
CHENIERE ENERGY, INC.

LNG Market Outlook and US LNG's Function -
The Perspective from Cheniere

IEEJ – 20 October 2017



Andrew Walker
VP Strategy and Communication

The bottom half of the slide features a series of light gray, curved, wavy lines that sweep across the page from left to right, creating a sense of movement and depth.

Today's Presentation

- Update on US LNG projects
- U.S. Gas Market Overview
- Impact of U.S. LNG on Global LNG Dynamics



Sabine Pass First Cargo: 24th Feb 2016

Safe Harbor Statements

Forward-Looking Statements

This presentation contains certain statements that are, or may be deemed to be, “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical or present facts or conditions, included or incorporated by reference herein are “forward-looking statements.” Included among “forward-looking statements” are, among other things:

- statements regarding the ability of Cheniere Energy Partners, L.P. to pay distributions to its unitholders or Cheniere Energy Partners LP Holdings, LLC or Cheniere Energy, Inc. to pay dividends to its shareholders or participate in share or unit buybacks;
- statements regarding Cheniere Energy, Inc.’s, Cheniere Energy Partners LP Holdings, LLC’s or Cheniere Energy Partners, L.P.’s expected receipt of cash distributions from their respective subsidiaries;
- statements that Cheniere Energy Partners, L.P. expects to commence or complete construction of its proposed liquefied natural gas (“LNG”) terminals, liquefaction facilities, pipeline facilities or other projects, or any expansions or portions thereof, by certain dates or at all;
- statements that Cheniere Energy, Inc. expects to commence or complete construction of its proposed LNG terminals, liquefaction facilities, pipeline facilities or other projects, or any expansions or portions thereof, by certain dates or at all;
- statements regarding future levels of domestic and international natural gas production, supply or consumption or future levels of LNG imports into or exports from North America and other countries worldwide, or purchases of natural gas, regardless of the source of such information, or the transportation or other infrastructure, or demand for and prices related to natural gas, LNG or other hydrocarbon products;
- statements regarding any financing transactions or arrangements, or ability to enter into such transactions;
- statements relating to the construction of our proposed liquefaction facilities and natural gas liquefaction trains (“Trains”) and the construction of the Corpus Christi Pipeline, including statements concerning the engagement of any engineering, procurement and construction (“EPC”) contractor or other contractor and the anticipated terms and provisions of any agreement with any EPC or other contractor, and anticipated costs related thereto;
- statements regarding any agreement to be entered into or performed substantially in the future, including any revenues anticipated to be received and the anticipated timing thereof, and statements regarding the amounts of total LNG regasification, natural gas, liquefaction or storage capacities that are, or may become, subject to contracts;
- statements regarding counterparties to our commercial contracts, construction contracts and other contracts;
- statements regarding our planned development and construction of additional Trains or pipelines, including the financing of such Trains or pipelines;
- statements that our Trains, when completed, will have certain characteristics, including amounts of liquefaction capacities;
- statements regarding our business strategy, our strengths, our business and operation plans or any other plans, forecasts, projections or objectives, including anticipated revenues, capital expenditures, maintenance and operating costs, run-rate SG&A estimates, cash flows, EBITDA, Adjusted EBITDA, run-rate EBITDA, distributable cash flow, and distributable cash flow per share and unit, any or all of which are subject to change;
- statements regarding projections of revenues, expenses, earnings or losses, working capital or other financial items;
- statements regarding legislative, governmental, regulatory, administrative or other public body actions, approvals, requirements, permits, applications, filings, investigations, proceedings or decisions;
- statements regarding our anticipated LNG and natural gas marketing activities; and
- any other statements that relate to non-historical or future information.

These forward-looking statements are often identified by the use of terms and phrases such as “achieve,” “anticipate,” “believe,” “contemplate,” “develop,” “estimate,” “example,” “expect,” “forecast,” “goals,” “guidance,” “opportunities,” “plan,” “potential,” “project,” “propose,” “subject to,” “strategy,” “target,” and similar terms and phrases, or by use of future tense. Although we believe that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors, including those discussed in “Risk Factors” in the Cheniere Energy, Inc., Cheniere Energy Partners, L.P. and Cheniere Energy Partners LP Holdings, LLC Annual Reports on Form 10-K filed with the SEC on February 24, 2017, which are incorporated by reference into this presentation. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these “Risk Factors.” These forward-looking statements are made as of the date of this presentation, and other than as required by law, we undertake no obligation to update or revise any forward-looking statement or provide reasons why actual results may differ, whether as a result of new information, future events or otherwise.

Reconciliation to U.S. GAAP Financial Information

The following presentation includes certain “non-GAAP financial measures” as defined in Regulation G under the Securities Exchange Act of 1934, as amended. Schedules are included in the appendix hereto that reconcile the non-GAAP financial measures included in the following presentation to the most directly comparable financial measures calculated and presented in accordance with U.S. GAAP.

LNG Trade Today – A Snapshot

- 53 years old
- 264 mt (35 bcf/d) in 2016
- 19 exporting countries
- 40 importing countries*
- ~435 trading ships**
- ~10% of all gas consumed worldwide
- ~30% of internationally traded gas



**including small scale importers; Norway, Sweden, Finland*

***excludes FSRUs, small vessels, laid-up vessels*

Source: GIIGNL Annual Report 2016, BP Statistical Review of World Energy June 2017, Affinity LNG

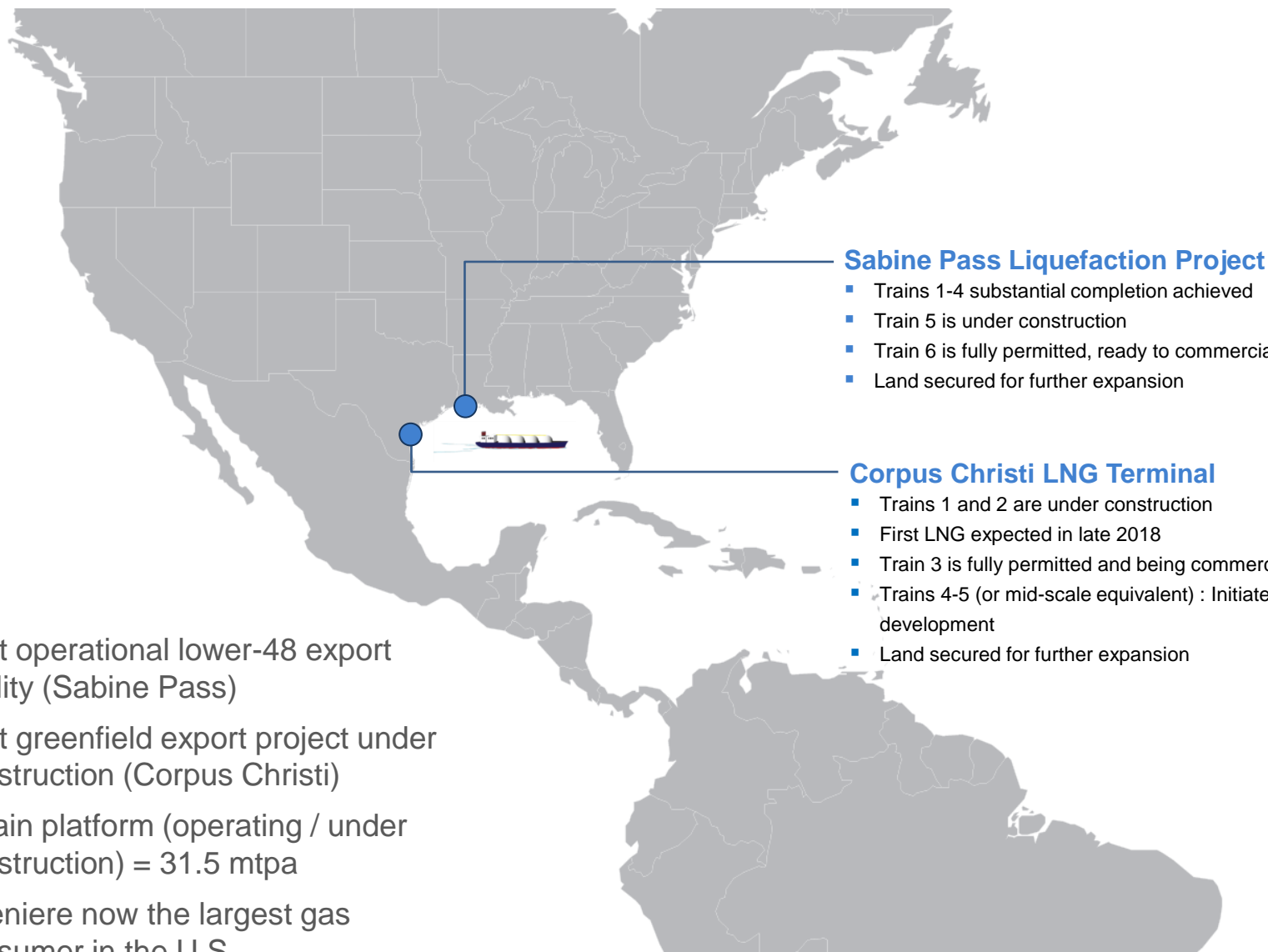
Today's Presentation

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Sabine Pass First Cargo: 24th Feb 2016

Cheniere LNG Platform Along United States Gulf Coast



- First operational lower-48 export facility (Sabine Pass)
- First greenfield export project under construction (Corpus Christi)
- 7 train platform (operating / under construction) = 31.5 mtpa
- Cheniere now the largest gas consumer in the U.S.

Sabine Pass Liquefaction Project



Sabine Pass Liquefaction – 2Q 2017



Corpus Christi Liquefaction – 2Q 2017



Cheniere LNG Projects: Attractive Features

- Cheniere LNG SPAs: LNG price tied to Henry Hub, offer destination flexibility, upstream gas procurement services, no lifting requirements
- SPAs with investment grade off-takers featuring parent as counterparty or guarantor & pricing with HH + fixed fee (no price reopeners)
- EPC contractor: proven track record of execution; proven liquefaction technology

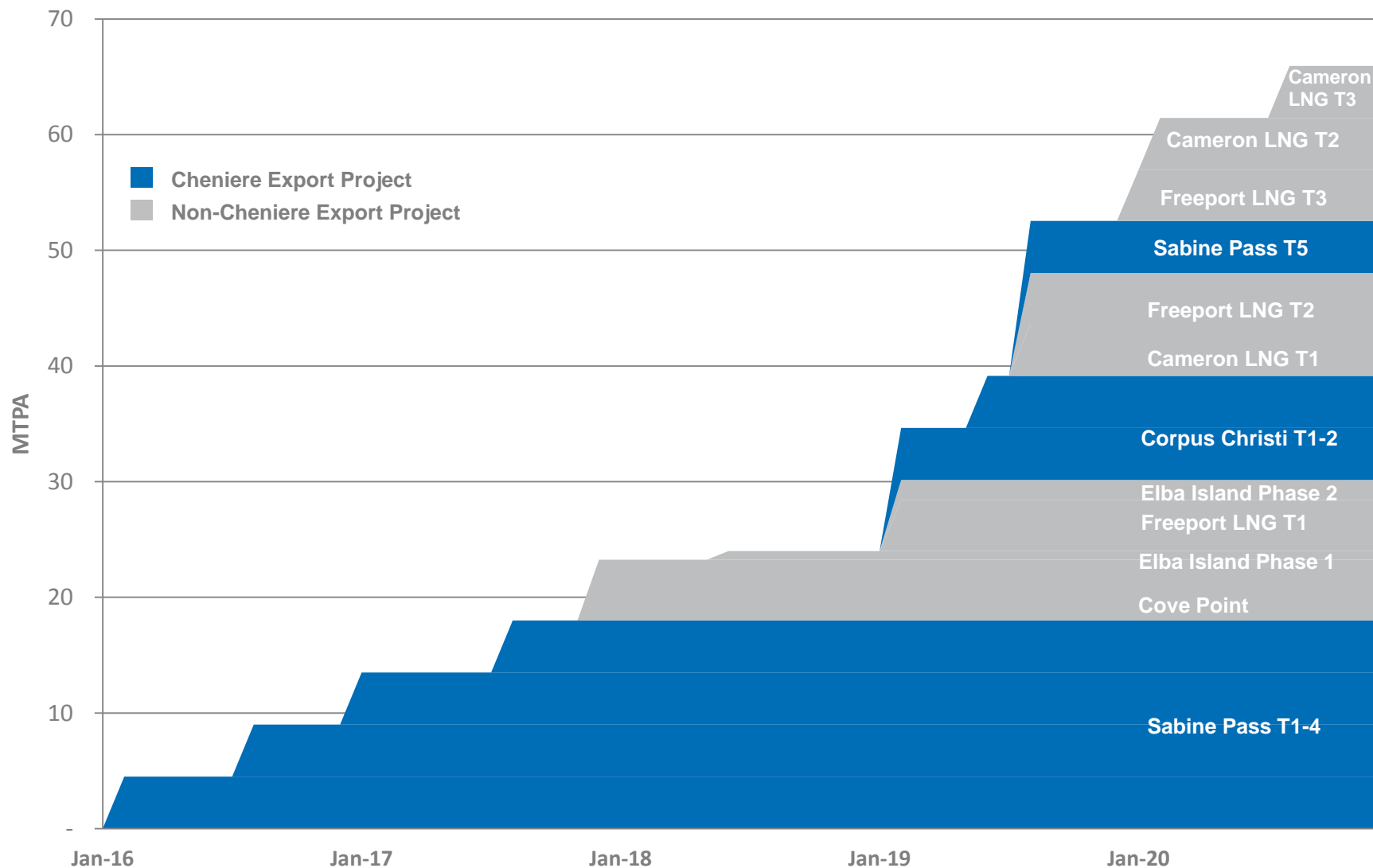
Sabine Pass Customers



Corpus Christi Customers

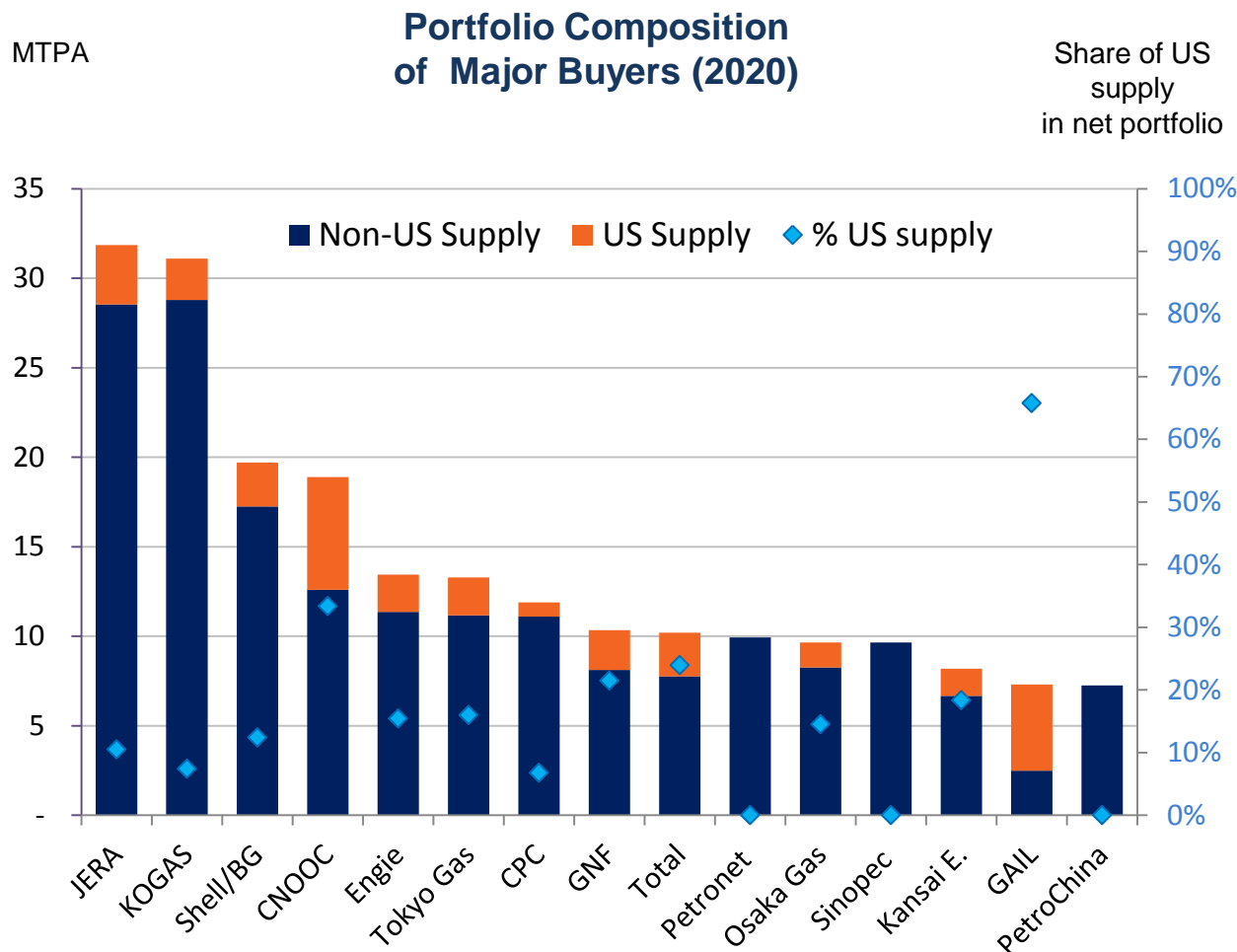


U.S. LNG Capacity Under Construction

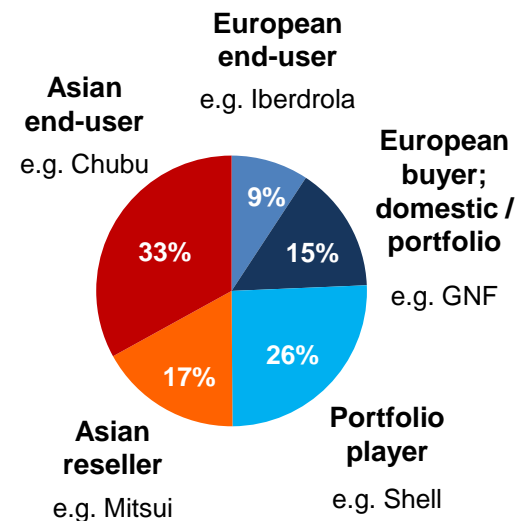


Source: Cheniere Research estimates for first export.
Actual start dates may differ depending on construction schedules

US LNG - A Wide Range of Customers



US FOB off-takers by type



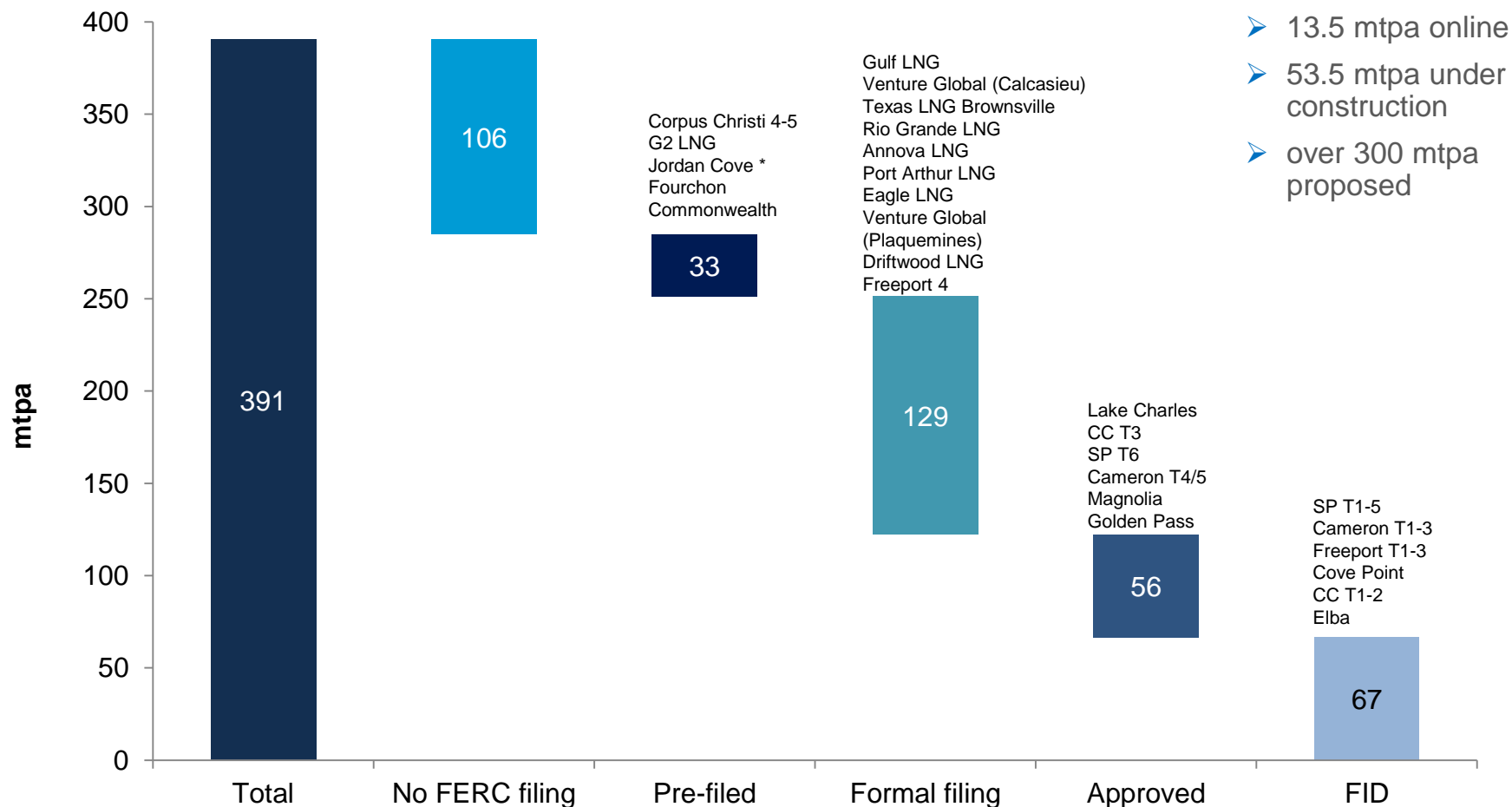
- ~50% sold to Asian entities
- ~42% sold to end-users
- Of 58 % sold to resellers; at least 57% resold / allocated

Source. Cheniere interpretation of Wood Mackenzie Data (2017). Top 15 portfolios shown. Volumes are net of re-sales.

Current Status of US LNG Projects

Note: Excludes Alaska

FERC Status (as of September 2017)



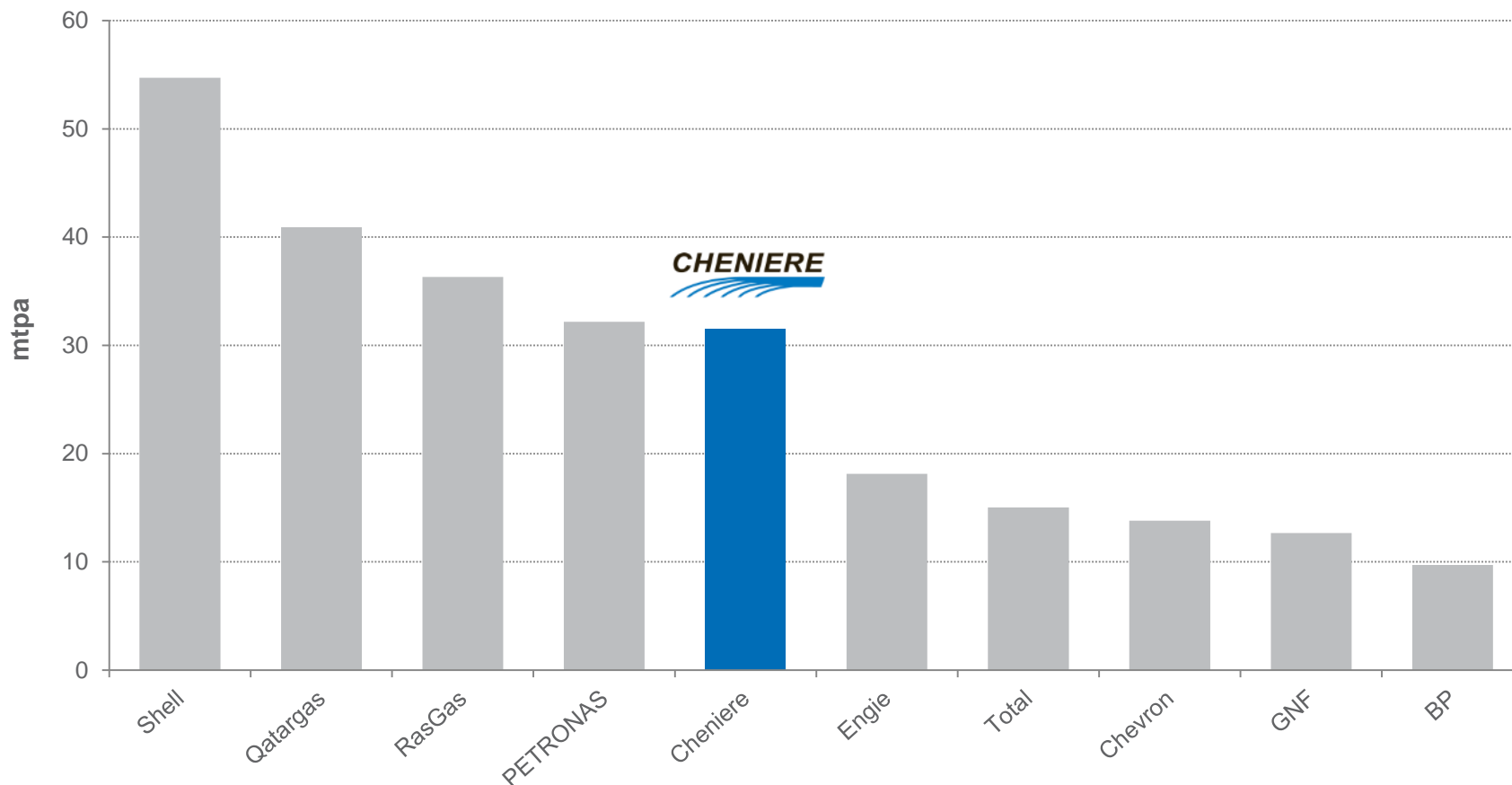
Source: US FERC, US DOE, and press reports *Previously denied by FERC and had to re-file

Projected Company Ranking by LNG Sales in 2020

On Track to Be a Top-5 Seller Less Than 5 Years After First Cargo

Projected Top LNG Suppliers by Company - 2020

Volumes for Projects Existing and Under Construction



Source: Cheniere Research, Wood Mackenzie

Note: volumes include 'equity' LNG, third-party offtake and own project offtake. Tolling facility production reflected in offtaker volumes.

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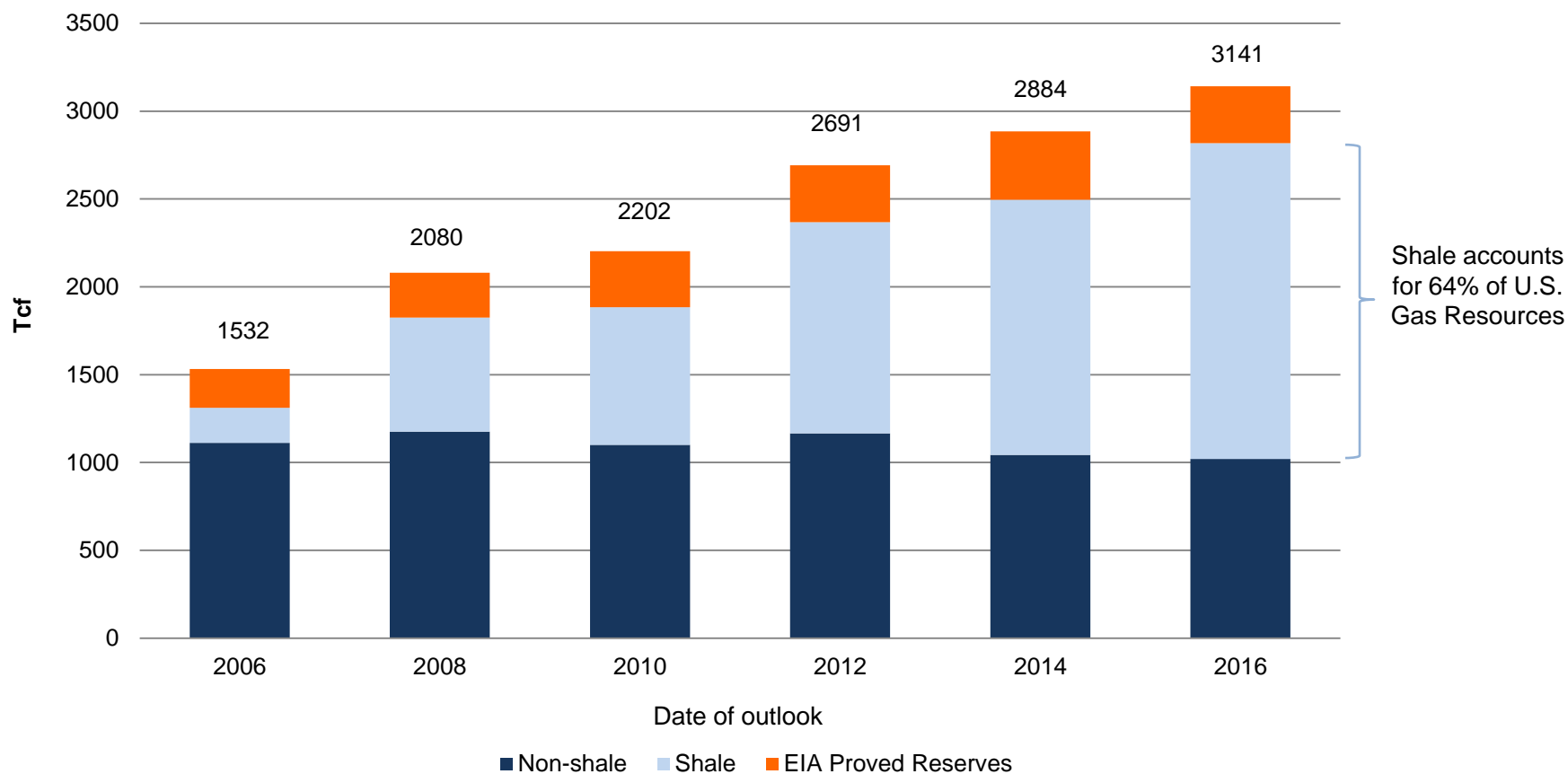


Sabine Pass First Cargo: 24th Feb 2016

Shale Gas has Doubled U.S. Natural Gas Resources Since 2006 ...

- Total U.S. future gas supply (reserves + resources) stands at record 3,141 Tcf
- Represents 100+ years of current domestic needs

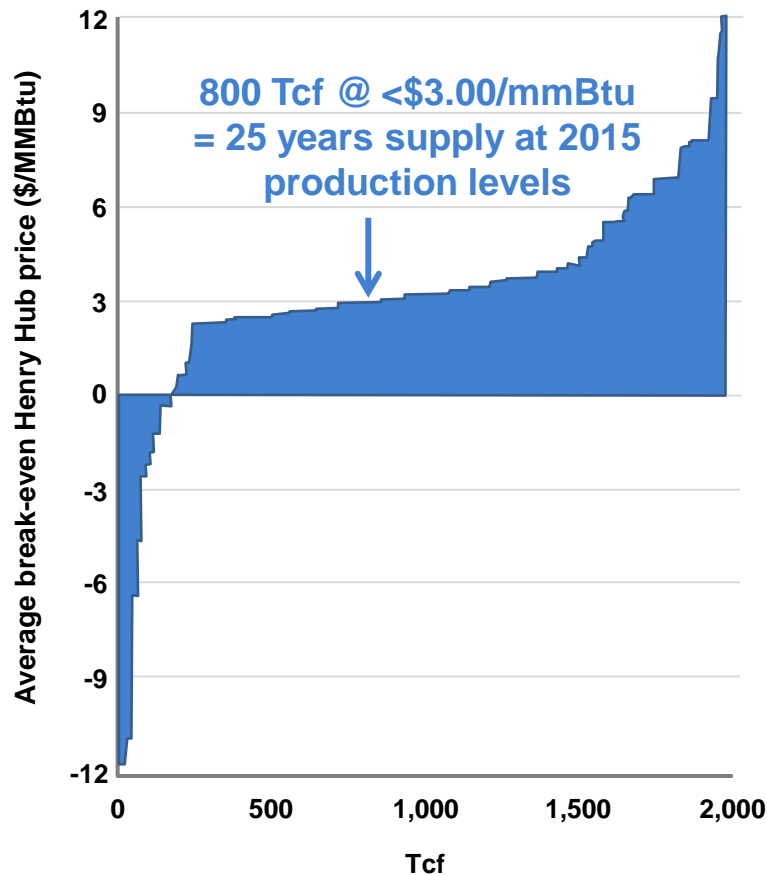
U.S. future supply of natural gas



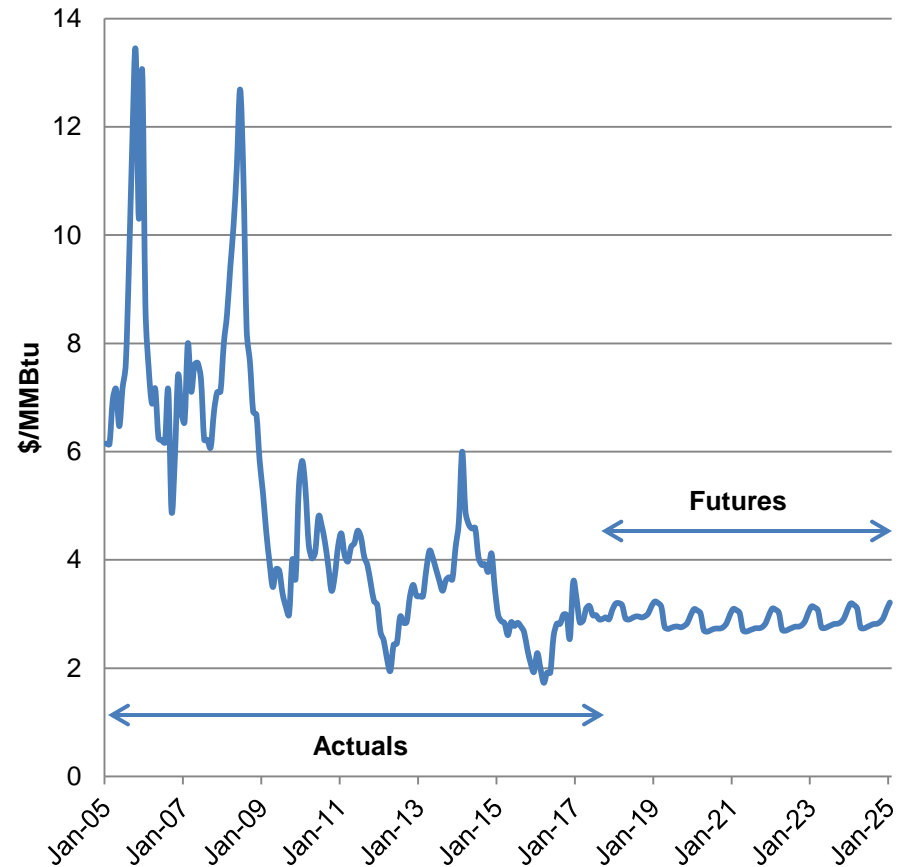
Source: Potential Gas Committee, 2017; EIA (Proved Reserves)

... And Has Fundamentally Reset Price Expectations

Break-even price at Henry Hub for North American natural gas resources

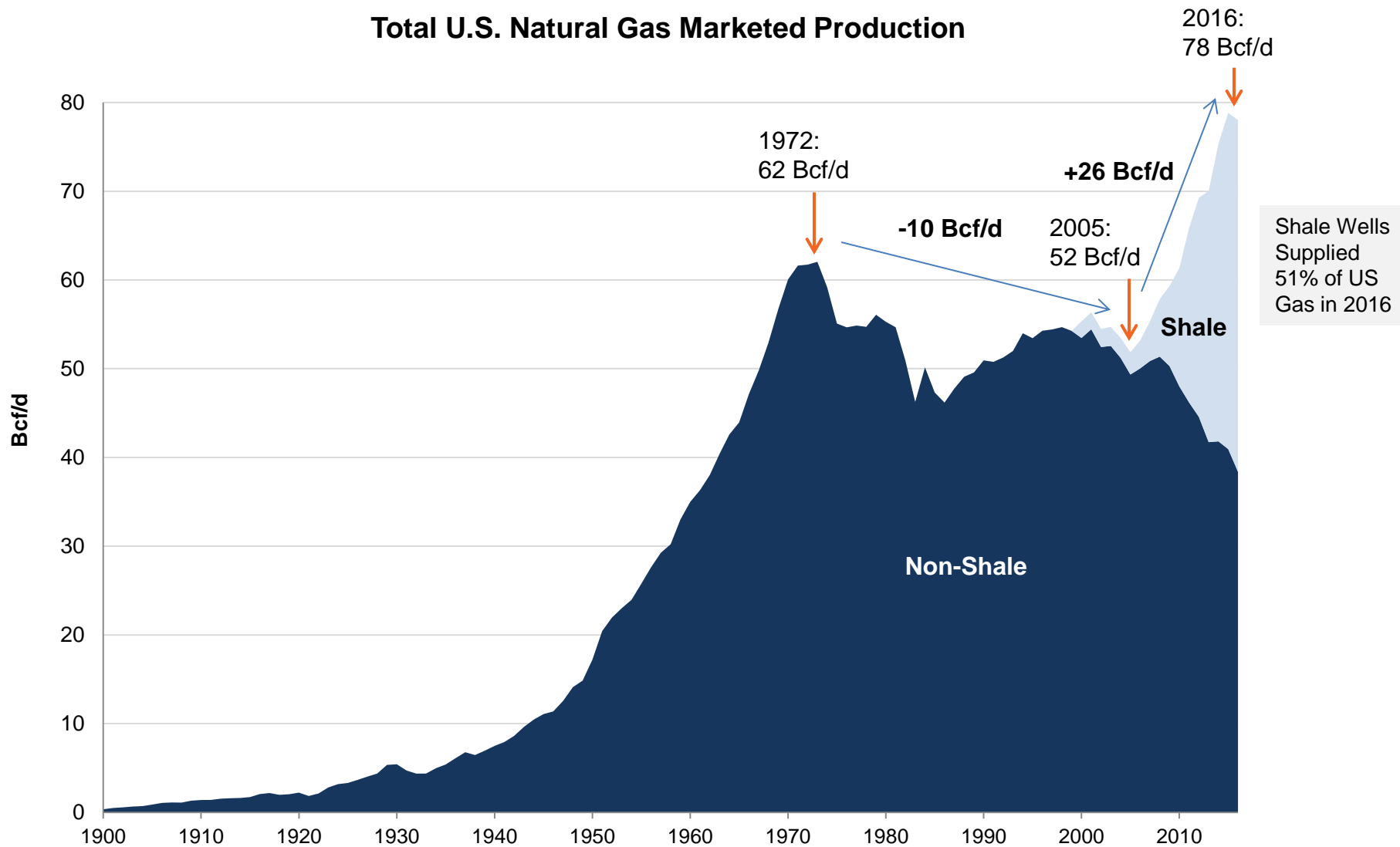


Henry Hub Natural Gas Price



Source: EIA Historical Henry Hub to Oct. 2017, NYMEX Henry Hub Futures as of Oct. 11, 2017

U.S. Natural Gas Production

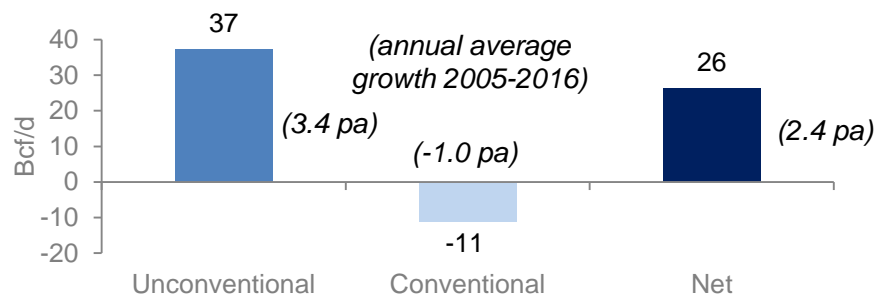


Source: EIA Natural Gas Monthly Sept. 2017

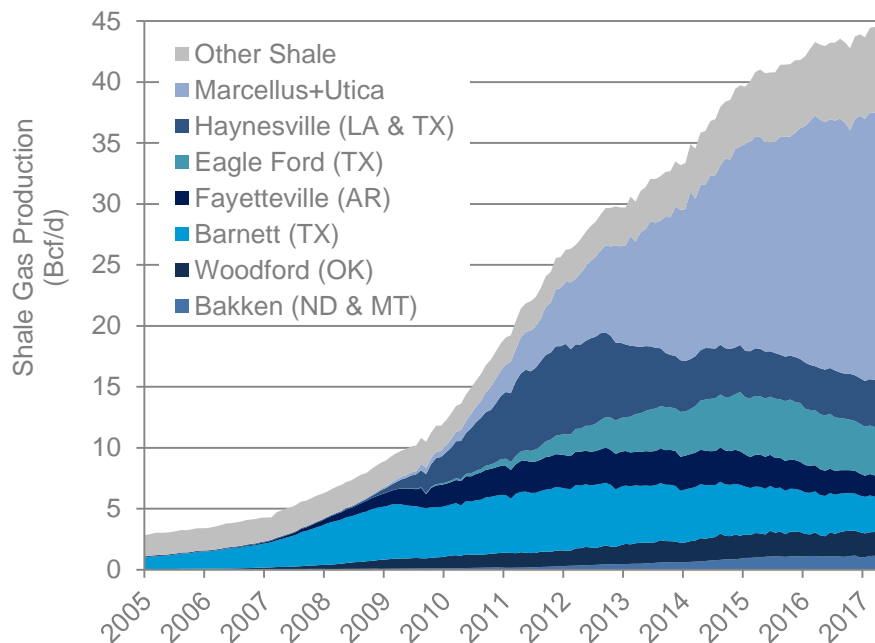
Supply and Demand since 2005

Supply

Marketed Production Growth 2005 to 2016



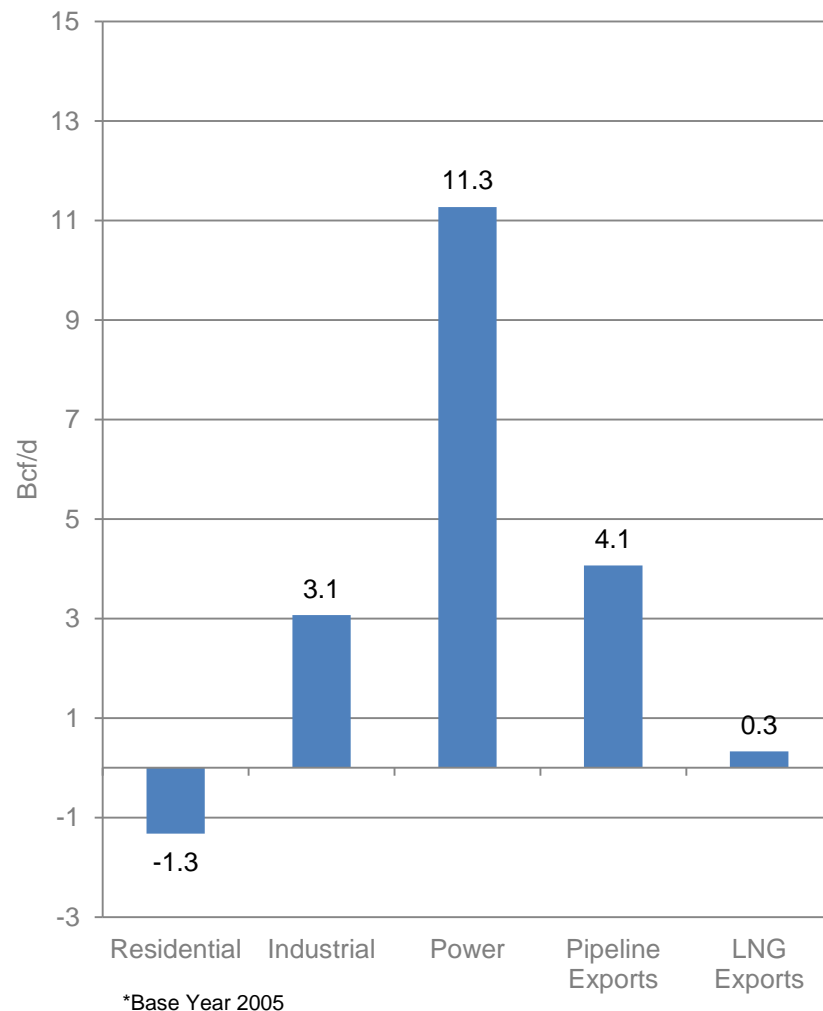
Shale Gas Production



Source: EIA

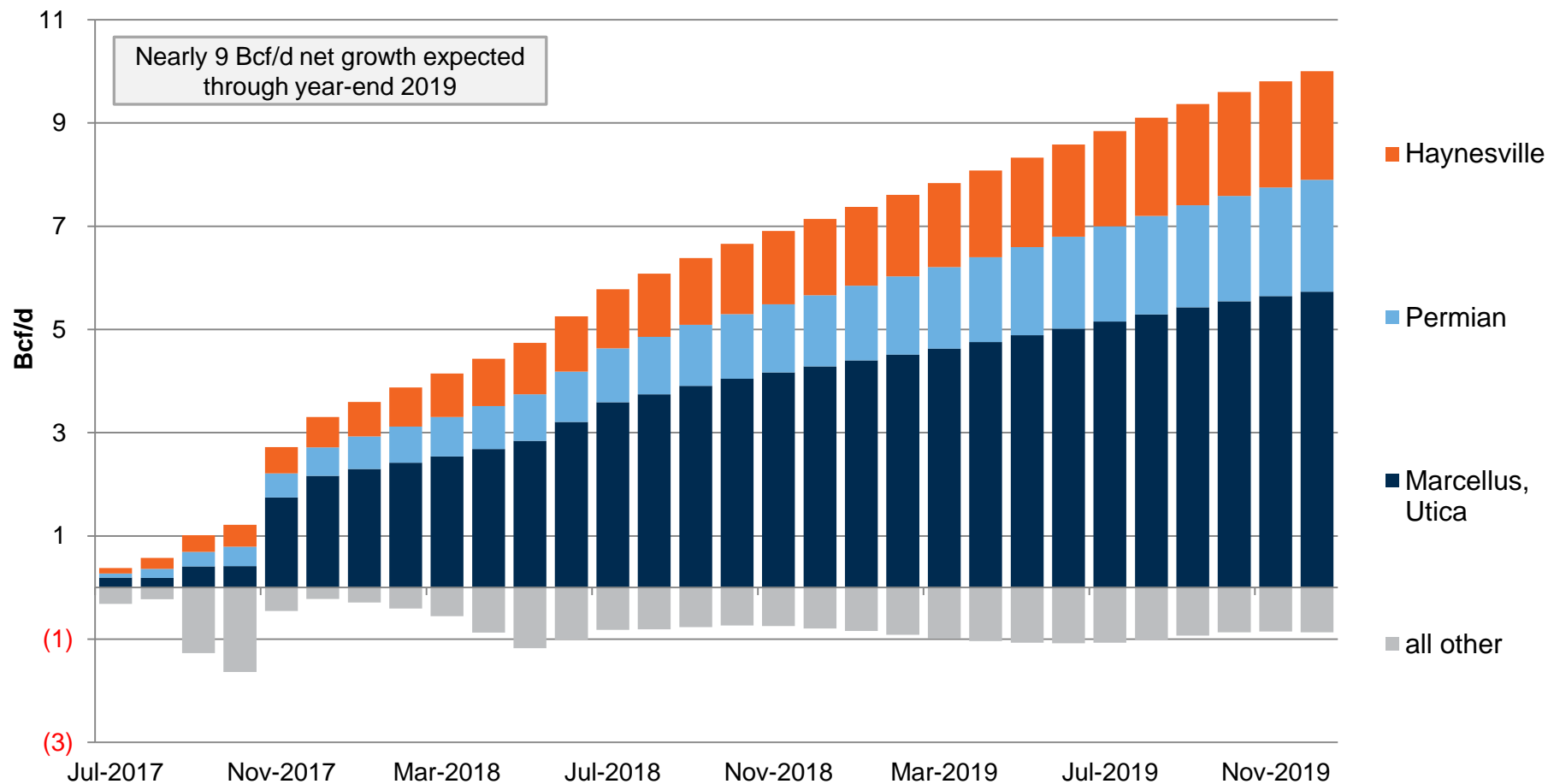
Consumption

Incremental natural gas consumption 2005 - 2016



Dry Gas Growth Will Be Driven By Marcellus/Utica, Permian & Haynesville

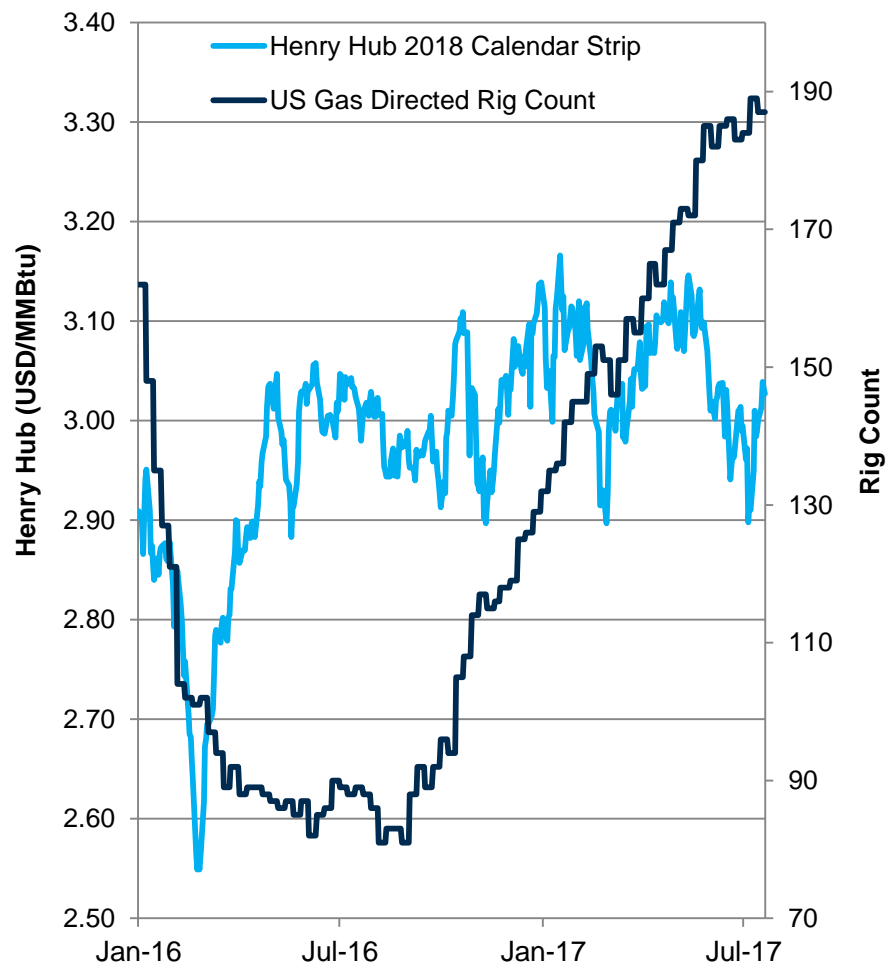
Cumulative Production Growth from mid-2017



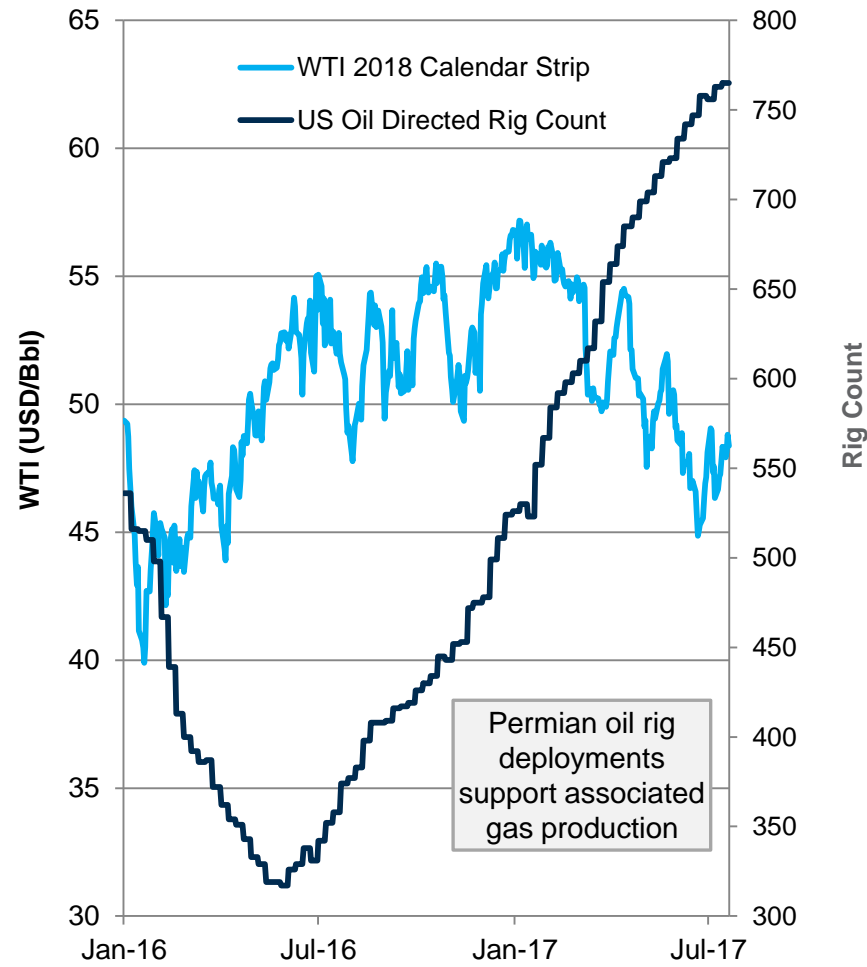
Source: Spring Rock; Cheniere Research

Current Production Growth Supported By Prices Below \$3.50 Henry, \$60 Oil

US Gas Rigs vs. NYMEX cal-2018 Henry Hub strip



US oil rigs vs. NYMEX cal-2018 WTI strip

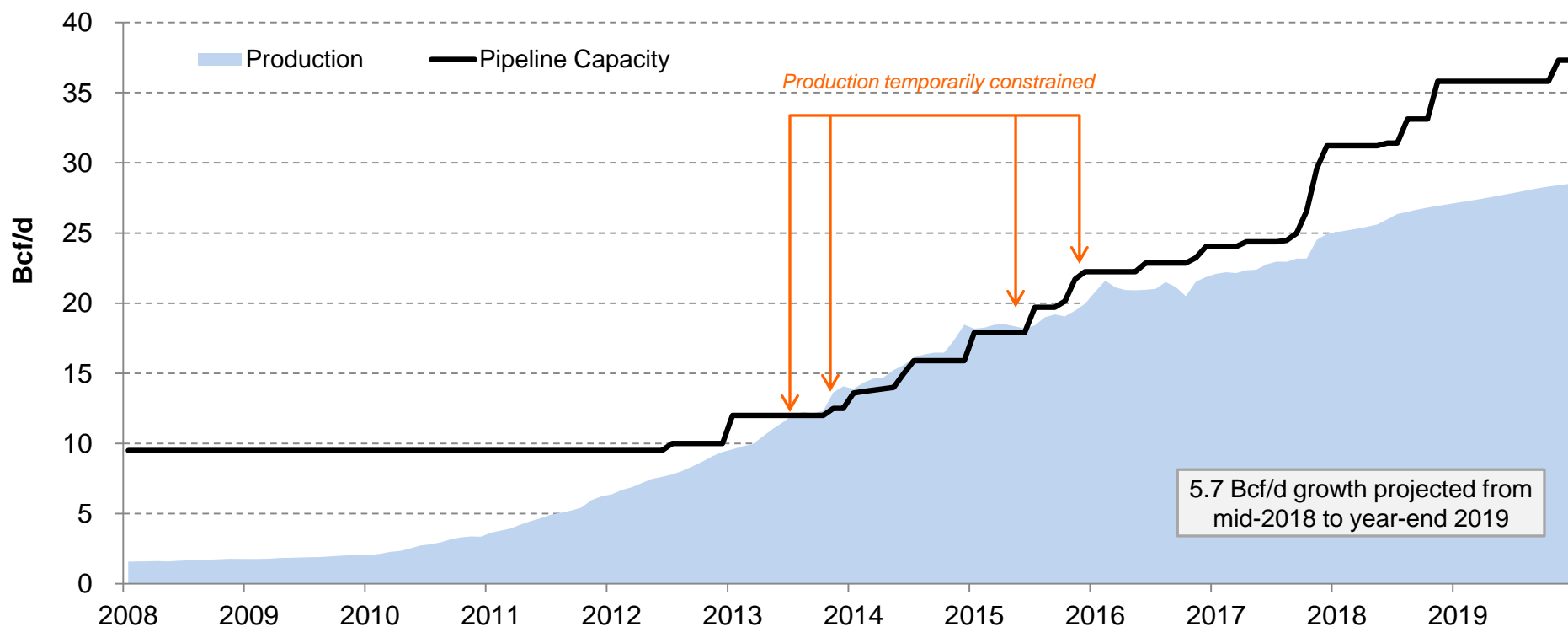


Source: NYMEX, Baker Hughes

Northeast Output Will Soon Be Unconstrained By Pipeline Infrastructure

- Incremental pipeline projects will provide up to 7 Bcf/d of additional market access by early 2018
- Additional 6 Bcf/d takeaway capacity is expected to enter service from mid-2018 through year-end 2019

Northeast US Dry Natural Gas Production vs. Pipeline Takeaway Capacity
Marcellus/Utica production in New York, Ohio, Pennsylvania, West Virginia



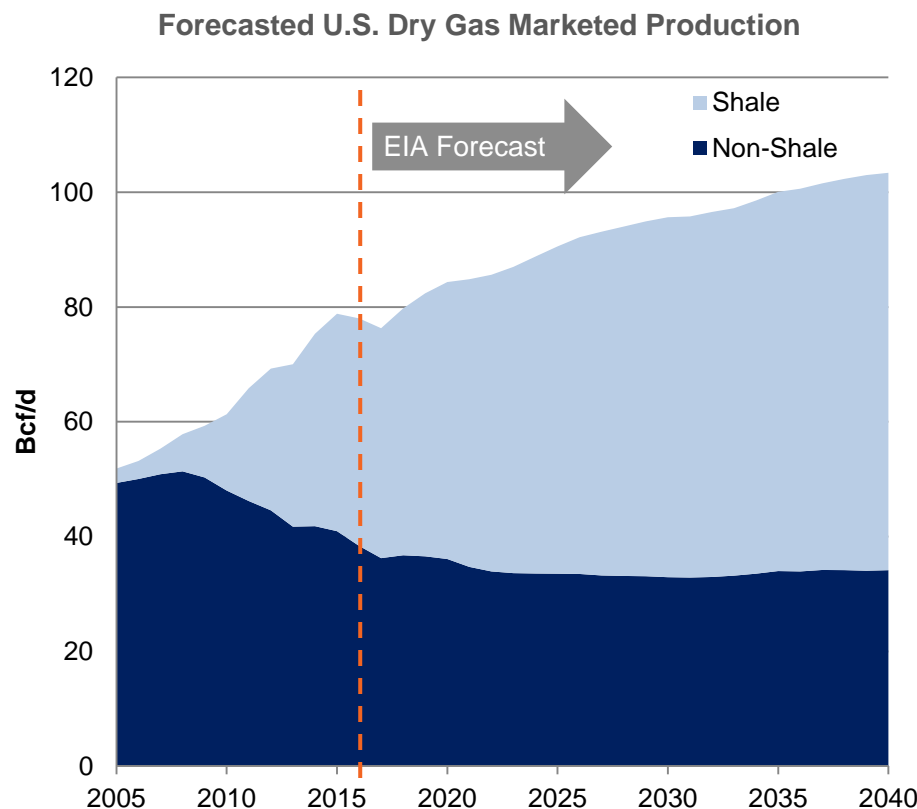
EIA U.S. Outlook to 2040

Gas production outlook

EIA base case sees dry gas growing 31 Bcf/d from 2016

Shale gas will be 67% of total dry gas production

Gas production grows at 1.5% CAGR through 2040

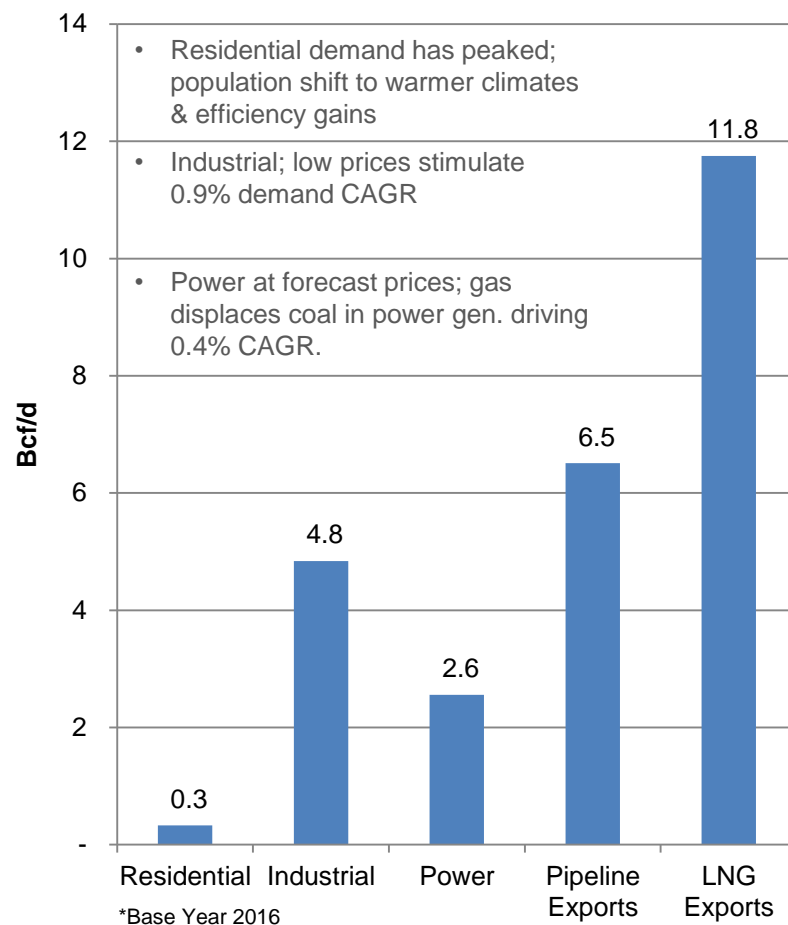


Source: EIA AEO 2017

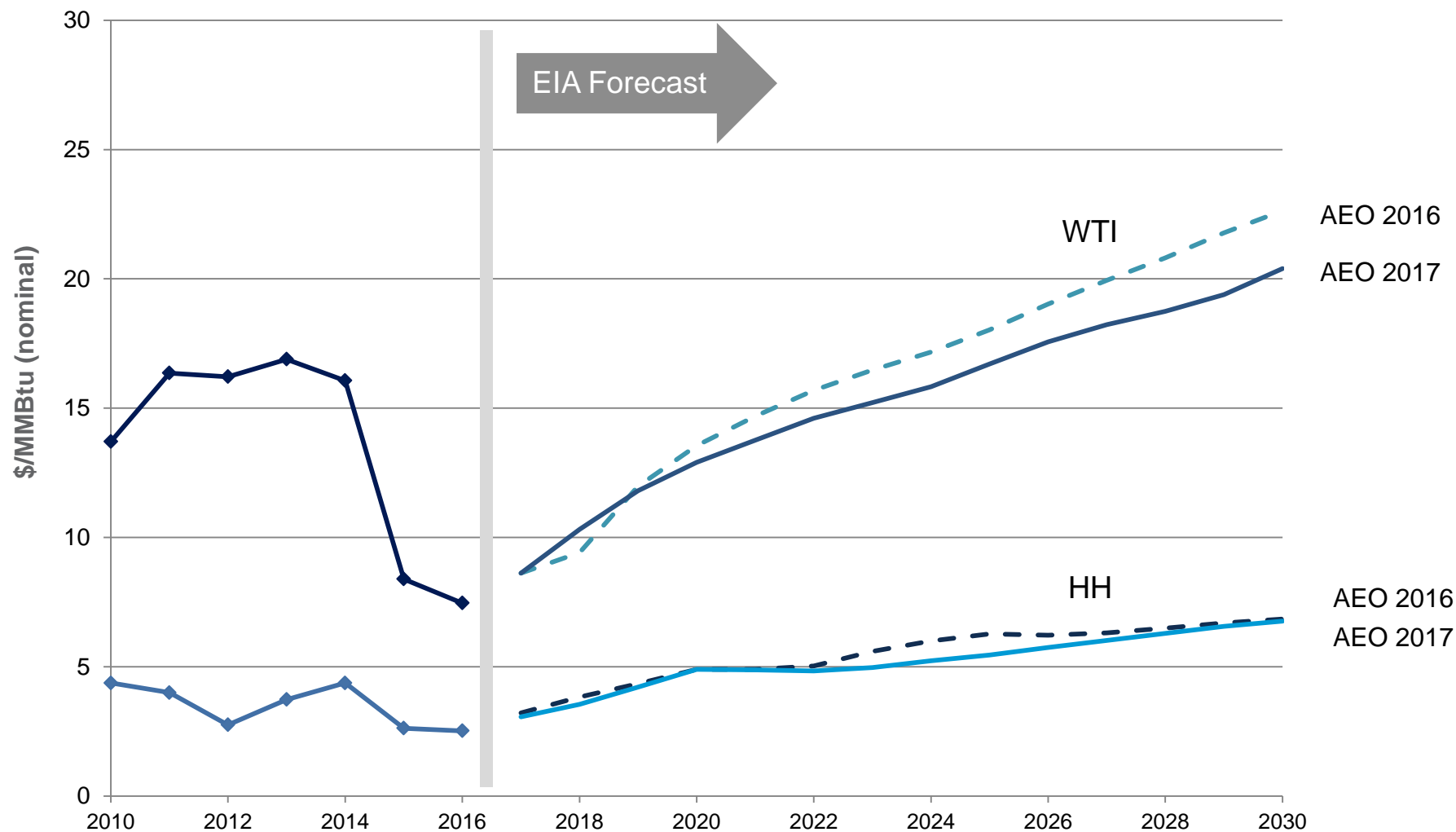
Gas consumption outlook

U.S. Gas demand grows at 1.5% CAGR

Incremental Natural Gas Consumption by 2040



EIA Price Outlook for Henry Hub and WTI



Source: EIA Annual Energy Outlook 2016,2017; Note: Actuals to 2016 from EIA

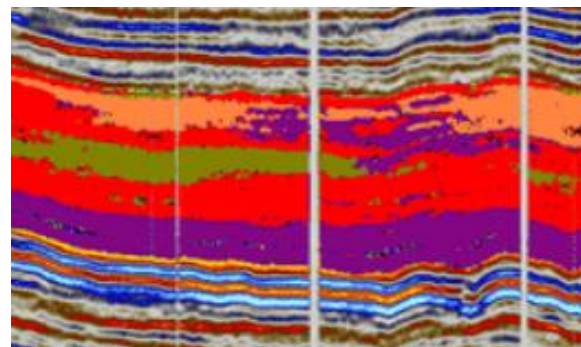
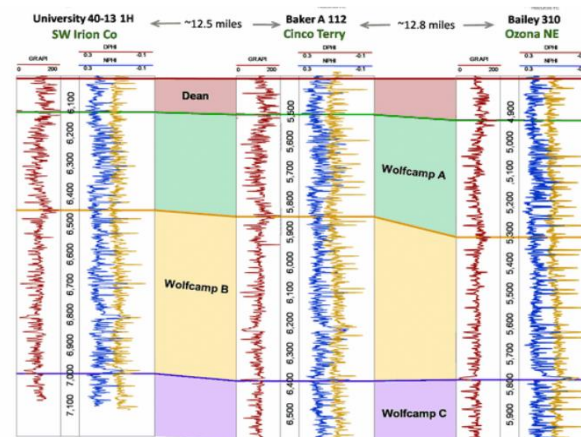
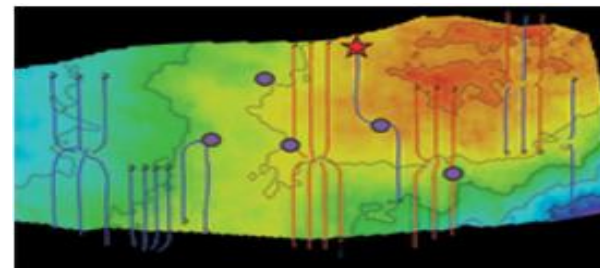
U.S. Natural Gas Production Continues to Evolve

■ Recent evolution

- **Larger wells:** average initial production (IP) rates have more than tripled since 2009
- **Longer laterals:** average horizontal feet drilled in Marcellus have doubled since 2009
- **Multi-stage fracking:** producers have increased number of stages used in hydraulic fracturing process
- **Innovation:** operational efficiencies improving drill times

■ Future evolution - continued technological advances to reduce costs and increase efficiencies

- **Data processing**, better software modelling and real time monitoring to help with well spacing, space staging, completion engineering...
- **Enhanced recovery factors** by experimenting with pump fluids and recovery methods
- **Targeted and steered drilling** to make more precise cuts into deep terrain
- **Extracting from multiple benches** of production within same play
- **Non-intrusive technologies** such as micro-seismic geophones and electromagnetics.



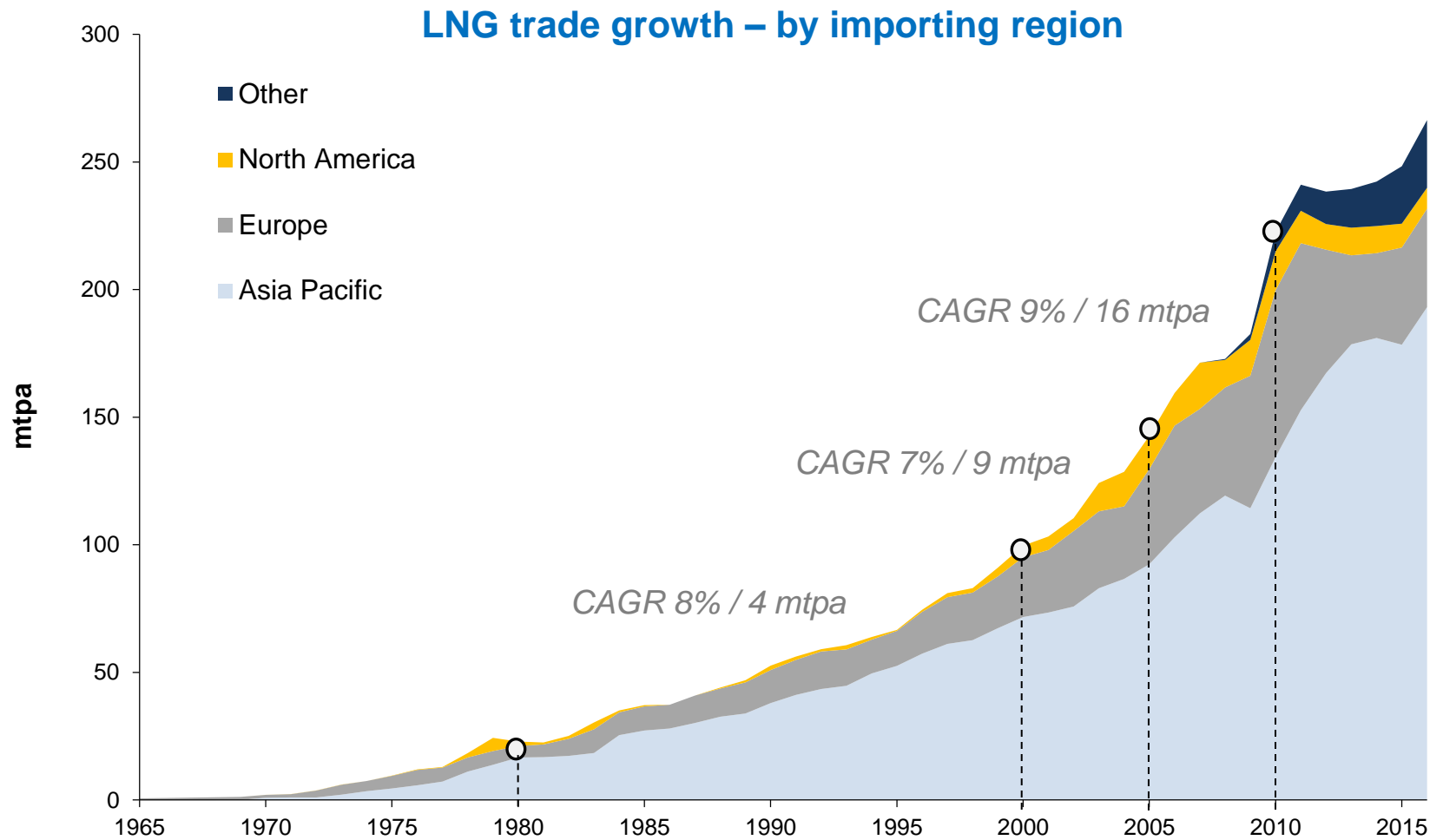
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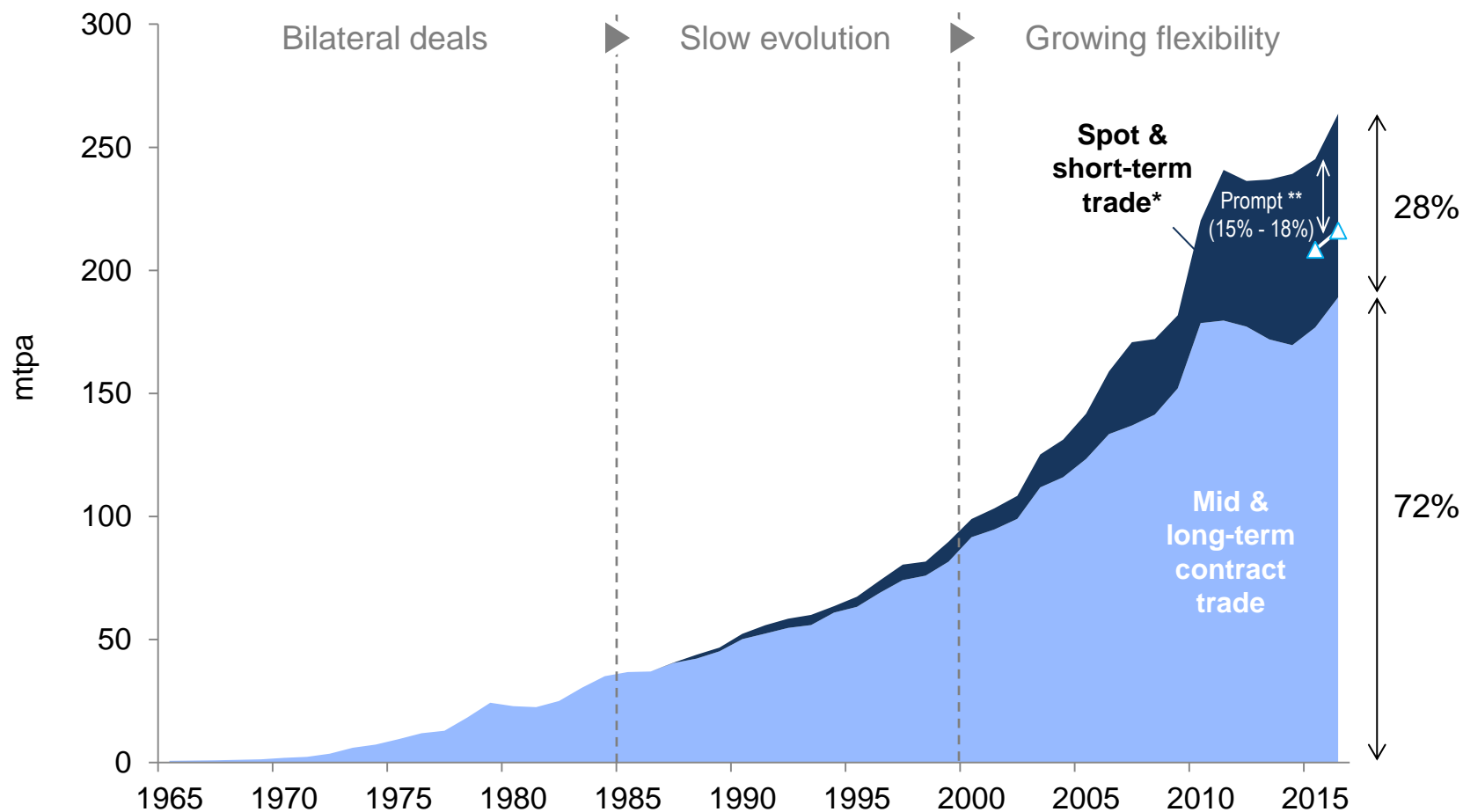
LNG: A High Growth Industry



Source: IHS Markit (2017)

Commercial Evolution Underway in Contract Length

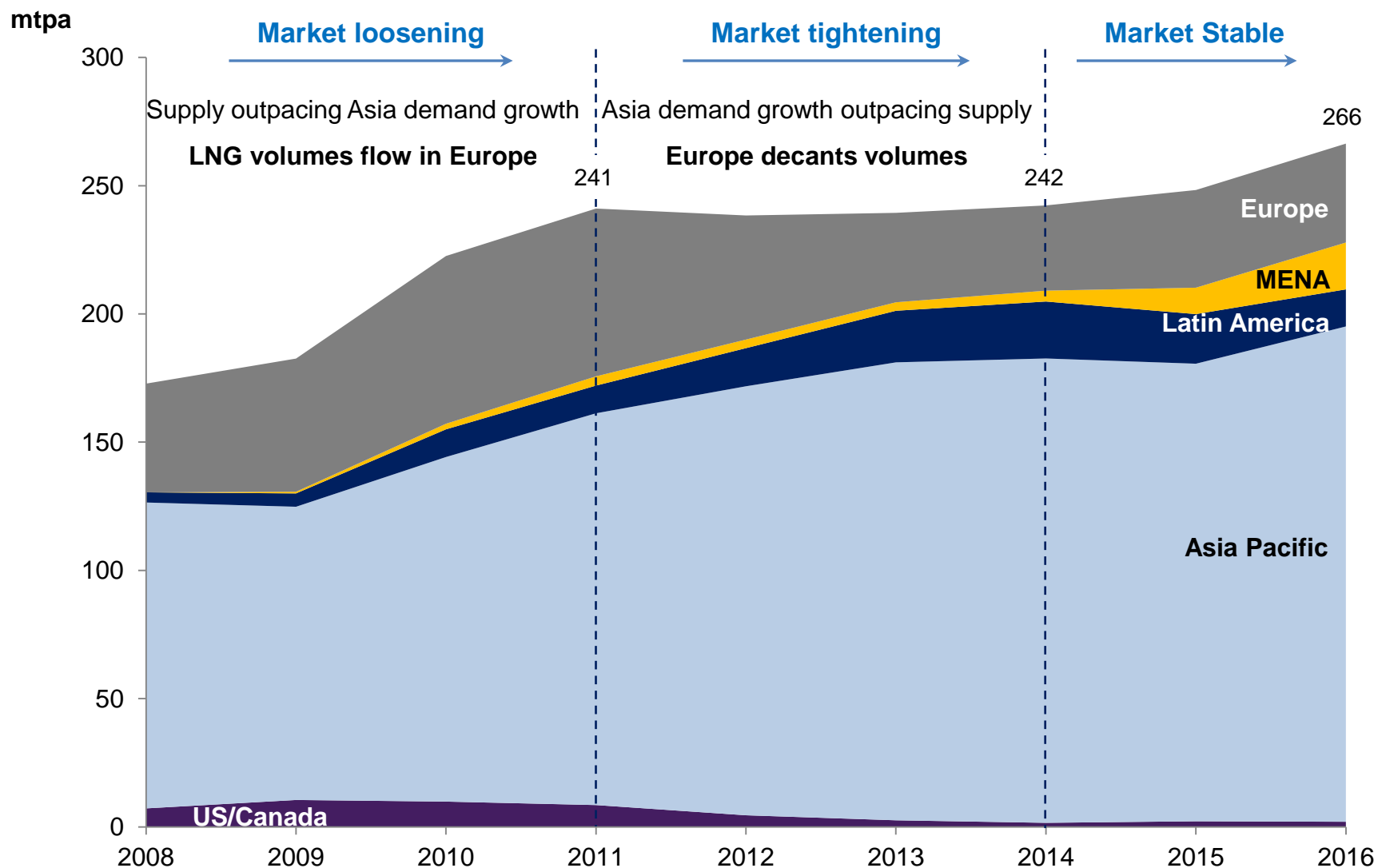
LNG trade by contract length



* Contract duration of 4 years or less (GIIGNL) ** Prompt = delivered within 3 months of transaction date

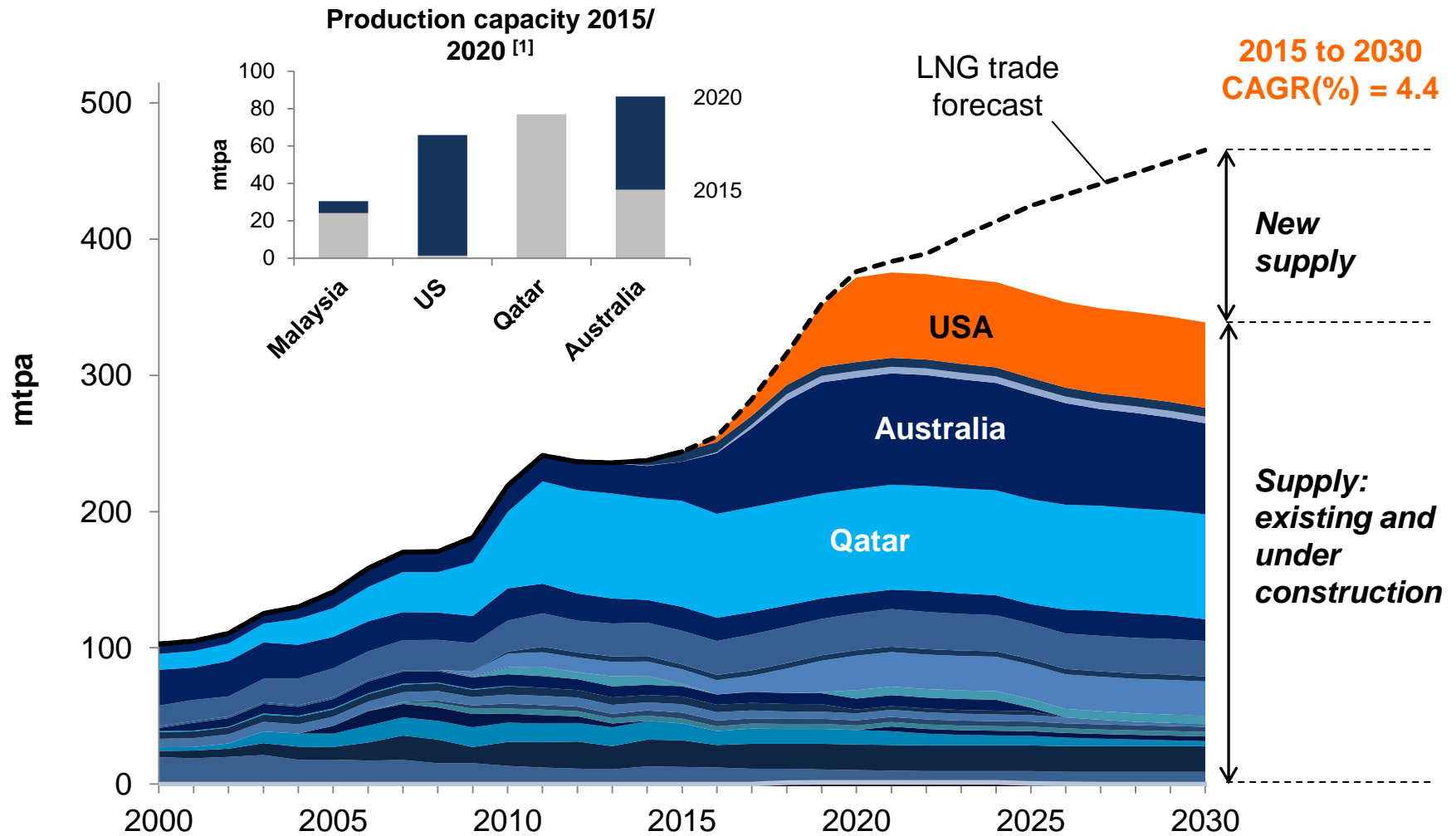
Source: CEDIGAZ World Outlook for 1965 – 1985 (assumes no spot volume), Poten and Partners 1985 – 2000 (2001), GIIGNL 2000 - 2016 (2016)

Europe's Balancing Role in the LNG market



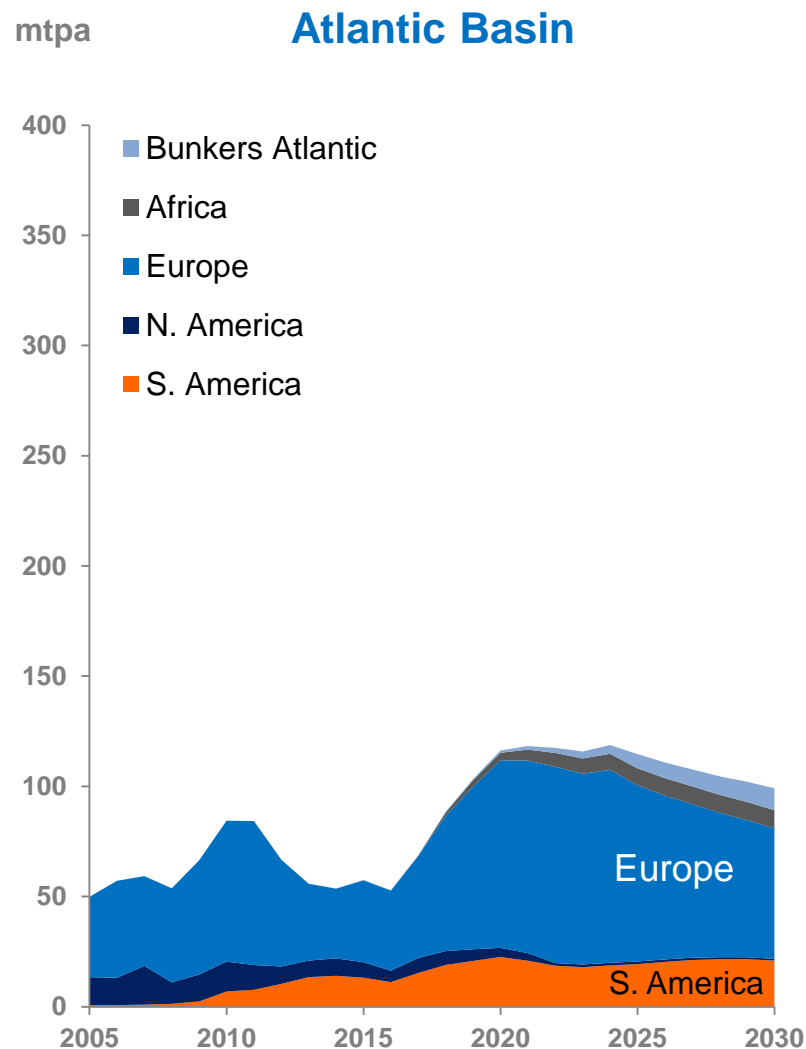
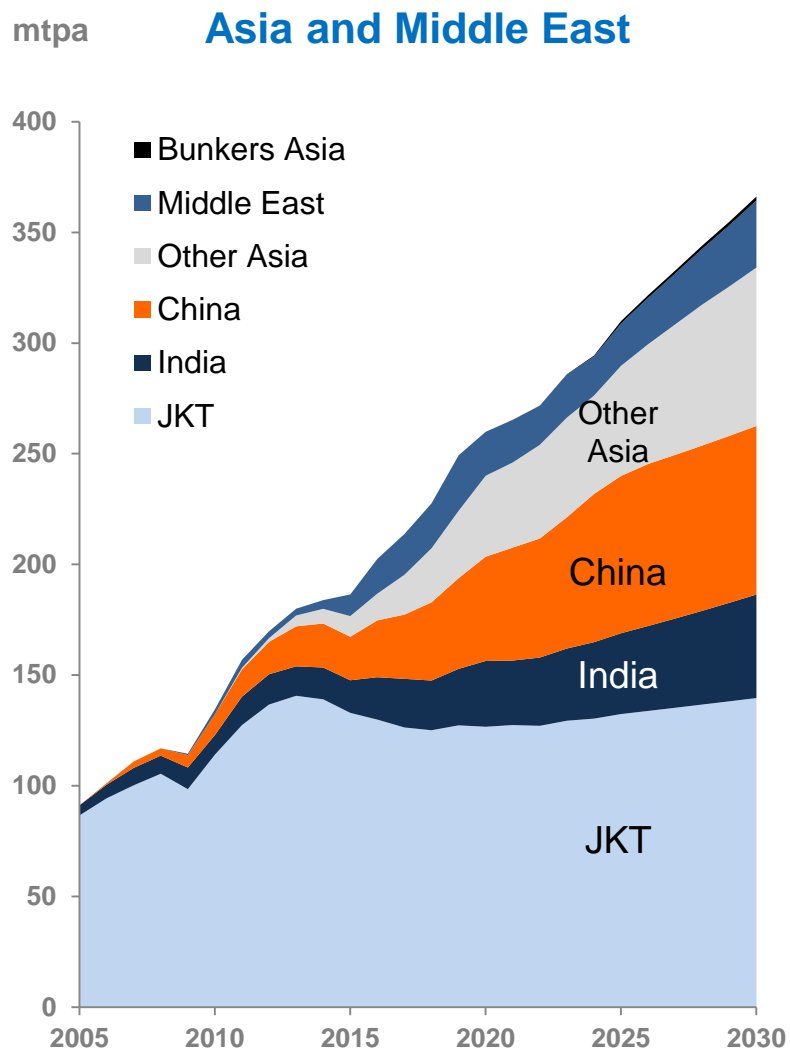
Source: Cheniere interpretation of IHS Waterborne data (Apr 2016), delivered volumes

LNG Supply vs. Demand to 2030



Source: Cheniere Research estimates; Woodmac for historical figures

LNG Import Outlook by Region



Source: Cheniere Research, Cheniere interpretation of Wood Mackenzie data (Q4 2016)

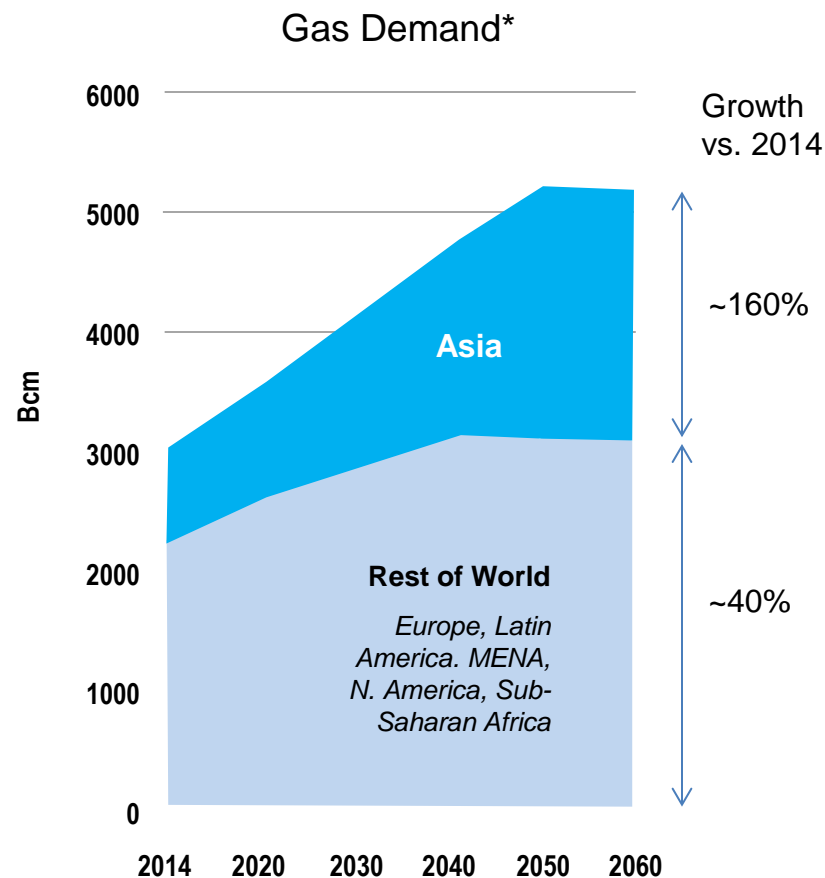
Opportunities and Challenges for Gas and LNG in Asia

■ Opportunities

- Demand for gas in Asia set to nearly triple over coming decades
- New markets, new buyers and new demand segments for LNG emerging in the region
- A more liquid and more responsive global LNG trade will make gas more attractive
- But gas growth in Asia should not be taken for granted

■ Challenges

- Demand uncertainty a common theme across Asia as energy transition and market liberalisations gather pace
- Some new markets will require help with the commercial or technical aspects of LNG
- Coal likely to remain cheap – and tempting



WEC Energy Outlook ('Modern Jazz' Scenario)

Gas needs to prove it is affordable, reliable and secure

Market Context

Market context for LNG buyers has been evolving in recent years ...

Growing Supply Availability

- Increasing market length through 2019 (+)
- Some portfolio players looking to reduce own length
- Expectations of growing liquidity / spot availability
- Healthy slate of potential new supply projects

Growing Price Uncertainty

- Reducing Oil Indexation Levels; 0.16 at peak falling to ~0.115 now
- Oil price uncertainty
- Inversion of Spot, Oil-indexed and HH-indexed prices;

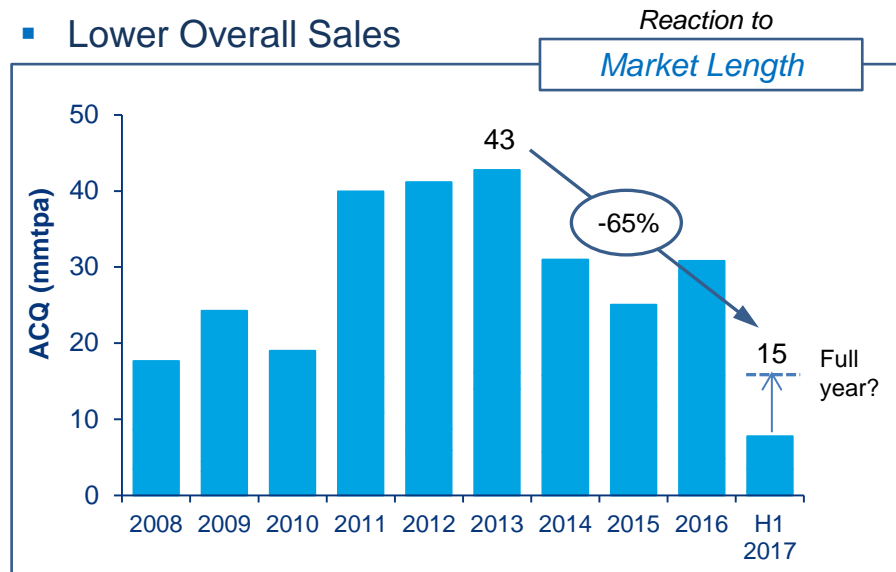
Growing Demand Uncertainty

- Liberalising markets: new players, increasing market competition
- Changing fuel mix outlook: 'fall' of nuclear and coal, rise of renewables
- Domestic gas balance; maturing fields, unconventional gas uncertainty

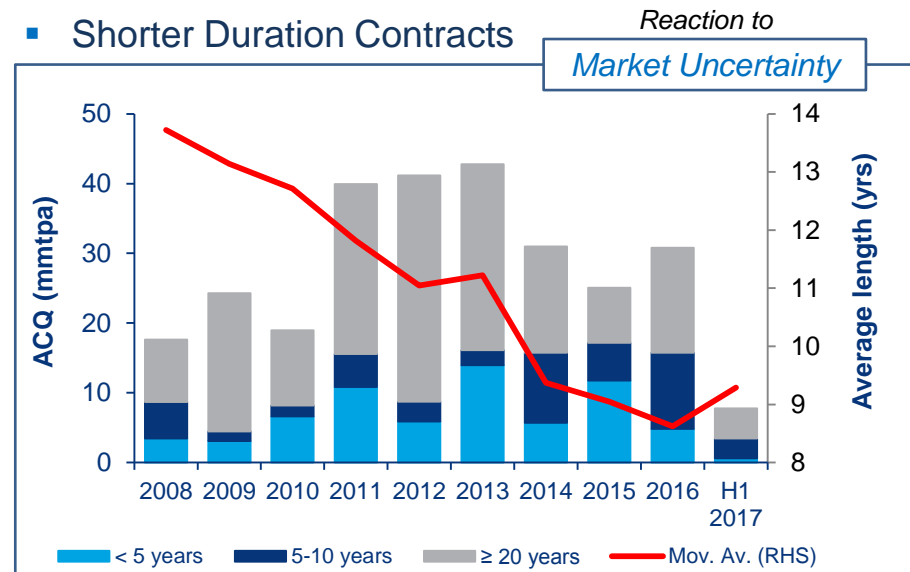
Buyers looking to rebalance their purchase portfolios to include greater spot / ST volumes

Contracting behaviour reacting to changing market environment

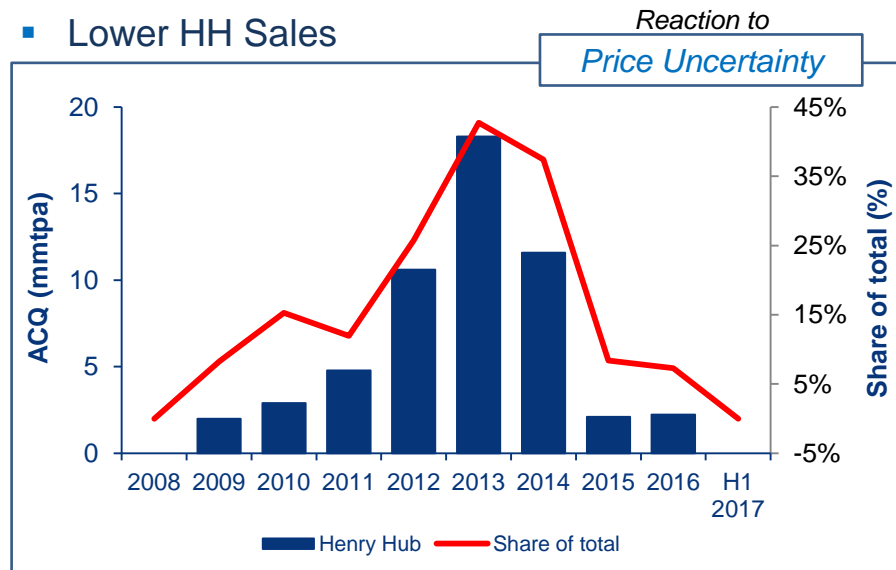
■ Lower Overall Sales



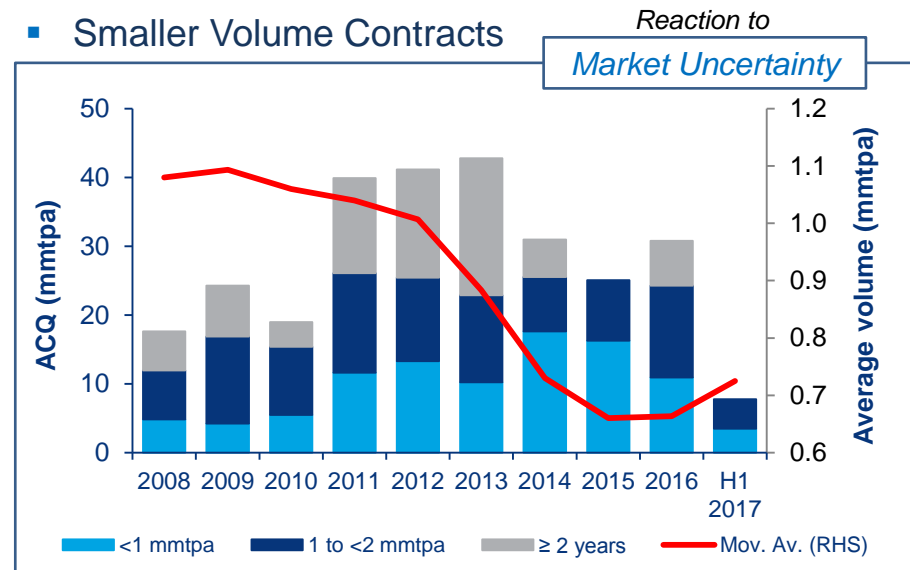
■ Shorter Duration Contracts



■ Lower HH Sales



■ Smaller Volume Contracts

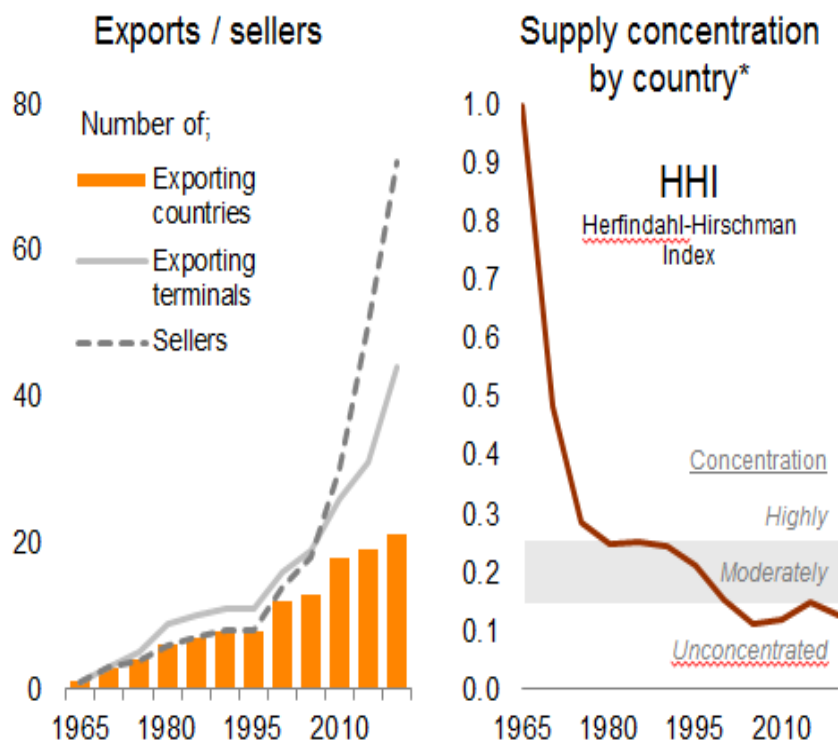


Source: Cheniere interpretation of Wood Mackenzie data (2017)

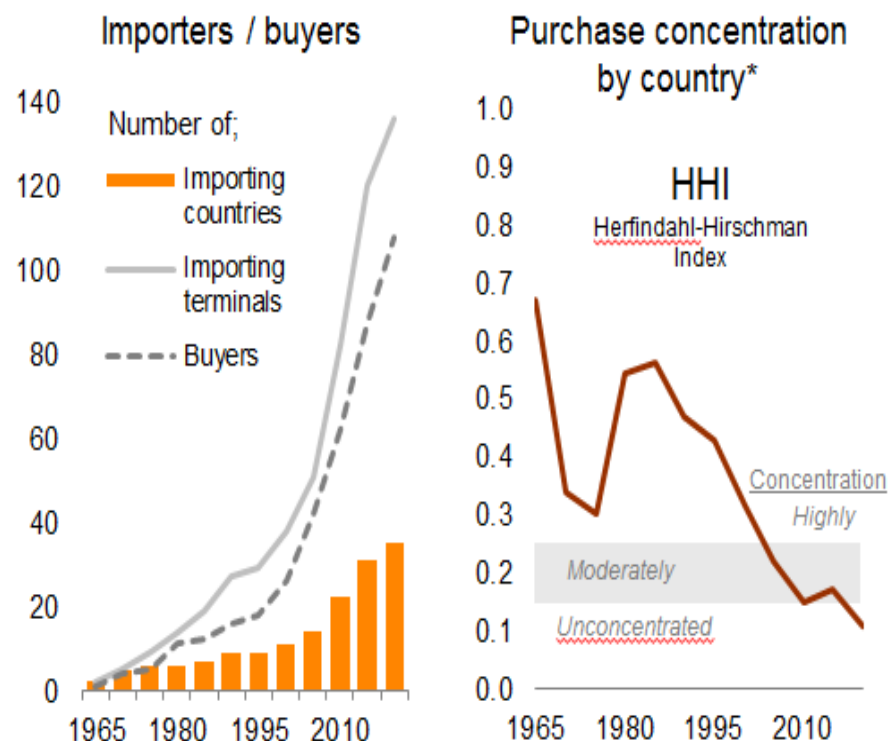
Are these changes structural or cyclical ?

LNG trade is diversifying and fragmenting

Supply



Markets



BG Group interpretation of Wood MacKenzie and IHS data (2015)

*each country considered a single supplier / buyer. Market categories for HHI: US Department of Justice

U.S. LNG Exports Driving Change in the Industry



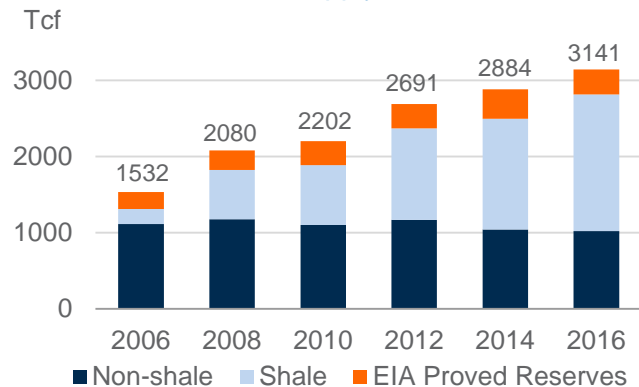
- Destination-free, flexible volumes
- Growing liquidity
- FOB and DES hub formation
- New markets facilitated by abundant, competitively priced gas

*A more responsive, more competitive
more diverse and more resilient LNG
trade system*

Benefits of U.S. LNG exports

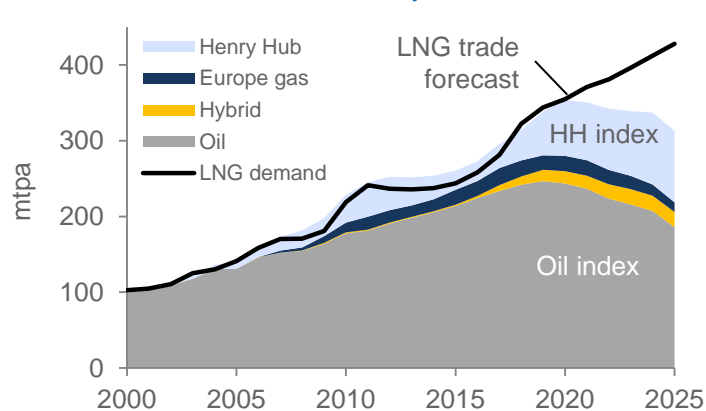
- Largescale resource base with strong Government support for exports

U.S. Future Supply of Natural Gas ⁽¹⁾



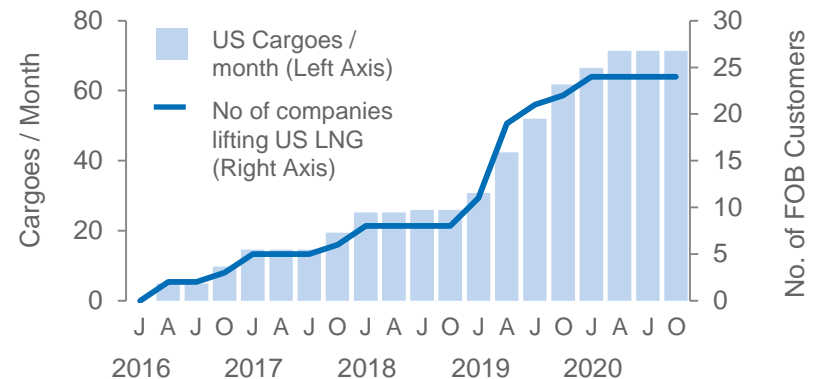
- Diversification from oil indexation

LNG Contracts by Price Index ⁽³⁾



- 70+ flexible U.S. cargoes per month by 2020 - underpinning growing industry liquidity

U.S. Supply & FOB Customers ⁽²⁾



- Inter-project competition driving innovation

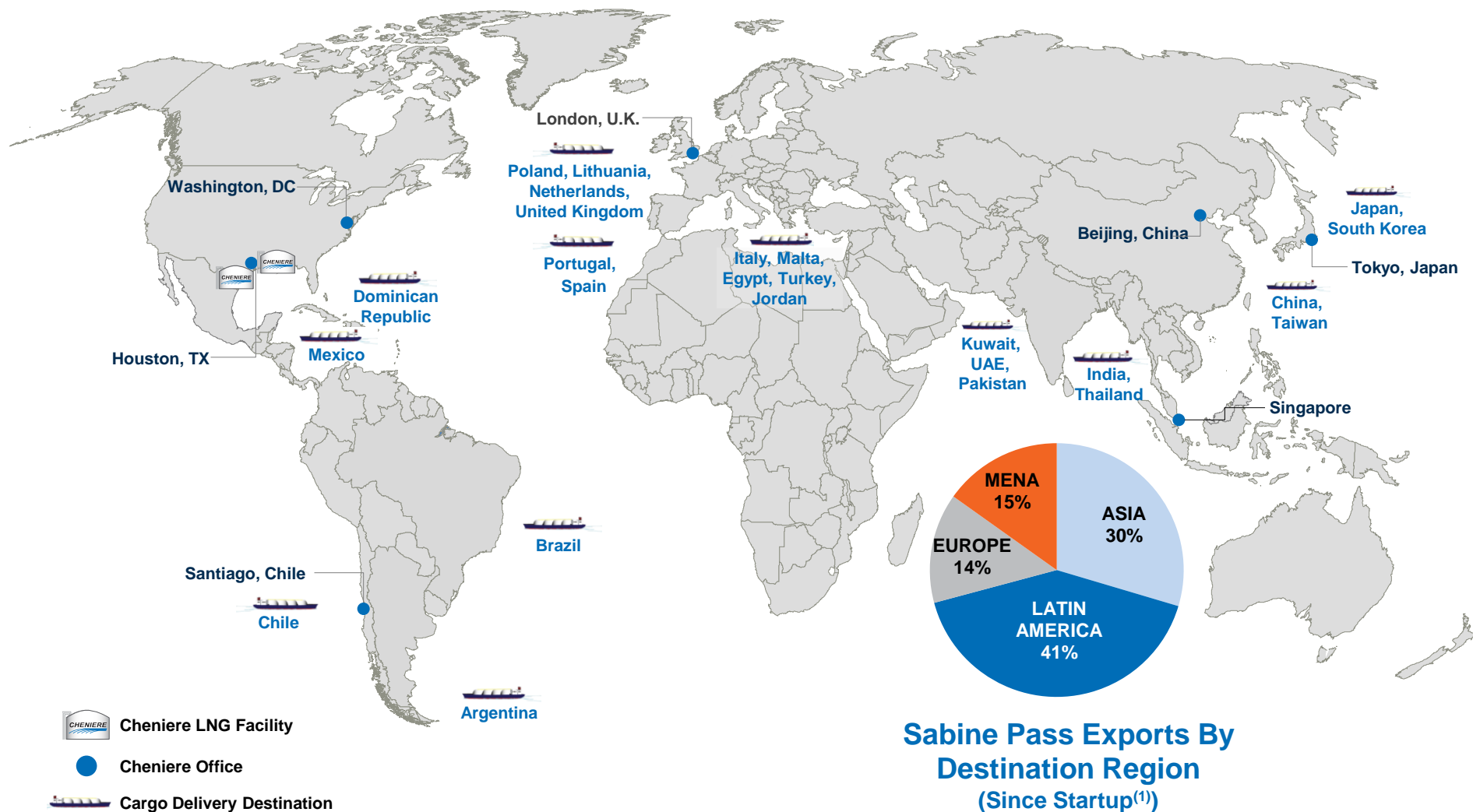


Visualization of possible mid-scale trains at Corpus Christi - Source: Cheniere

U.S. LNG driving change in the industry

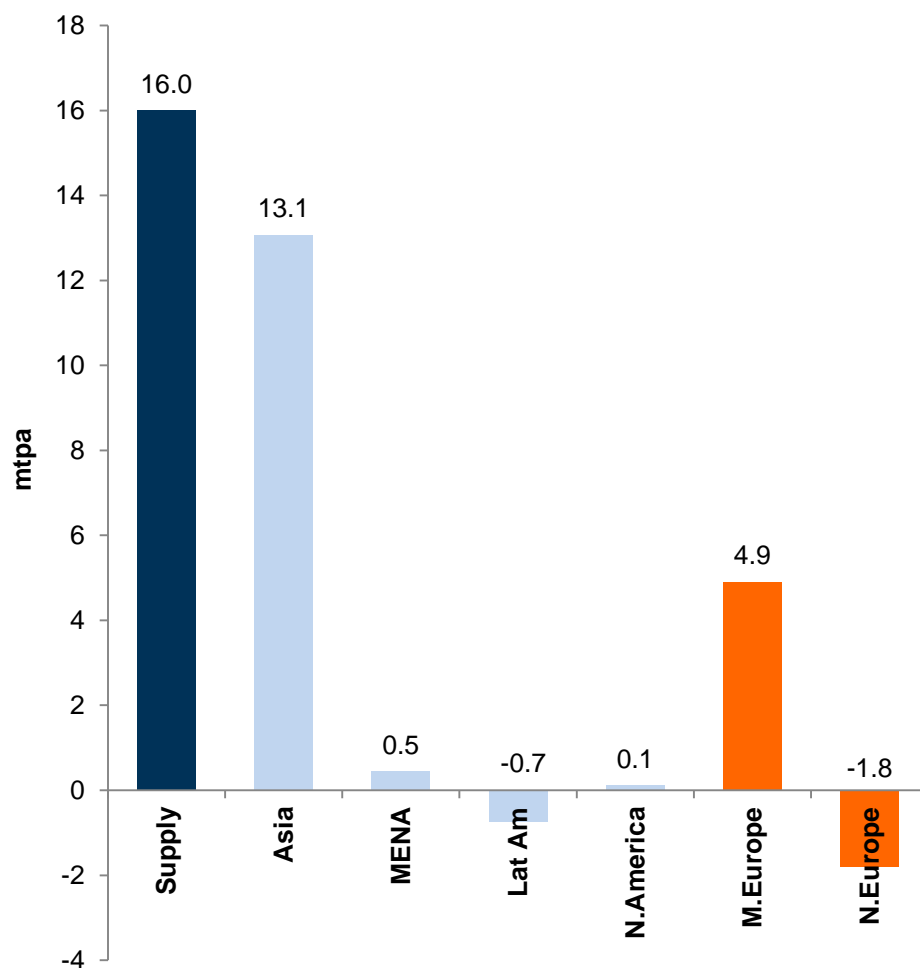
Destination of Sabine Pass Cargoes

Since Start Up, More than 190 Cargoes Loaded and Delivered to 25 Countries



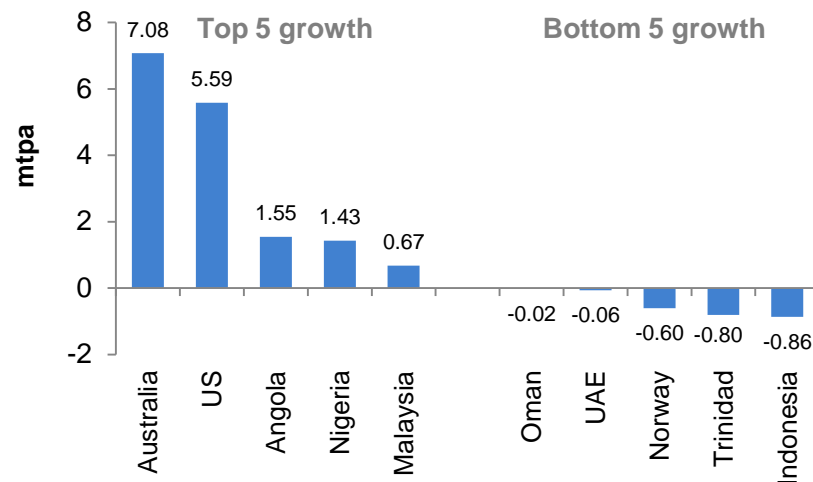
LNG Trade Figures H1 2017

Regional imports balance H1 2017 (Year-over-year)

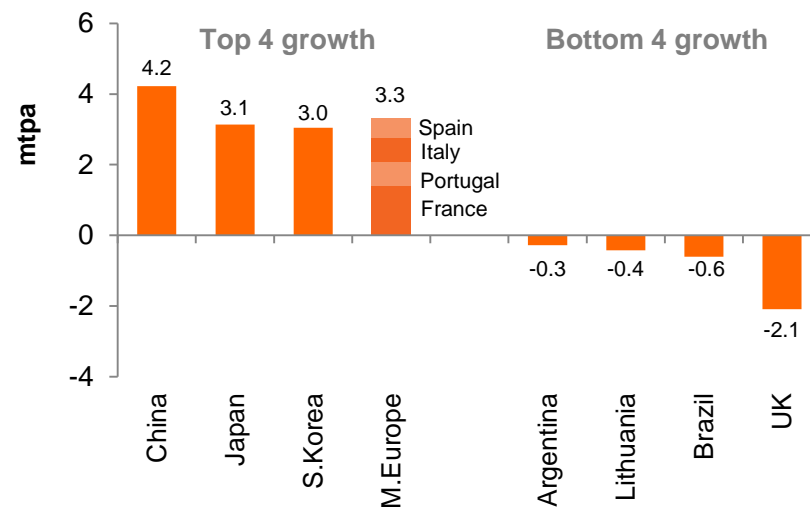


Source: Waterborne IHS data, delivered volumes

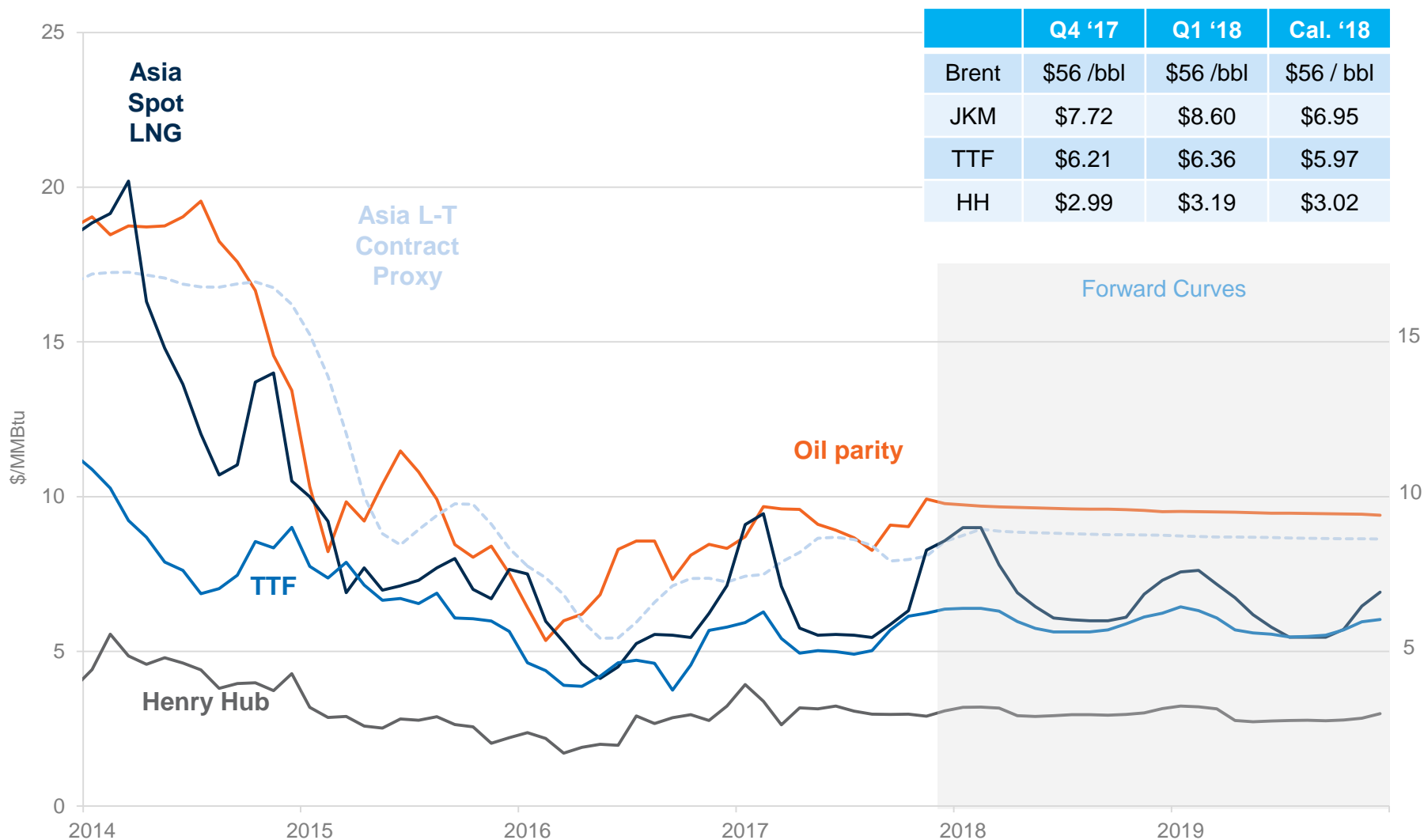
Growth by Supply Country H1-2017 (YoY)



Growth by Import Country H1-2017 (YoY)

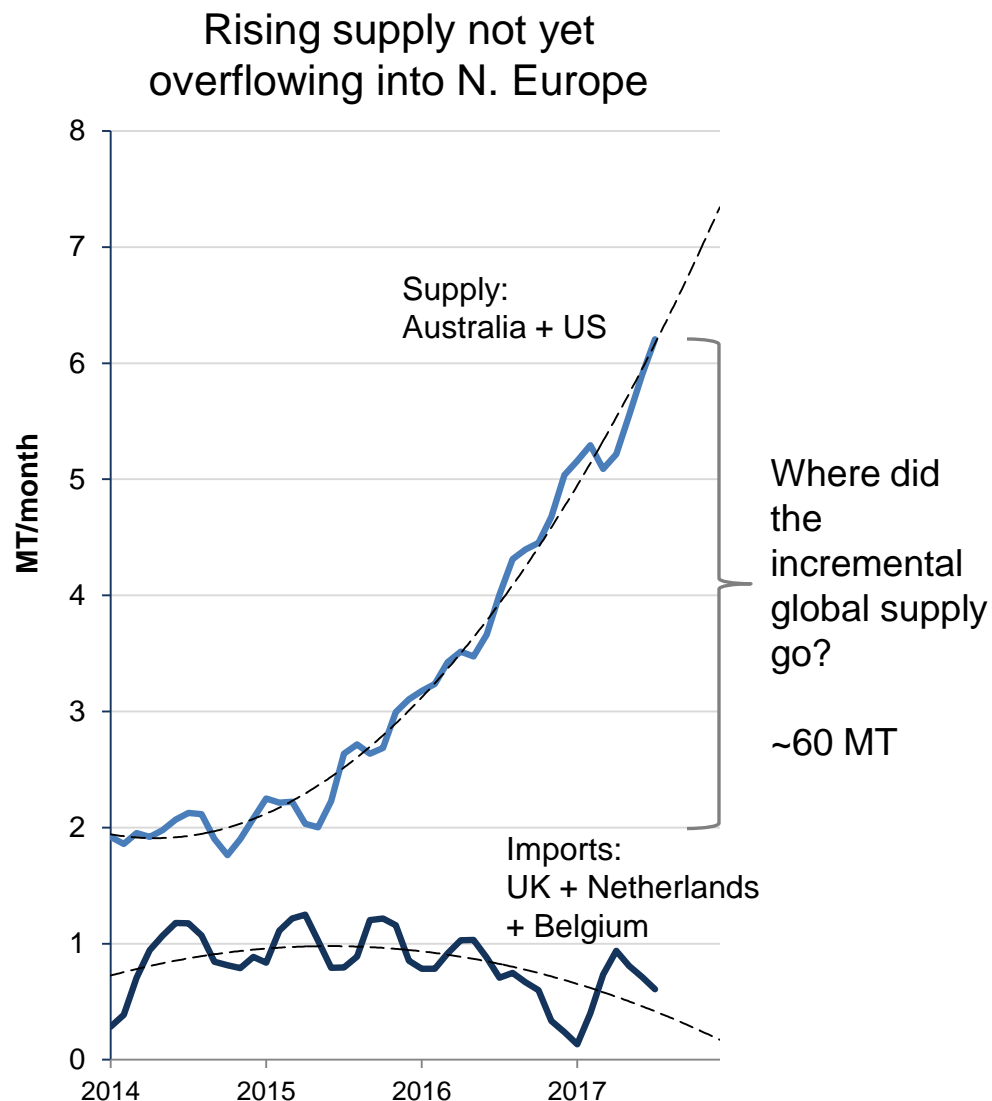


Global Gas Prices (as of 10/10/2017)

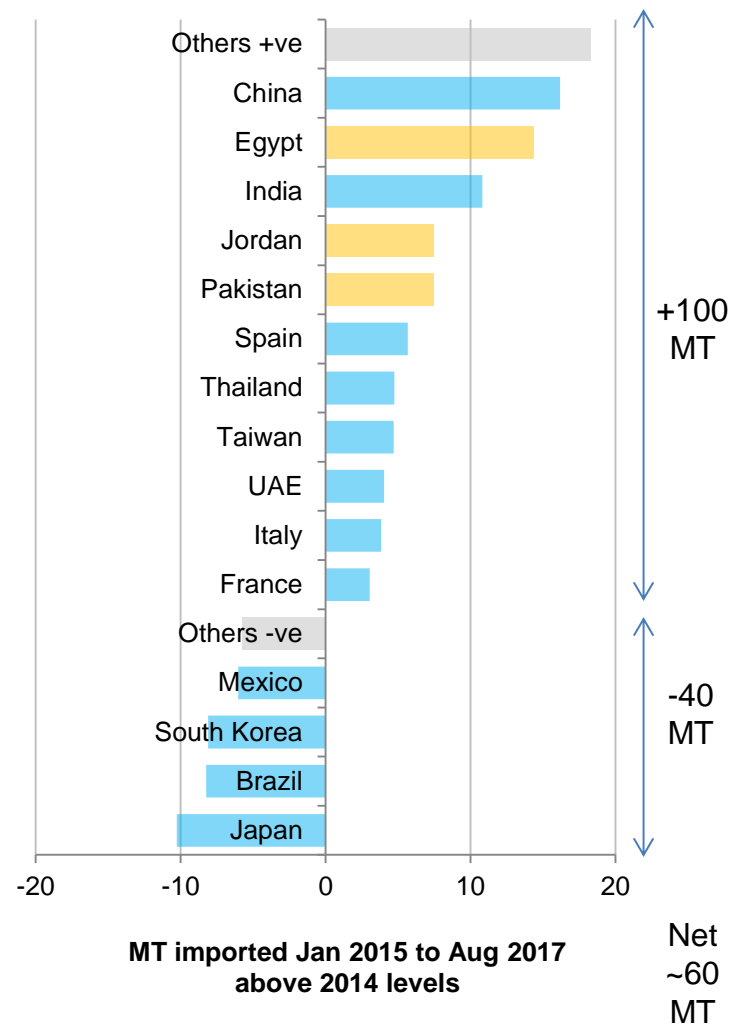


Note: Asia L-T Contract Proxy = 14.85% Japan Crude Cocktail (3-month average)+ \$0.50/MMBtu; same formula is used with Brent crude oil prices for forward curves

Global LNG balance – 2015 to Aug 2017



Incremental imports since 2014



Source: Waterborne Data, Graph based on Akos Losz/ Teddy Kott – CGEP (2017)

Note: countries with less than +/-3 mt increment were aggregated

10 Ways U.S. LNG is Changing the Global Market

1. Significant new supply source ***reduces the market power of incumbents***
2. Competitive cost sets ***price marker for new LNG supplies***
3. Transparent pricing ***improves price discovery***
4. Destination flexible supply ***reduces the rigidity of current trade***
5. Growth in liquidity will result in ***development of trading and risk management tools ...***
6. ... and aid the ***formation of LNG trade hubs in Asia***
7. Volume flexibility provides buyers a '***safety valve***' on supply commitments
8. HH indexed pricing ***weakens the influence of oil price on the global gas market***
9. HH pricing construct ***reduces pricing volatility***
10. Increasing influence of ***US energy diplomacy***



A more competitive
and resilient trade
system

Will a Liquid Hub for LNG Form Over the Next Decade?

Drivers

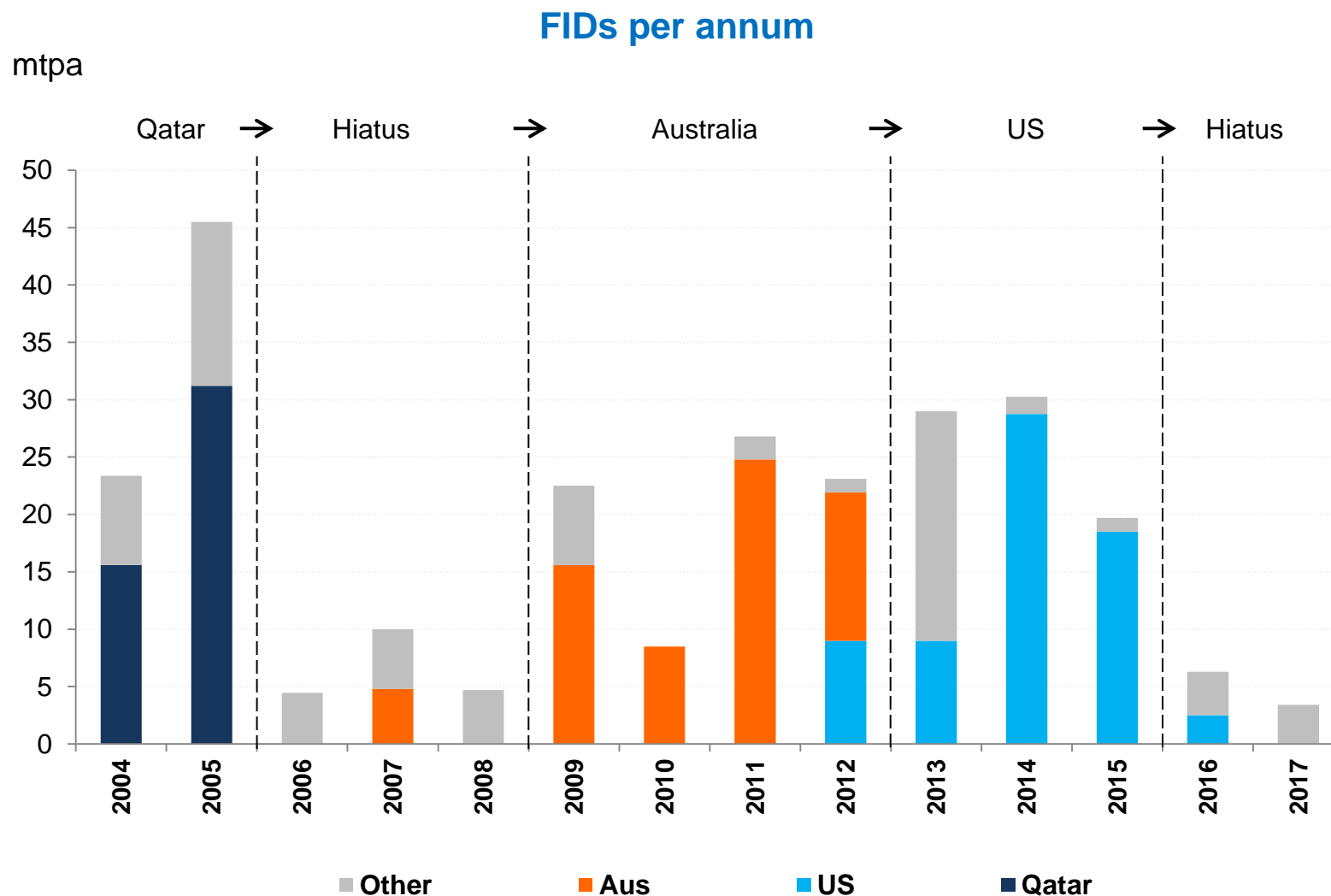
- ✓ Significant supply at 'open market' location (USGC)
- ✓ LNG & gas hub initiatives in Asia
- ✓ New players interested in new instruments
- ✓ Increase in flexible supply
- ✓ Any significant disconnect between spot and term prices

Inhibitors

- ✗ Limited buyer-seller alignment
- ✗ Current low industry liquidity
- ✗ Lack of consensus on location for an Asian LNG hub
 - Market access
 - Deregulated Pricing
 - Multiple Buyers / Sellers
- ✗ Existing long-term contracts
- ✗ Established pricing indexes
- ✗ Quality constraints
- ✗ Storage constraints
- ✗ Financing secured through long-term oil indexed / HH-plus contracts

Inhibitors will likely not stop Asian hubs from forming –
but will determine pace and location of hub developments

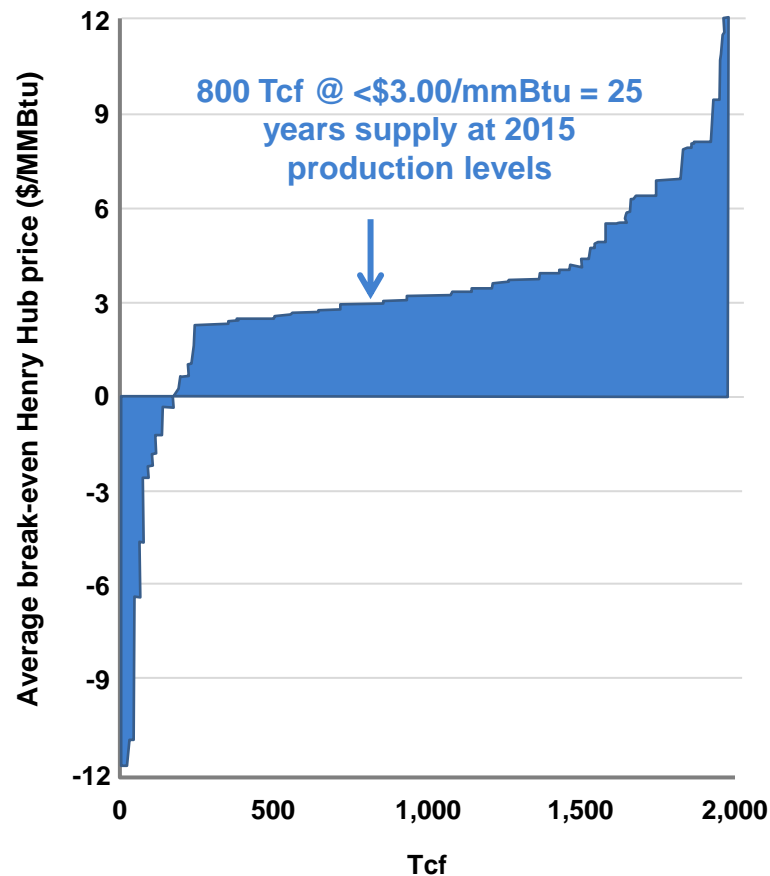
Slowdown in FIDs



Source: Cheniere interpretation of Wood Mackenzie data (Q1 2017)

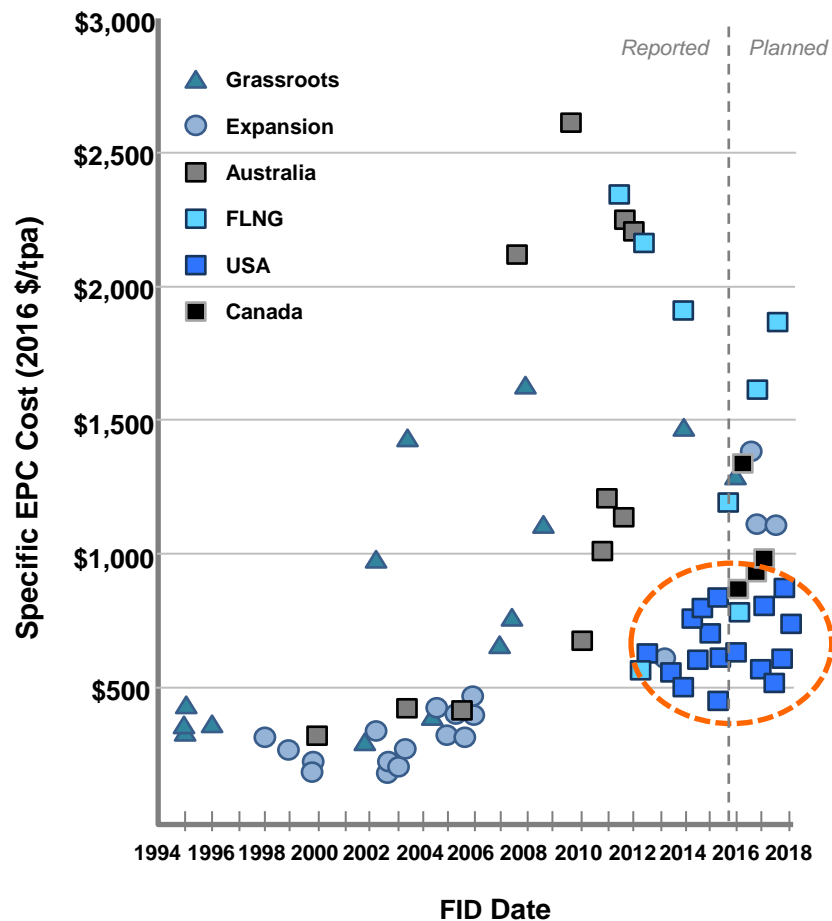
U.S. LNG Advantaged by Low Costs

Break-even price at Henry Hub for North American natural gas resources



Source: IHS Energy : Shale Gas Reloaded (2016)

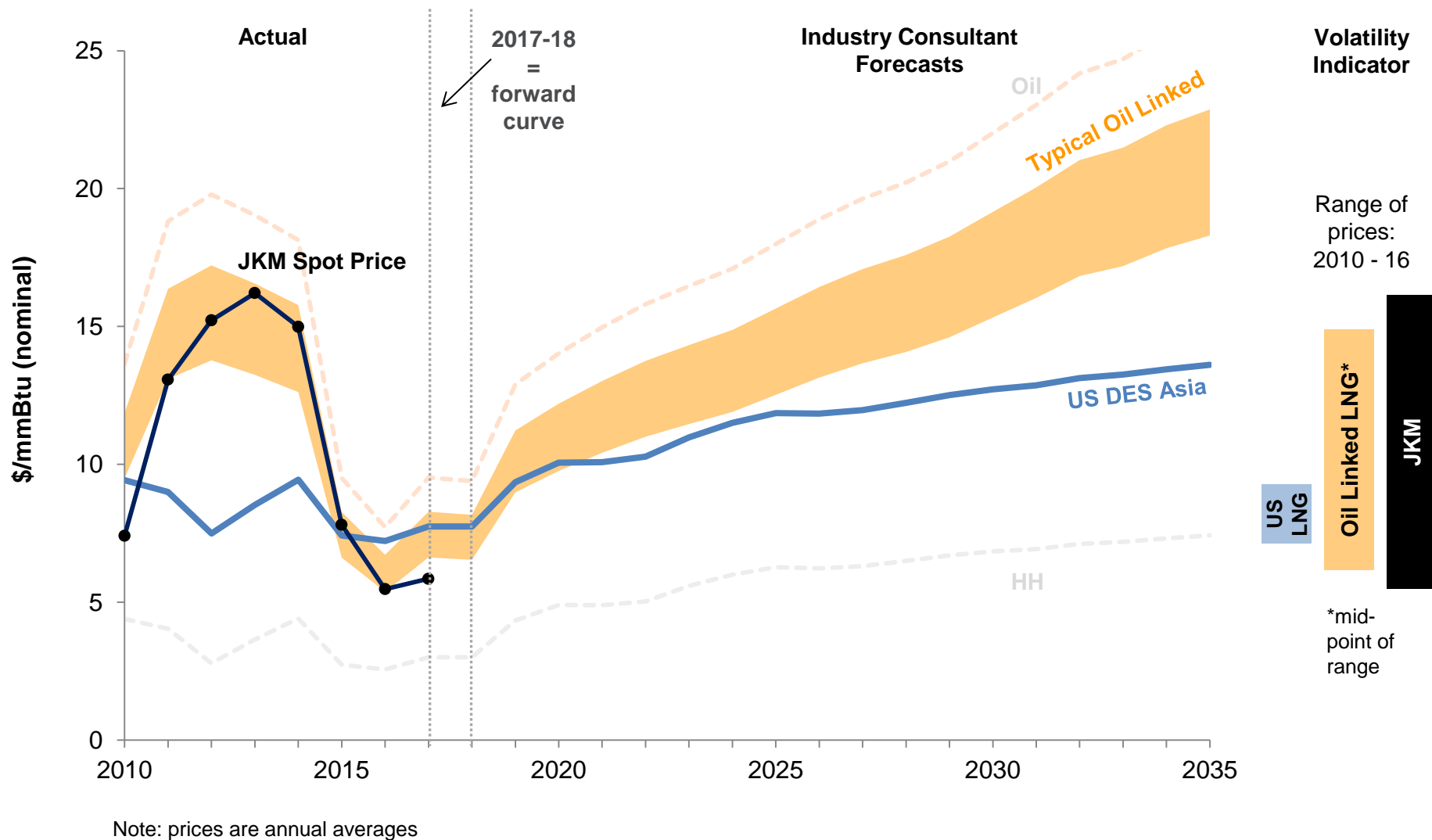
Liquefaction plant EPC* costs



*Engineering, procurement and construction costs for liquefaction plant.
Does not include upstream development, pipelines or financing and owner's costs.

Source: Poten & Partners

Long-Term LNG Price Outlook (EIA)



Sources: Actuals - Platts, Heren, IPE, Petroleum Association of Japan and Bloomberg (Apr 2016); Forecasts – EIA, Wood Mackenzie, IHS CERA, and PIRA (2016)

Benefits of US LNG for Asian Buyers

- Price competitiveness
 - Largescale, low-cost gas resource
 - HH-plus price structure
 - De-linked from oil
- Price stability
 - Reduced volatility from fixed-component
- Buyer control
 - Destination flexible volumes to manage demand uncertainty
 - and / or build trading platform
- Reliability
 - Largescale, nationwide resource base



Sabine Pass First Cargo: 24th Feb 2016

New LNG Market Realities

New market realities ...

**Fragmenting /
Evolving market
place**

**Globalising /
Commoditising
industry – with
regional nature**

**Supplier challenge:
how to lower cost,
innovate &
create new markets**

... will require
new commercial
solutions ...

... but will also have
to be financeable

**New contract
structures:
price index, term,
flexibility**

Summing Up

- Flexible U.S. LNG ramping up and responding to global market signals
- U.S. LNG has already changed the industry. Providing buyers with;
 - Price diversification and transparency
 - Destination flexibility
 - Increased supply availability and market competition
 - A sustainably low-cost supply over the long-run
- And is set to drive further change
 - Growing liquidity / hub formation / price discovery
 - Resulting in a more competitive and more resilient trade system
- Buyers can enjoy and capitalize on these functions of U.S. LNG in a direct manner
- But Buyers and Sellers will have to work together to achieve the commercial bargain required to bring on new supply under current low-price conditions
- Cheniere able to move quickly to expand its platform with two permitted brownfield trains, plus enough land at both sites to allow for significant further expansion

Thank You

