




CWC
CHINA LNG & GAS
INTERNATIONAL
SUMMIT & EXHIBITION
17 - 18 MAY 2017 BEIJING, CHINA

Navigating the Winds of Change for Asian LNG Supply



Christopher Goncalves
Chair and Managing Director, Energy

May 17th, 2017

Disclaimers



The opinions expressed in this presentation are those of the individual author(s) and do not represent the opinions of BRG or its other employees and affiliates.

The information provided in this presentation is incomplete without the oral briefing of the author(s), and should not be considered out of context.

The information provided is not intended to and does not render legal, accounting, tax, or other professional advice or services, and no client relationship is established with BRG by making any information available in this presentation.

Agenda



- About BRG
- Global LNG Outlook
- Commercial Implications

About BRG



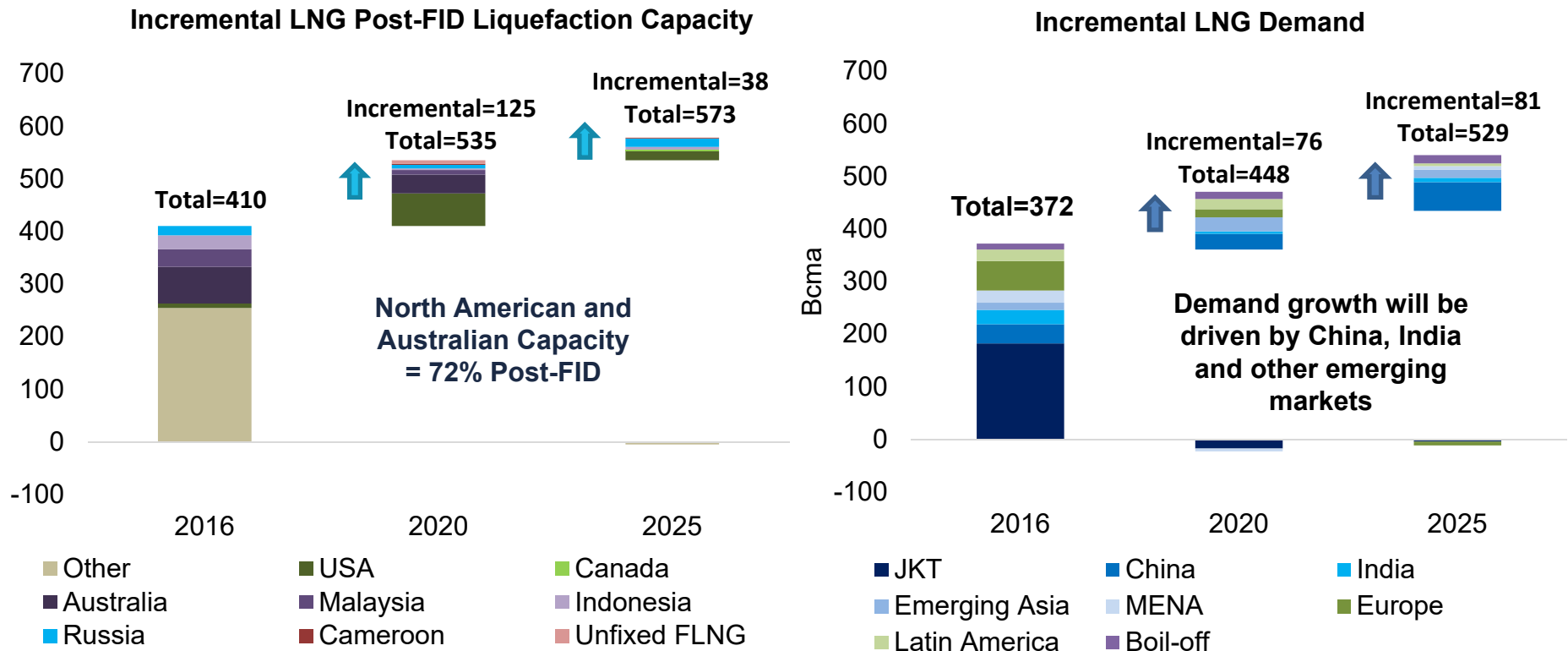
BRG is a leading global expert services and advisory firm that provides business advisory and dispute resolution services throughout the energy industry, and other industries, worldwide

- BRG's energy practice provides strategic, economic, commercial, and financial advice to energy companies, government agencies, investors, lenders, and their legal counsel.
- Our gas and LNG expertise spans the value chain and encompasses natural gas production, processing, pipeline, storage, terminal operations, shipping, and marketing and trading.
- Our primary client services include:
 - Business and commercial strategic advisory
 - Market analysis and forecasting
 - Economic and financial analysis
 - Investment and financing due diligence
 - Company, asset, and project valuation
 - Expert analysis and testimony for price reviews and commercial and investment disputes.



Global Capacity Surpluses

In 2016, 10% of liquefaction capacity was unutilized. By 2020, this capacity buffer will increase to 19% as substantial post-FID liquefaction projects come online. By 2025, the capacity buffer will fall back to 8% as demand growth absorbs the surplus capacity, assuming pre-FID projects remain constrained by the near term market environment.

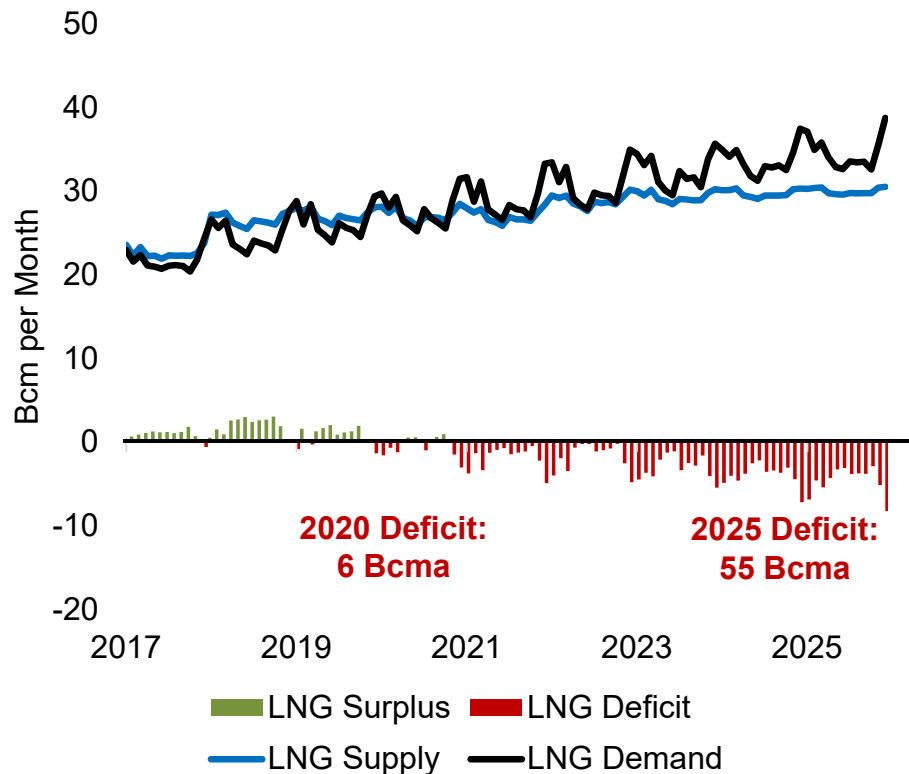


Sources: BRG Analysis, Global LNG Info, Waterborne, Wood Mackenzie
 Note: Unfixed FLNG includes Exmar FLNG, Golar's Gimi and Gandria LNG projects. LNG Demand includes ~3% boil-off.

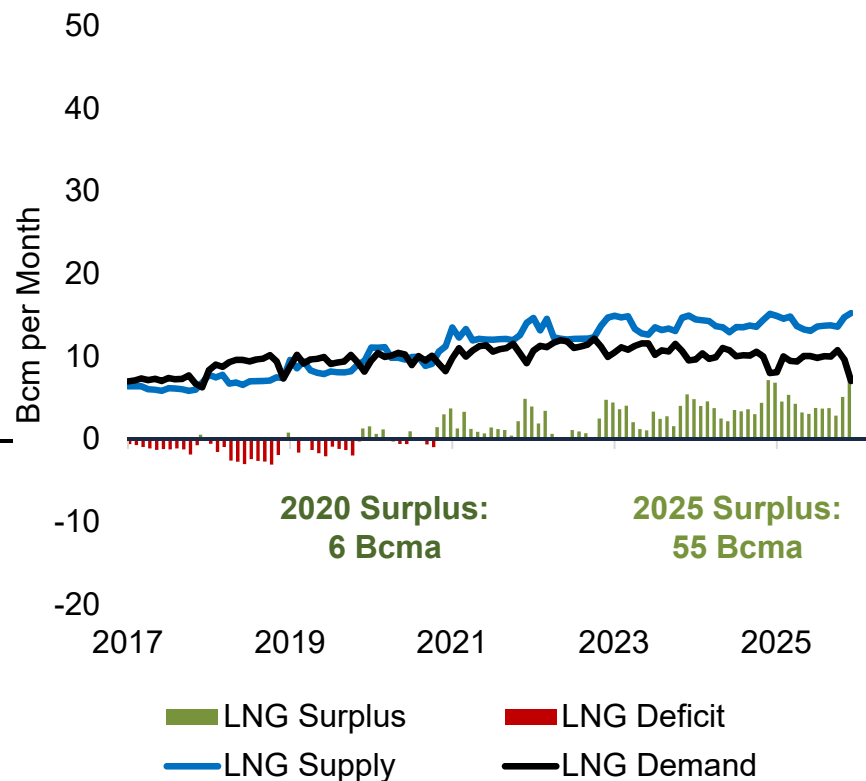
Global Supply-Demand Balances

Before 2020, moderate East-of-Suez (“EOS”) deficits are fed by modest West-of-Suez (“WOS”) surpluses; whereas, thereafter mounting EOS deficits will be supplied by increasing WOS surpluses.

EOS LNG Supply-Demand Balance



WOS LNG Supply-Demand Balance

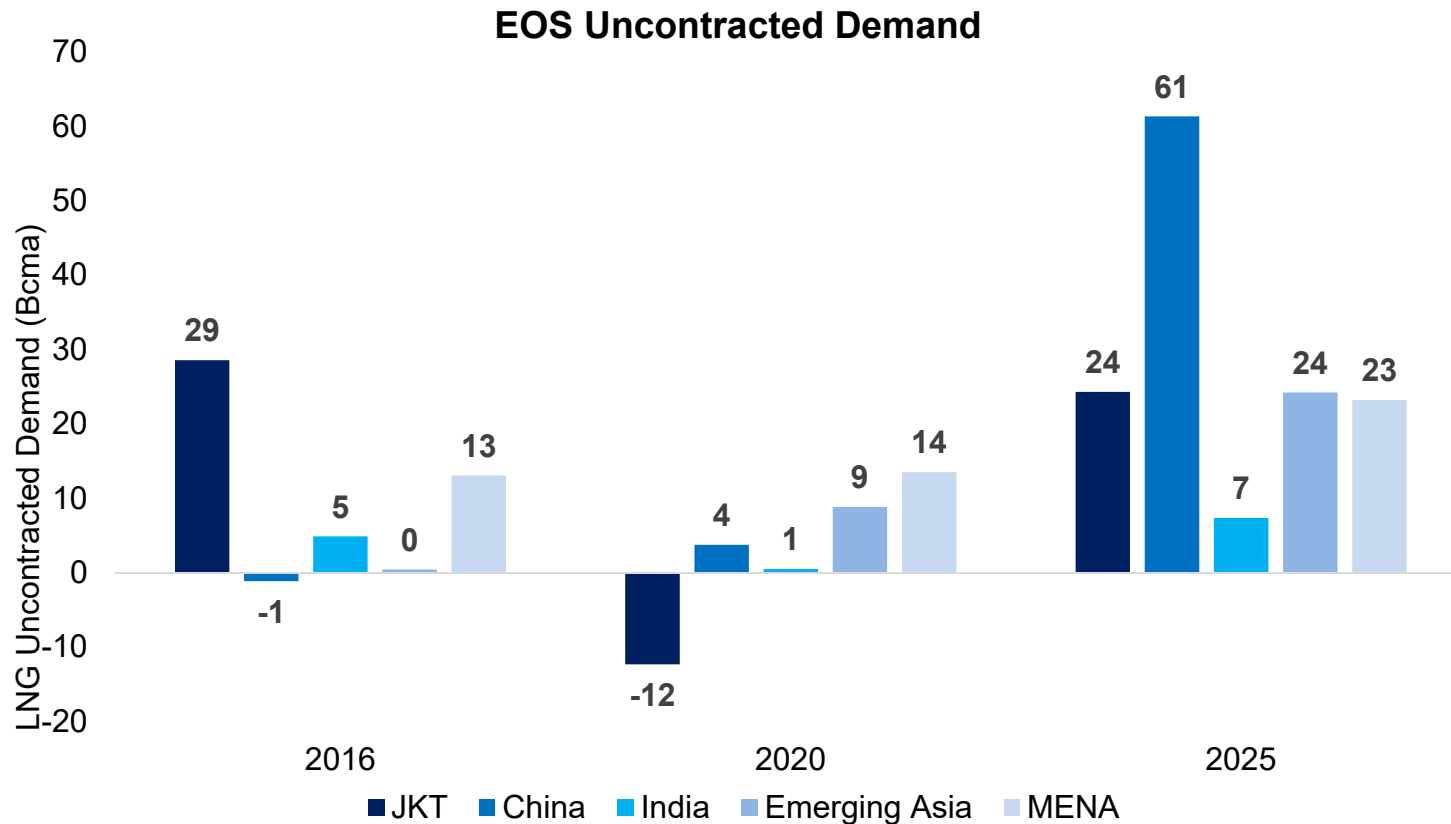


Sources: BRG Analysis.

Notes: LNG supply refers to estimated LNG production (not capacity). US LNG is included in WOS LNG supply.

EOS Uncontracted Demand

By 2020, JKT may become overcontracted and uncontracted demand in other EOS markets will grow moderately. From 2020 to 2025, all EOS markets will experience substantial growth in uncontracted demand, which can be supplied by new LTCs and/or short-term and spot market supplies.

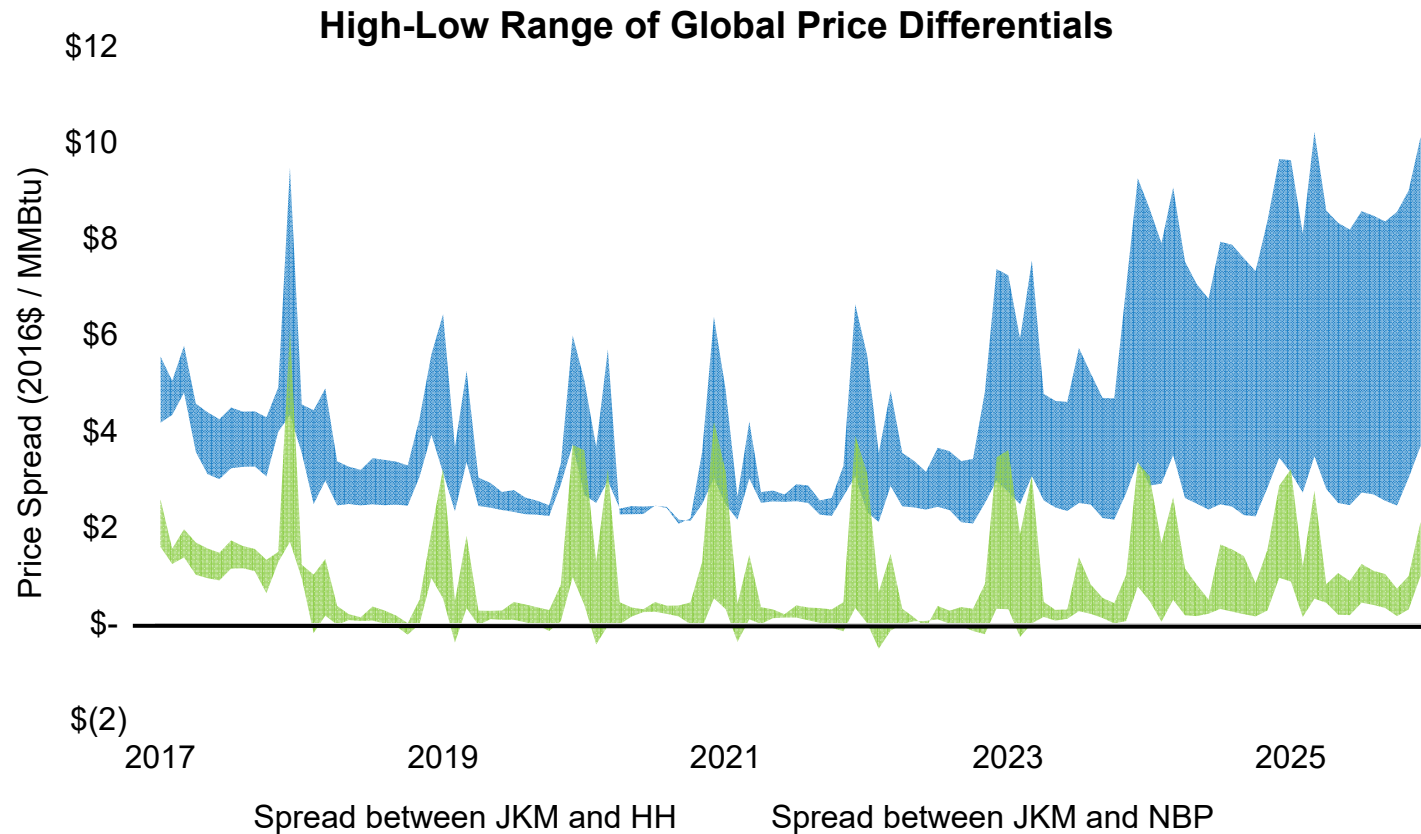


Sources: BRG Analysis, GIIGNL, Global LNG Info, Wood Mackenzie.

High-Low Range of Price Differentials Vary Widely



Under a range scenarios for future LNG demand and production capacity, our price projections yield global price differentials where JKM and NBP converge and remain within a tight range; whereas, the differentials between JKM and HH could widen substantially after 2022 – especially if Asian LNG demand growth is robust before a few advanced, pre-FID U.S. liquefaction projects come online by the mid-2020s.



Sources: BRG Analysis. HH forecasted was based on NYMEX and EIA AEO 2016.

Implications for Asian LNG Supply



The range of future market developments have critical implications for LNG buyers and sellers in the Asian markets.

- The expansion of US LNG exports, sluggish demand, mounting surpluses, and oil price collapse, have driven a recent convergence of oil-indexed LTC and traded natural gas hub prices.
- This has contributed to increased debate about the utility of oil-indexation of LNG LTCs, and increased buyer preference for the use of extra-regional hub based pricing. Nevertheless, a significant and sustainable shift to hub pricing will require substantial progress in the development of natural gas and LNG trading hubs in Asia to establish reliable price benchmarks.
- Over the coming years, buyers will enjoy sustained surpluses, increased supply liquidity, and ample access to short-term supplies, but the market will rebalance in the coming decade, giving way to tighter markets and increasing prices.
- The current market environment and market outlook present buyers and sellers with important strategic and commercial choices regarding the optimal balance between the use of LTCs and short-term trade, LTC flexibility provisions, and LNG pricing terms. Well-informed, flexible procurement and portfolio strategies are needed to navigate the significant market uncertainty on the mid-term horizon.
- For existing LTCs, mid-term market conditions will also stimulate buyer-seller (re)negotiation of contract pricing, flexibility, and duration. Where negotiation cannot bridge the commercial gaps between buyers and sellers, formal price review and/or arbitration will be needed.



THANK YOU

Christopher Goncalves

Chair and Managing Director, Energy

D: +1 202.480.2703

M: +1 240.505.6162

cgoncalves@thinkbrg.com

