

LNG-enabled optionality

Alex Lagakos

Chairman, Greek Energy Forum

Member, Group of Gas Experts – UN Economic Commission Europe
Energy & Freight Market Strategist



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Presentation Outline

A faint, light gray wireframe cube is positioned on the left side of the slide, partially overlapping the first two items of the outline.

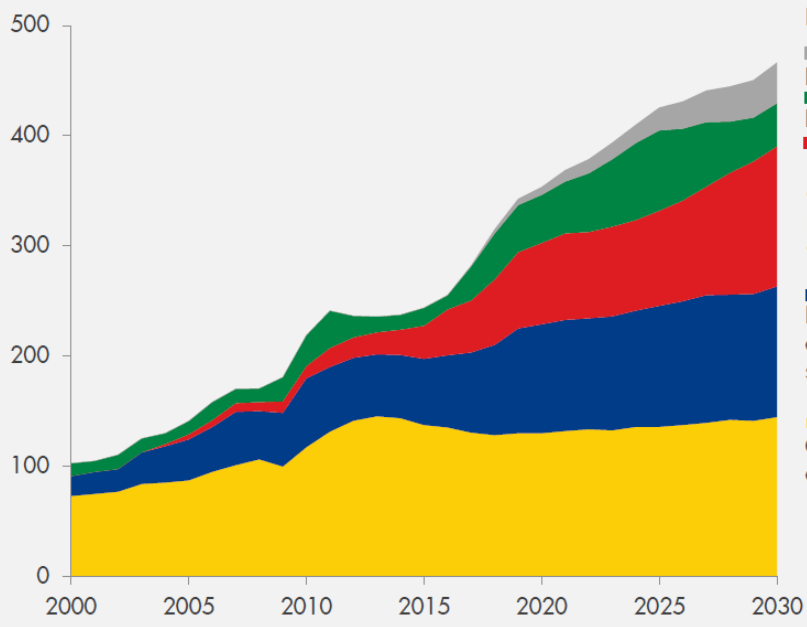
1. Supply & Demand LT Outlook

2. LNG-enabled Options

3. Proof of Concept

Diverse drivers of LNG demand growth

LNG imports by role in meeting gas demand (MTPA)

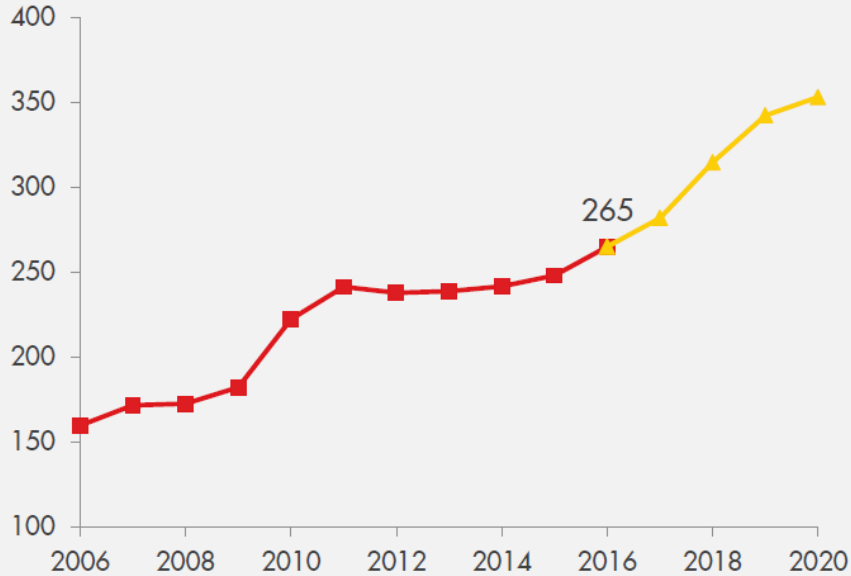


LNG demand driver	Countries/regions
Bunker fuel	<ul style="list-style-type: none"> Atlantic Middle East Pacific
Balances LNG supply	<ul style="list-style-type: none"> Northwest Europe
LNG replaces declining domestic production into existing demand	<ul style="list-style-type: none"> India Thailand Indonesia Malaysia Pakistan* Egypt* Kuwait UAE Colombia* Bangladesh* Bahrain* Philippines* Vietnam*
LNG complements domestic and pipeline supply	<ul style="list-style-type: none"> Southern Cone Eastern Europe Southern Europe North America China Singapore Morocco* Jordan* Israel
Gas supply solely dependent on LNG	<ul style="list-style-type: none"> Japan Korea Taiwan Puerto Rico Dominican Republic Jamaica* Panama*

Source: Shell interpretation of Wood Mackenzie Q4 2016 data
 * Denotes new or emerging LNG importing countries

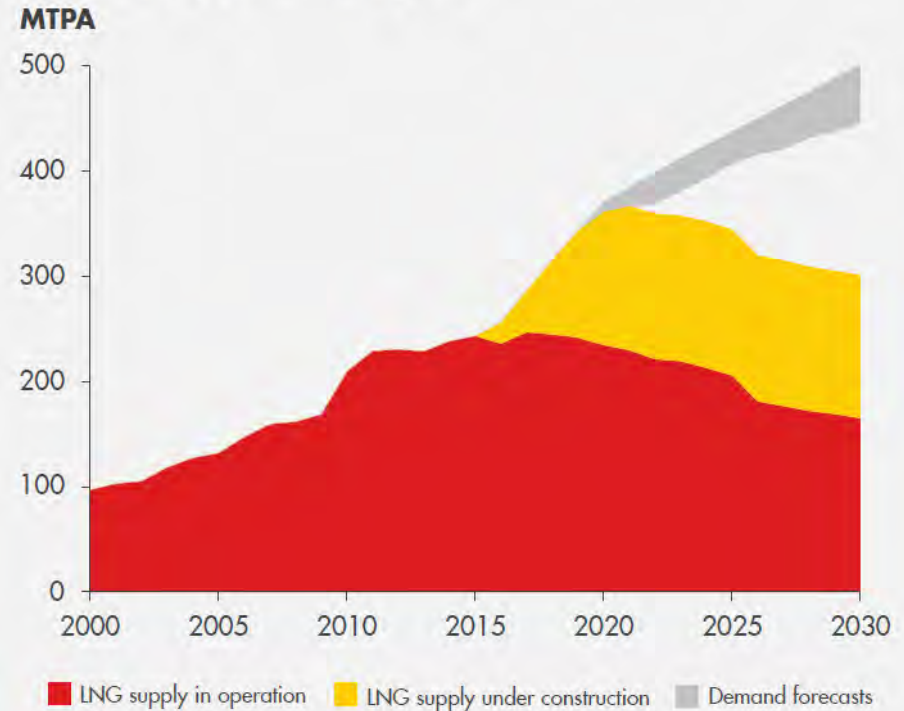
More FiD's needed post 2020

Delivered volume
MTPA



Source: Shell interpretation of IHS (LNG Waterborne Trade, Liquefaction Projects Database) and Wood Mackenzie Q4 2016 data

LNG supply/demand gap



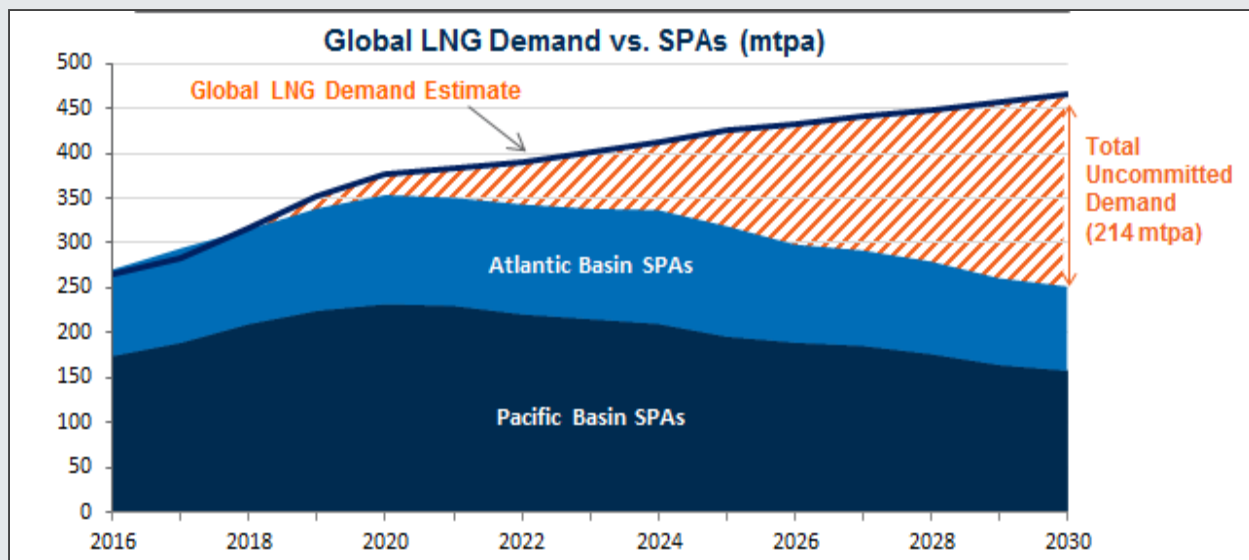
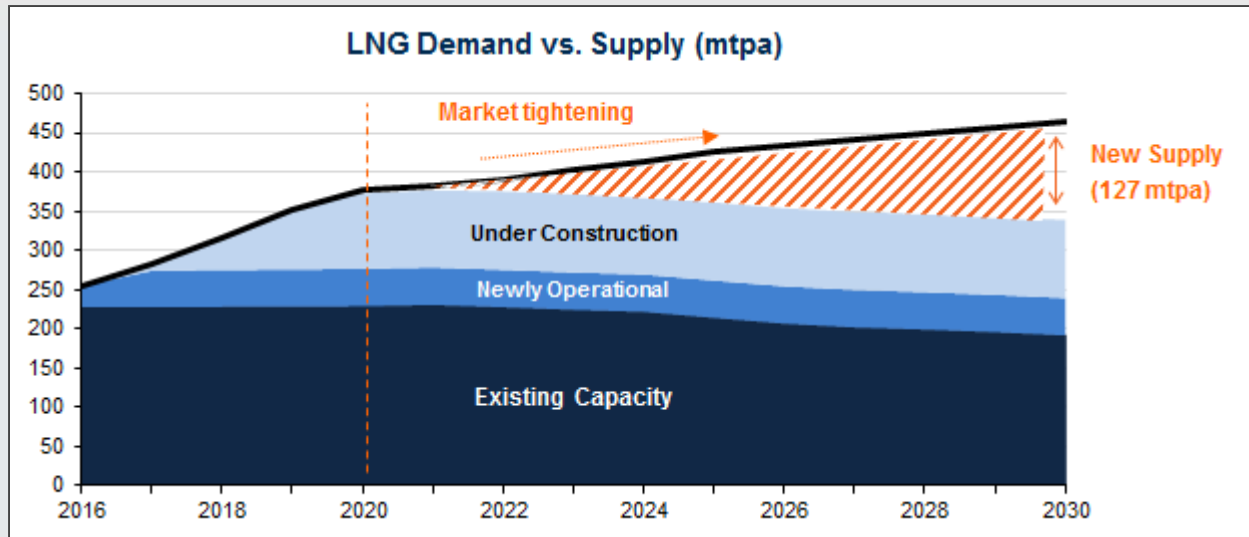
1/3 of new LNG supply growth already online

“Mind the Gap”

Global LNG market needs competitive new supplies to fill the approaching supply gap

Expiration of contracts will result in significant portfolio gaps

~90 mtpa of recontracting demand in addition to underlying market growth

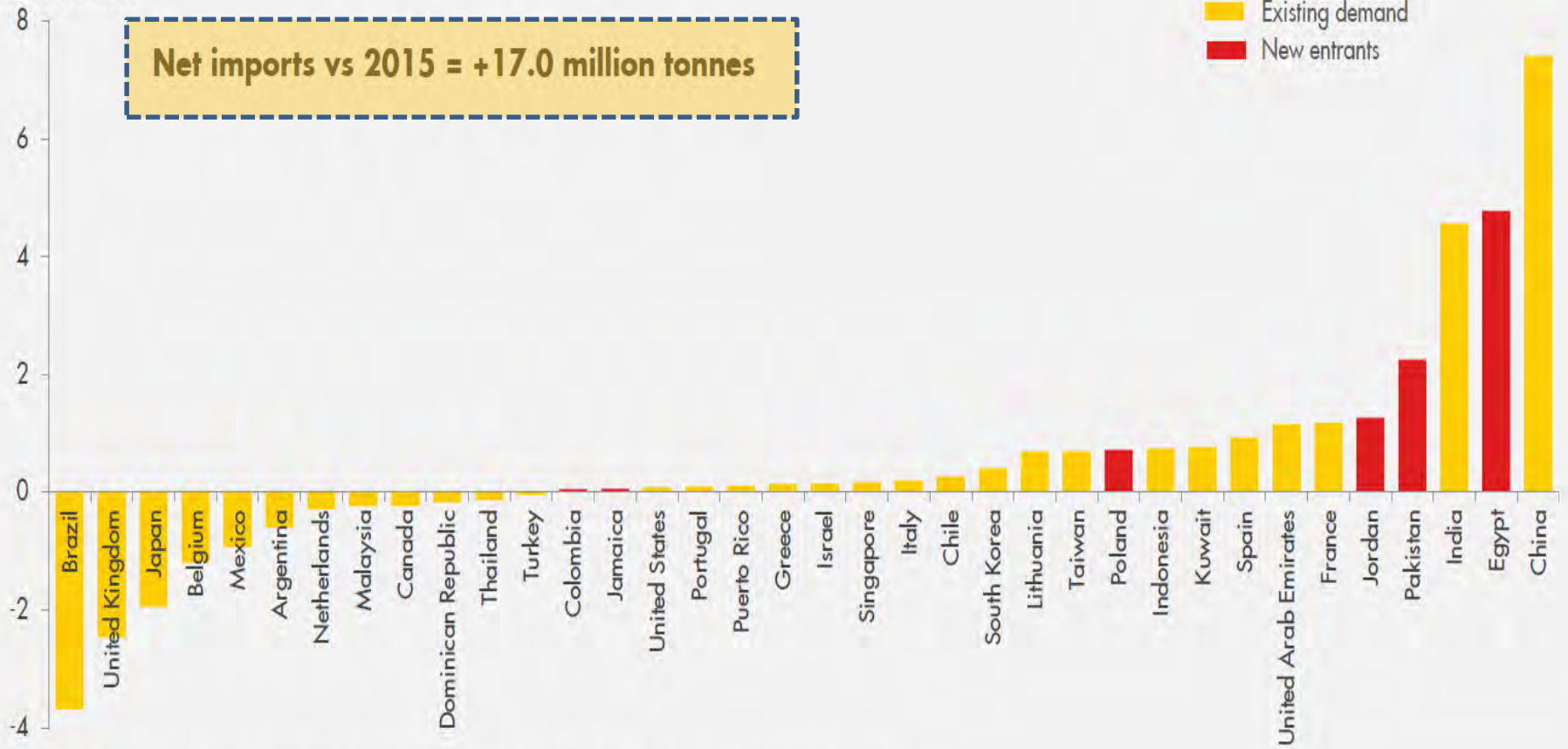


2016 import growth vs 2015

Million tonnes

Net imports vs 2015 = +17.0 million tonnes

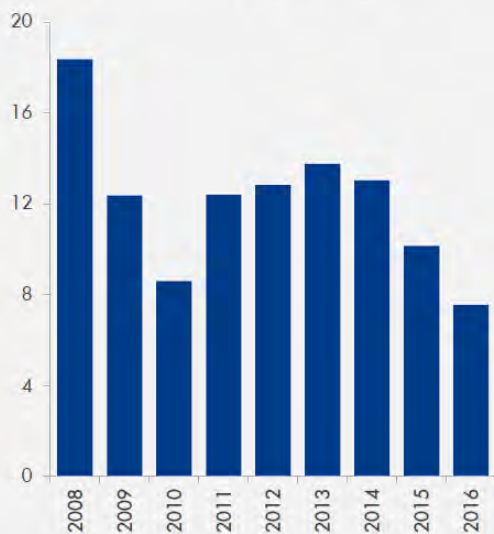
Existing demand
New entrants



Source: Shell interpretation of IHS (LNG Waterborne Trade) data, delivered volumes; red denotes new entrants (2015-2016)

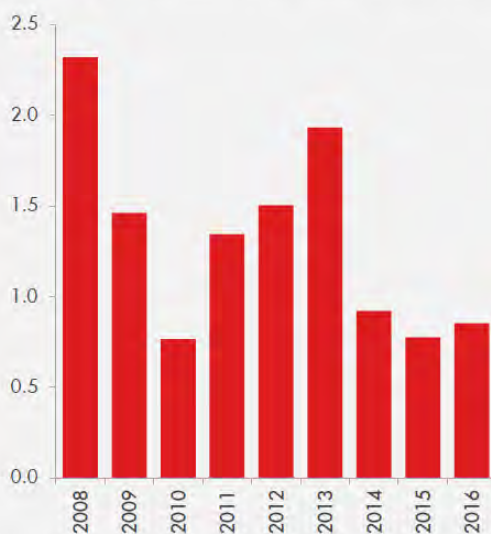
Time for better (buyer's) terms is NOW

Average contract length, years

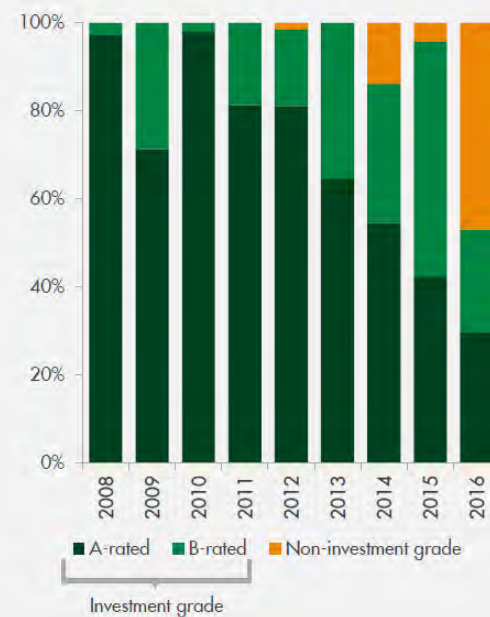


Source: Shell interpretation of IHS (Energy LNG Sales Contracts Database), Moody's and Fitch data

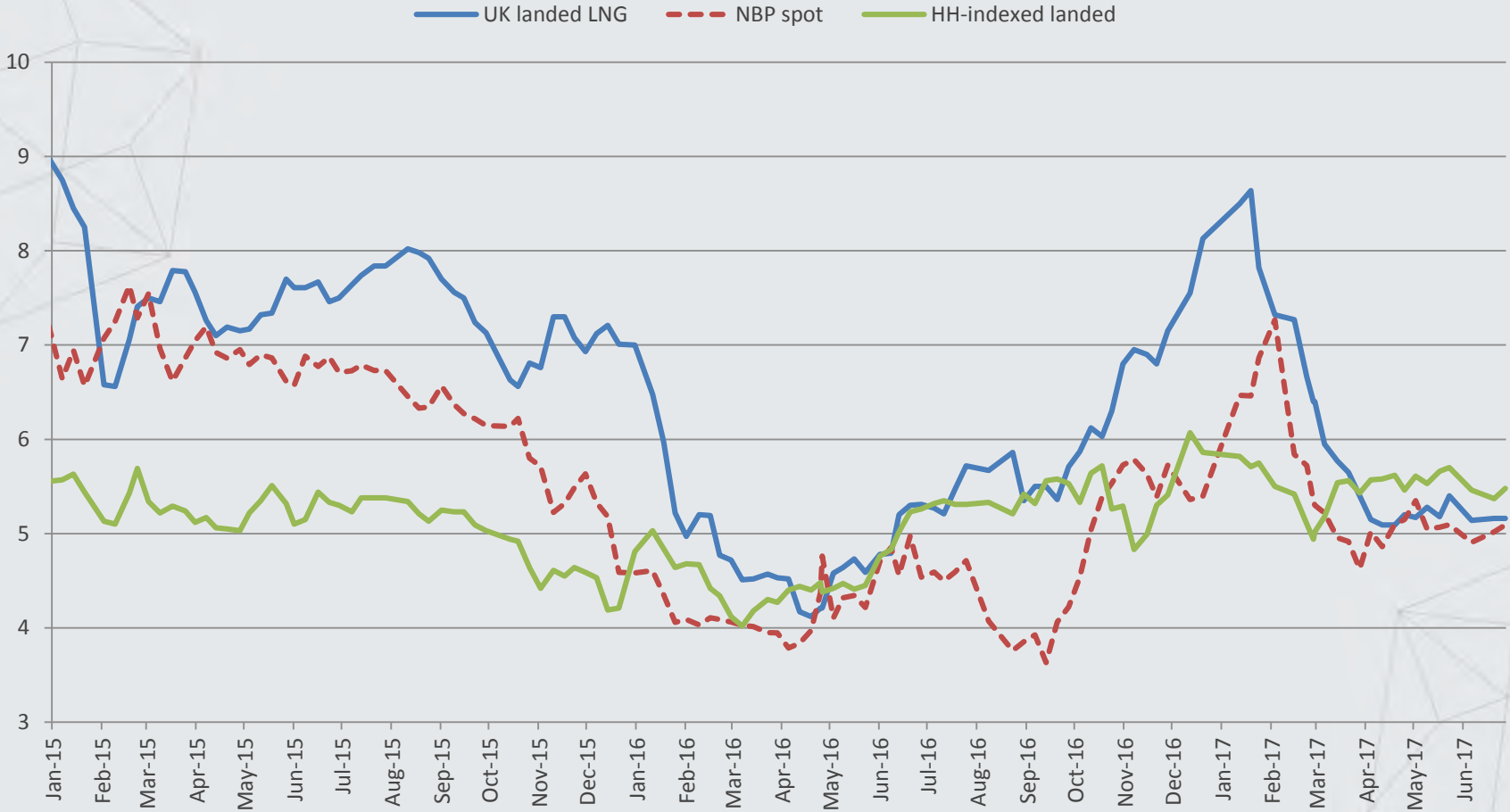
Average contract volume, MTPA



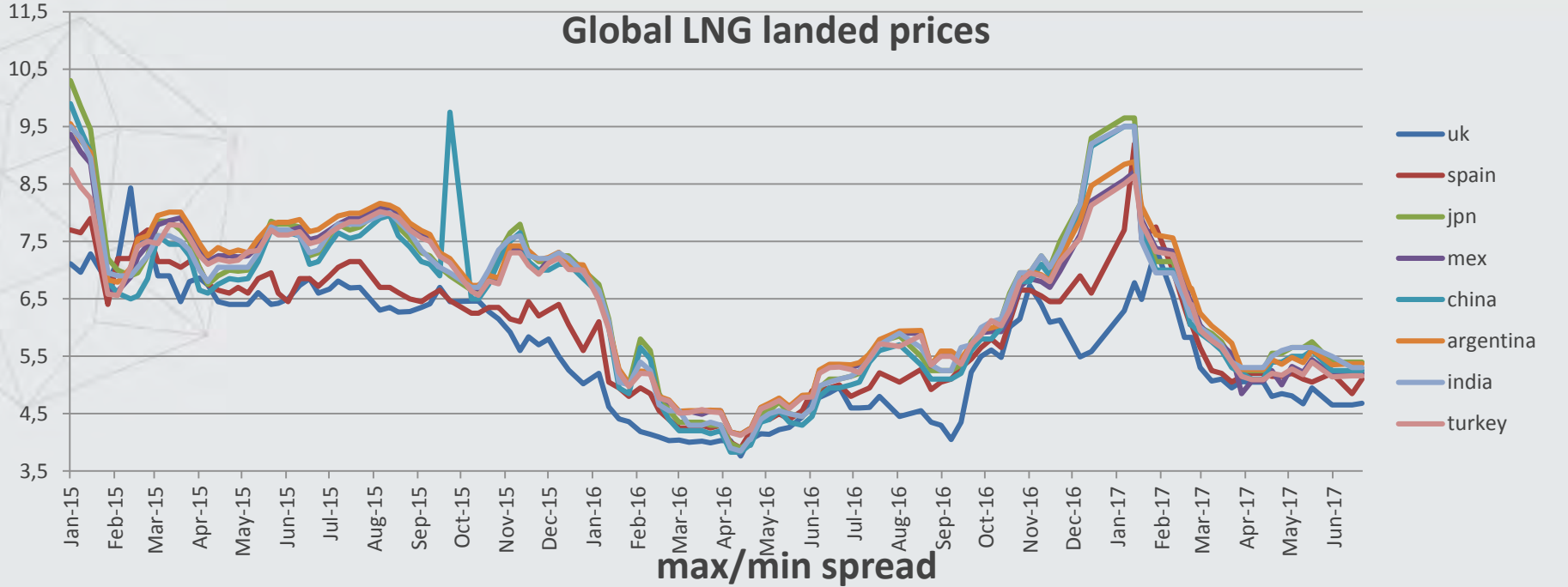
LNG buyer credit ratings



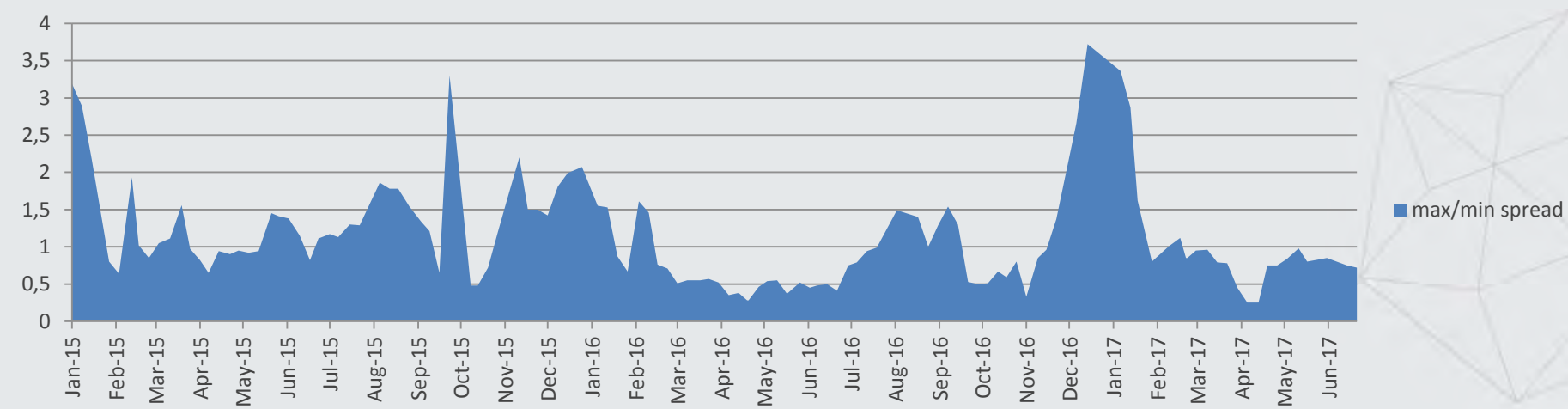
Onshore Supply Optimisation



FOB-enabled optionality



max/min spread

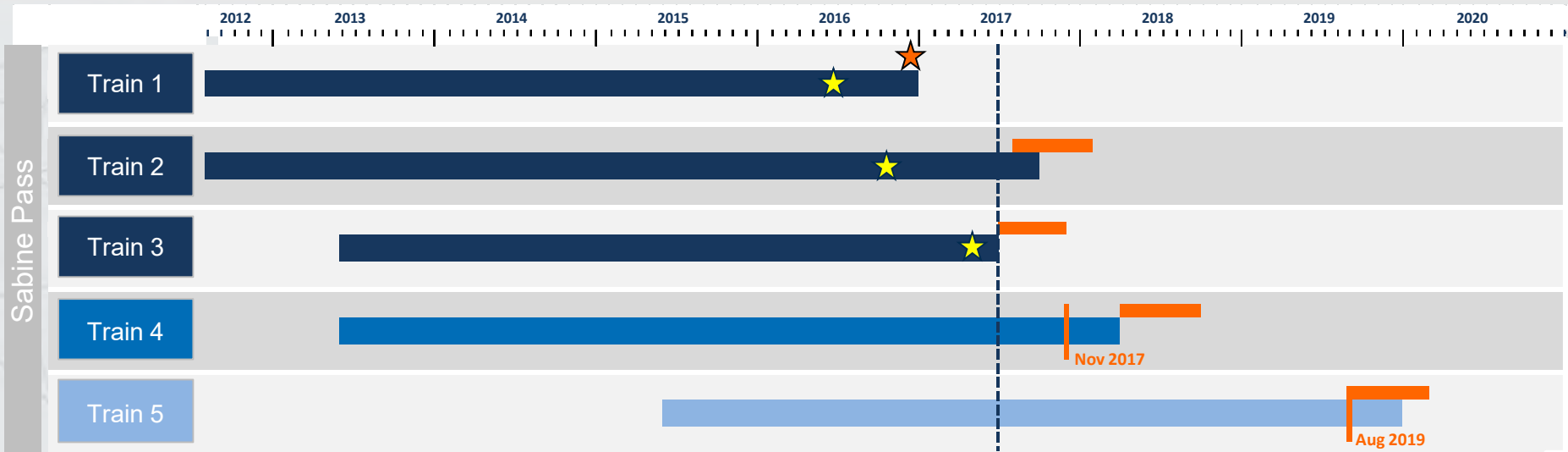


max/min spread

The Japanese Case

- Japanese buyers are **pushing for more freedom to resell cargoes**, following JFTC's statement
- At stake JPN contracts that represent **~10% of global trade** this year
- **60%+** LNG supplied to Japan comes via so-called **delivered ex-ship contracts**
- **25 mln tonnes** in 2017 as **FOB supplies** (14mln AUS, 3.4mln RUS, 2.3mln PNG, 2.2mln OMAN)

Sabine Pass Liquefaction Construction Progress



Guaranteed Schedule
DFCD Window
Current Completion Schedule
Progress
★ Substantial Completion
 ★ DFCD

- **Stage 1 (Trains 1 & 2) complete with trains operational**
 - First two trains completed 6 and 12 months ahead of guaranteed schedule, respectively
- **Stage 2 (Trains 3 & 4) 97.3% complete overall**
 - Train 3 substantial completion occurred March 28, and Train 4 commissioning began in March
 - Engineering and procurement 100% complete, construction 97.4% complete
- **Stage 3 (Train 5) 65.4% complete overall**
 - Soil improvement and piling completed 3 months ahead of schedule
 - Engineering 99.4% complete, procurement 95.3% complete, construction 22.3% complete

Note: Based on Guaranteed Substantial Completion Dates per EPC contract. Construction percentages complete as of April 30, 2017.

Cheniere LNG Cargo Destinations

More than 100 Cargoes (~400 TBtu) Exported and Delivered to 20 Countries Across the Globe



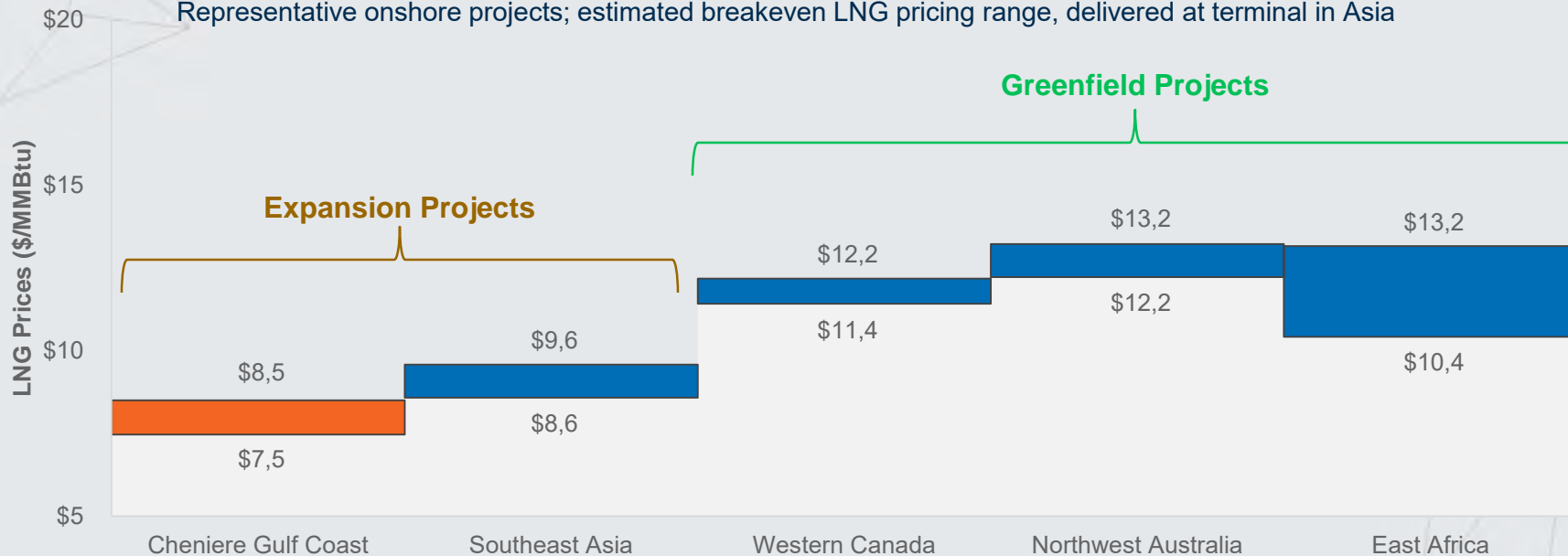
Note: As of April 30, 2017.

Cheniere Offers Low Cost Incremental LNG Liquefaction Capacity

- U.S. natural gas is abundant and cost competitive with other sources of global supply
- U.S. Gulf Coast liquefaction project costs are also significantly lower due to less project development needed and access to affordable and skilled labor
- Estimated delivered LNG cost to Asia from Cheniere expansion trains is competitive compared to other proposed new build LNG projects in Asia, Canada, Australia and Africa

Estimated New Build LNG Project Breakeven Supply Cost

Representative onshore projects; estimated breakeven LNG pricing range, delivered at terminal in Asia



Source: Cheniere interpretation of Wood Mackenzie data, company filings and investor materials.

Note: Breakeven prices derived assuming unlevered after-tax returns of 8% for U.S. projects and 10% on all other projects over construction plus 20 years of operation at 90% utilization. Henry Hub at \$3.00/MMBtu and shipping charter cost at \$80,000 / day

Key Takeaways

- Global LNG market will eventually **tighten post 2020**
- Until then **Buyers can still claim better contractual terms**
- New LNG Suppliers offer **more flexibility**, allowing Buyers to better **monetise global arbitrage** and **supply optimisation** opportunities
- These are **already developing** and not just prospective new **trends** as per recent facts