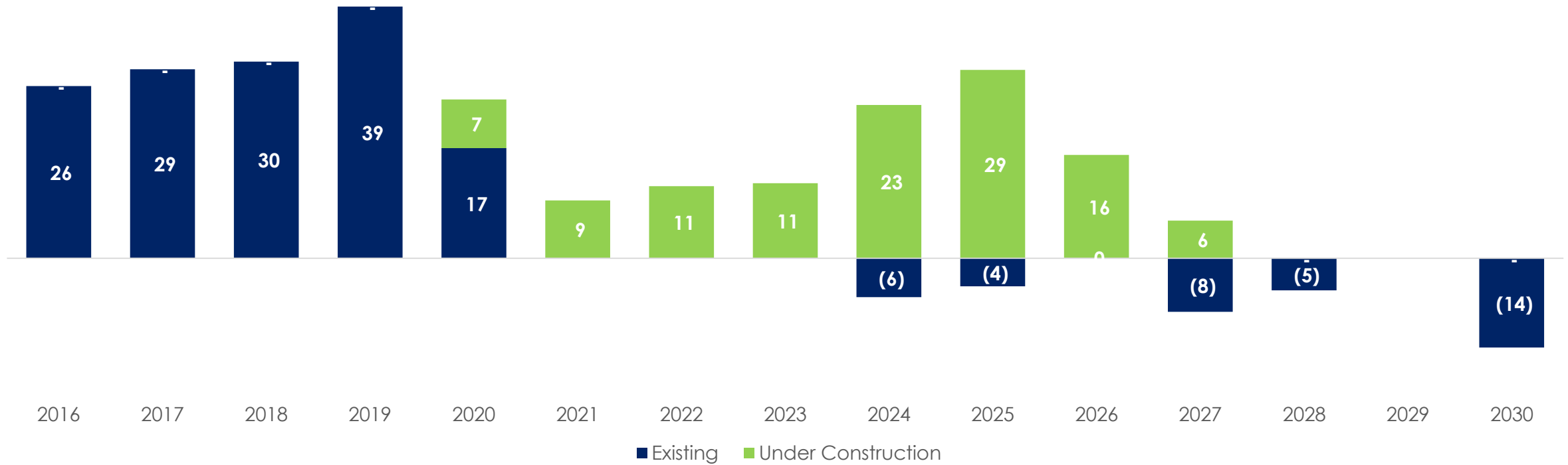
\$7.88	\$14.04	\$15.12	\$16.54	\$13.85	\$7.45	\$5.73	\$7.13	\$9.74	\$5.49
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Source: Wood Mackenzie, MarketView, Platts, ICE, Tellurian research.

Slowing capacity additions

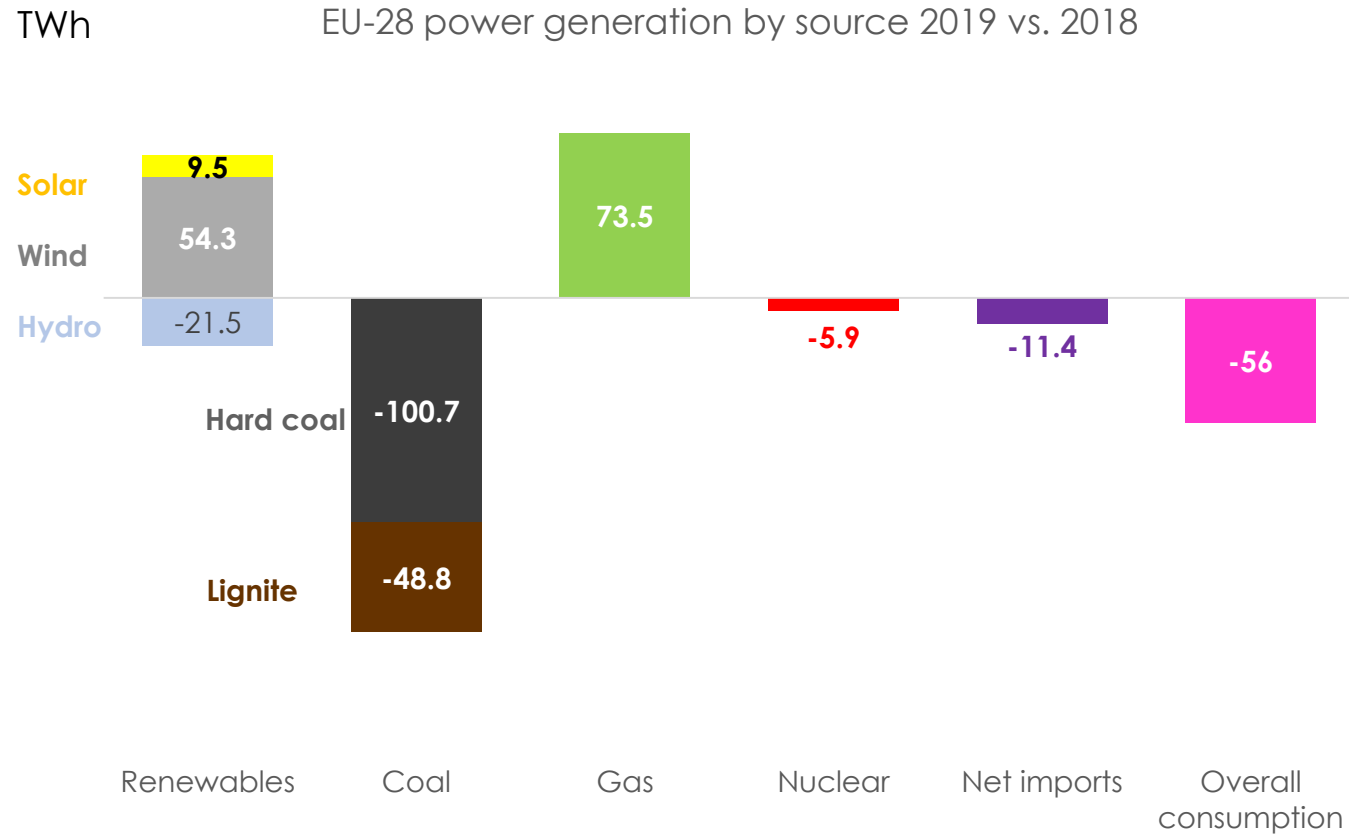
LNG capacity additions (mtpa)

2020-2030: +1.6% p.a. LNG capacity growth, **supply allocation**



How did Europe absorb 32 MT in 2019?

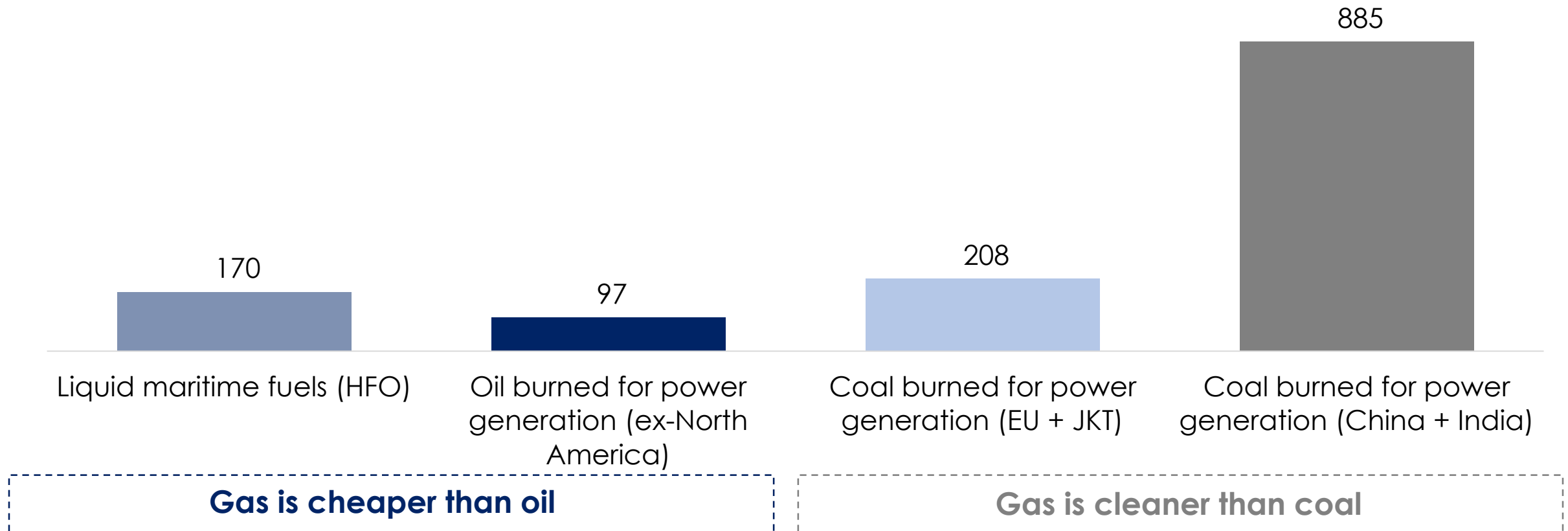
Gas and renewables each took half of the residual demand left from coal declines, CO2 emissions -12% in 2019



1,359 mtpa LNG equivalent latent LNG demand

There is substantial latent demand for LNG, which is competitive with oil prices and cleaner than coal

2018 fuel consumption (mtpa LNG equivalent)

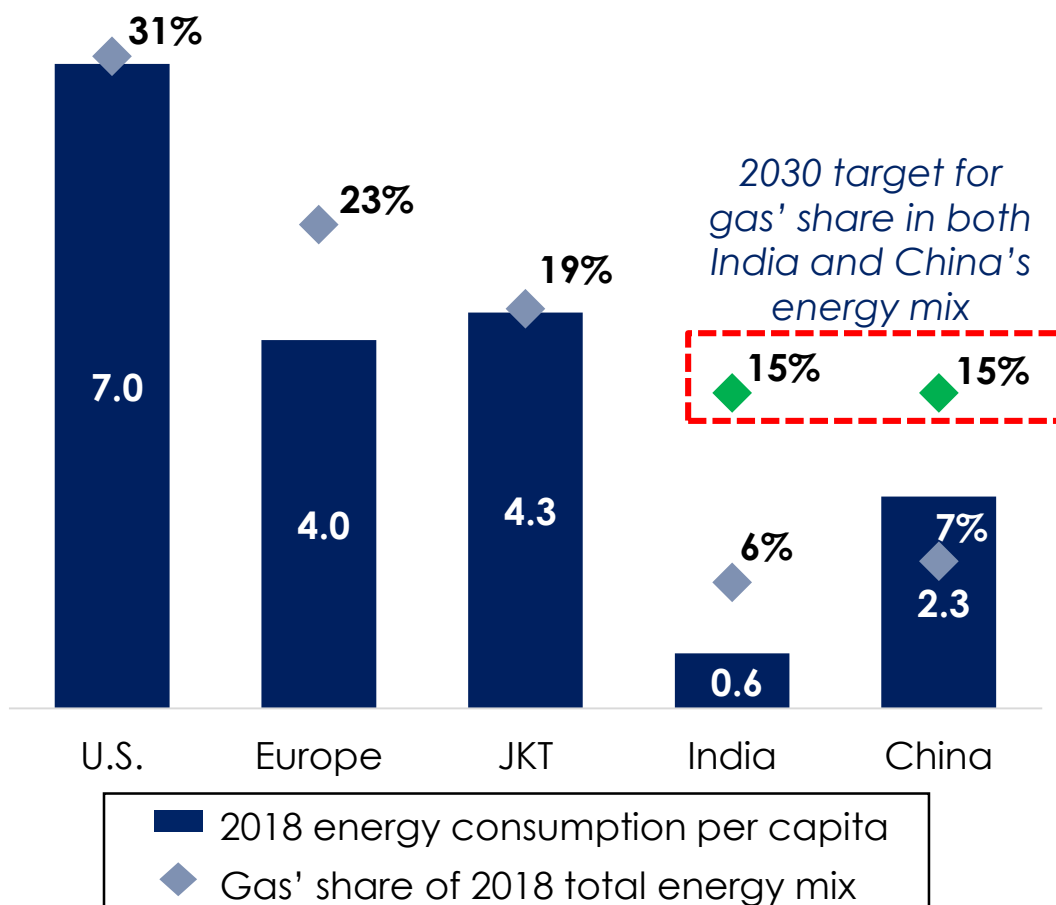


Sources: BP Statistical Review, Oxford Energy Institute and Tellurian analysis.

Global energy needs require natural gas

The shifting landscape of energy consumption

Tonnes oil eq./capita



Source: BP Statistical Review of World Energy, Tellurian Research

Note: (1) Based on total 2018 energy demand for non-OECD countries and 0.855 mtpa LNG per 1 million tonnes oil eq.

Drivers of shifting landscape

- Non-OECD energy consumption growth rate was **~13x** that of OECD's over the past decade
- Despite massive energy growth, natural gas is **just 22%** of non-OECD's energy mix, while **coal's share is 36%**
 - If gas moved to just 25%, **over 200 mtpa** of LNG would be required to meet demand¹
- Population and economic growth to encourage further energy consumption growth in Asia
- **9 of 10** world's most polluted cities located in just two Asian countries (India & China)
- A drive towards cleaner energy sources will require both natural gas and renewables

We are in an era of gas demand creation

- Coal switching to cleaner fuel sources is in early innings in Europe
 - Coal switching was split evenly between gas and renewables
 - Major economies eliminating nuclear power – baseload backfill source required
 - Climate change will make hydropower even more intermittent
- Clean fuel displacement hasn't even started in Asia, especially as the energy needs of a growing and affluent population increase
- Today's low-price environment will disappear as capacity additions slow and demand for gas + renewables increases to meet power and industrial demand globally