

## Texas LNG - Overview

July 2020

# TEXAS LNG OVERVIEW AND UPDATE



# Texas LNG Facility: 4 MTA in 2 Trains

Ideal size and timing for current market conditions

- Realistically sized facility of 4 MTA (two trains)
  - If warranted by market conditions, project can be sanctioned with one 2 MTA train only.
- Expected FID 2021 & Commercial Operations to begin in 2024/2025
- Major permits received
  - FERC Authorization (late 2019)
  - DOE Export permits
    - Free Trade Nations (2014)
    - non-Free Trade Nations (2020)
  - Texas Air Quality Permit (2020)

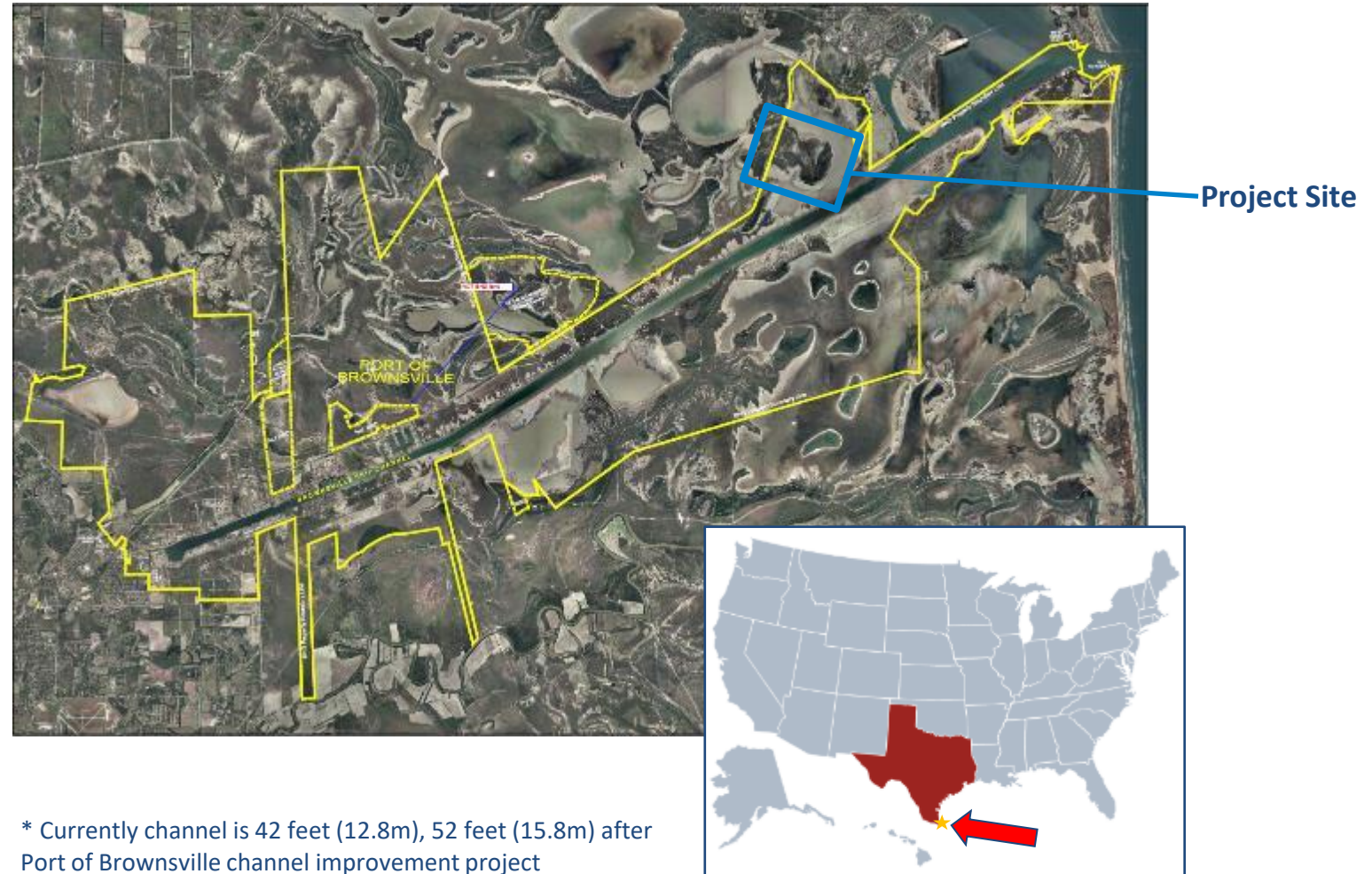




# Ideal site

The key factor in any LNG export facility is the site of the facility. Texas LNG as one of the best sites on the US Gulf Coast

- Site owned by Port of Brownsville
  - Exclusive option for long-term lease
  - Zoned for industrial development
- Deepwater channel draft – 52 feet\*
- Close to open water – about 1 hour transit
- Proximity to Panama Canal
- Located along major highway (Highway 48) and on more developed north side of channel
- Delimited port utility corridor (for feed gas pipelines and utility)
- New, large diameter natural gas pipeline runs adjacent to site from Permian hub at Agua Dulce
  - No costly under channel boring required
  - Project benefits from existing infrastructure



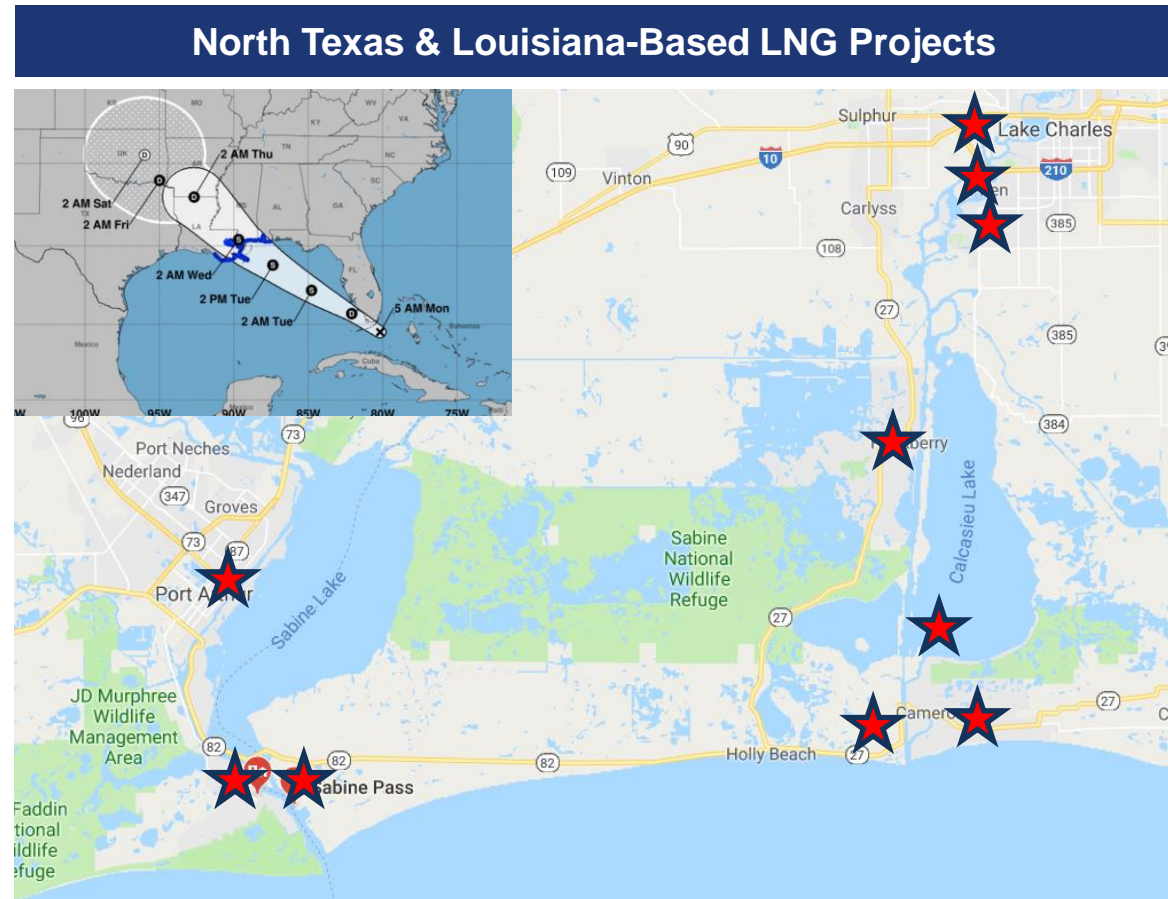
# Facility site avoids concentration risk associated with most other US Gulf Coast projects

Brownsville location avoids congestion, flooding and hurricane issues with north Texas and Louisiana locations

- Over 100 MTA in 50 km radius of hurricane-prone area
- Maritime congestion in anchorage and ship water channel
- Long distance to open water
- Some locations are up to 50km to sea along narrow shipping channels / canals

**“Most of America’s new LNG capacity sits in Hurricane Alley”**

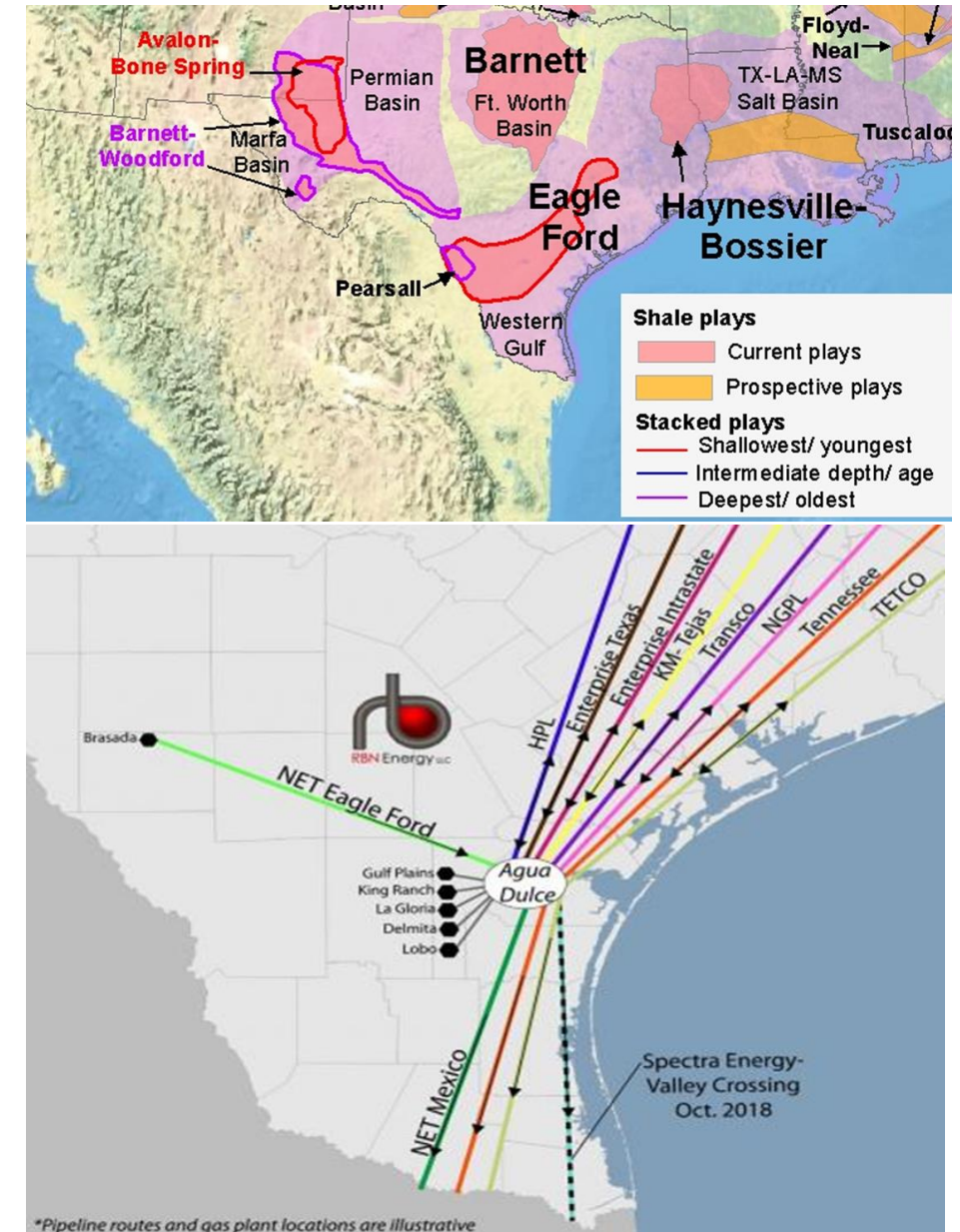
Bloomberg News; August 27, 2019





# Access to plentiful and cheap feed gas is a pre-requisite for successful LNG exports

- Texas LNG will access low cost feed gas from Permian Basin
  - Permian's Waha hub prices have been trading at large discount to Henry Hub and other US hubs for the past few years. Discount likely to persist in current environment due to low cost of production and proportion of associated gas production.
- Permian is the fastest growing feed gas source – and has massive potential for future low-cost feed gas production
- Large portion of Permian gas will flow via the Agua Dulce hub via existing and future proposed pipelines
- Agua Dulce is also connected to eight major interstate and intrastate pipelines at Agua Dulce with access to other shale gas basins and is growing in liquidity
- Texas LNG will be connected to Agua Dulce via the existing Valley Crossing Pipeline
  - Pipeline owned and operated by Enbridge
  - Pipeline can be expanded to accommodate full capacity of Texas LNG
  - Requires a short lateral pipeline to Texas LNG site



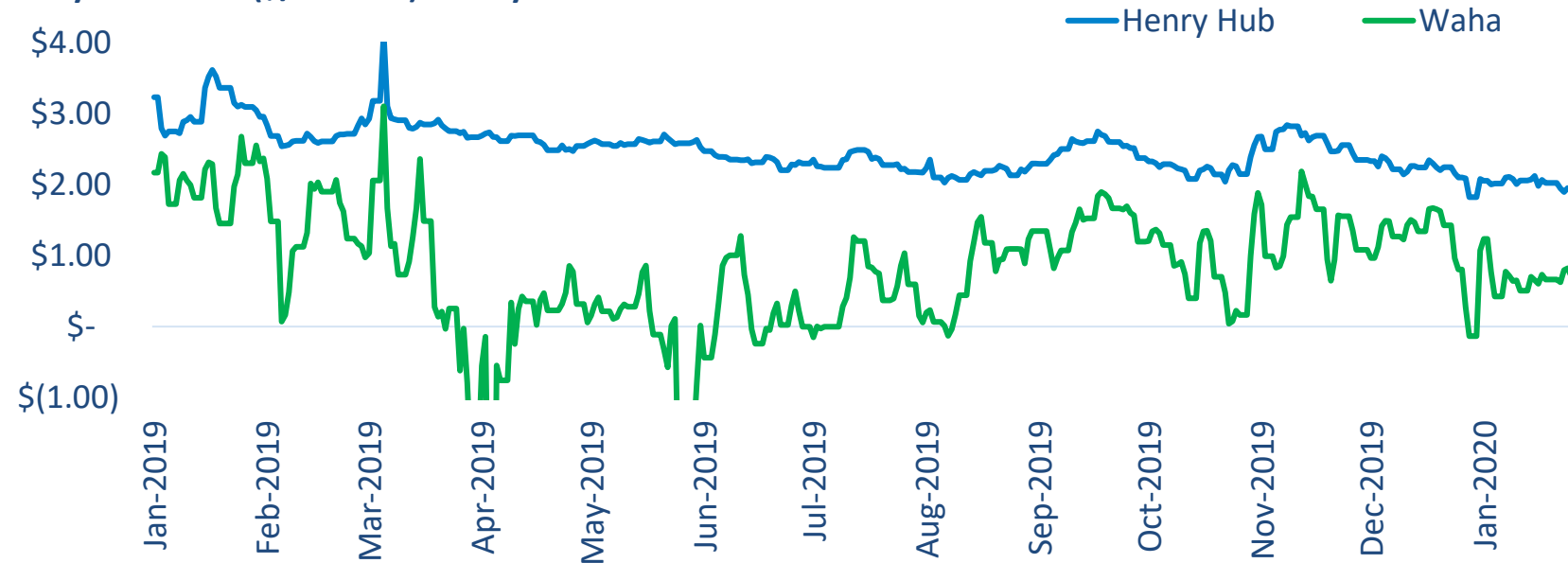
# Gas Supply: Low Cost Supply

Excellent Access to Cheap Gas priced on Waha (Permian) Pricing - has been cheaper than Henry Hub for many years - and expected to stay cheaper in long term.

## Natural Gas Prices

- Permian Waha hub prices have traded close to or below \$0/MMBtu
- Discount between Waha and other US hubs (e.g. Henry Hub) likely to continue

### Daily Gas Prices (\$/MMBtu): Henry Hub vs. WAHA



Source: S&P Global Platts

# Texas LNG will use robust and widely used technologies

Reduction in technical risks will help gain acceptance in marketplace, minimizing cost and schedule overruns

## World-Leading Liquefaction Technology

- Project will use C3MR, Air Products' liquefaction technology
- Highest market share in global large & mid-size LNG projects
- 90+ trains installed and operated globally (80%+ of global LNG capacity); used by Shell, ExxonMobil and Qatar



## Modular Fabrication

- Modular fabrication mitigates labor & schedule risks and reduces capital expenditures
- Texas LNG will use as many “off the shelf” components as possible





# Strong Sponsor Support: Glenfarne Group



**Industrial Owner-Operator  
of Real Assets**



**1.5 GW of Installed Capacity**



**800MW Developed &  
Under Construction**



**Transactional Relationships with  
Global Financial Institutions**

**Operational Capabilities**

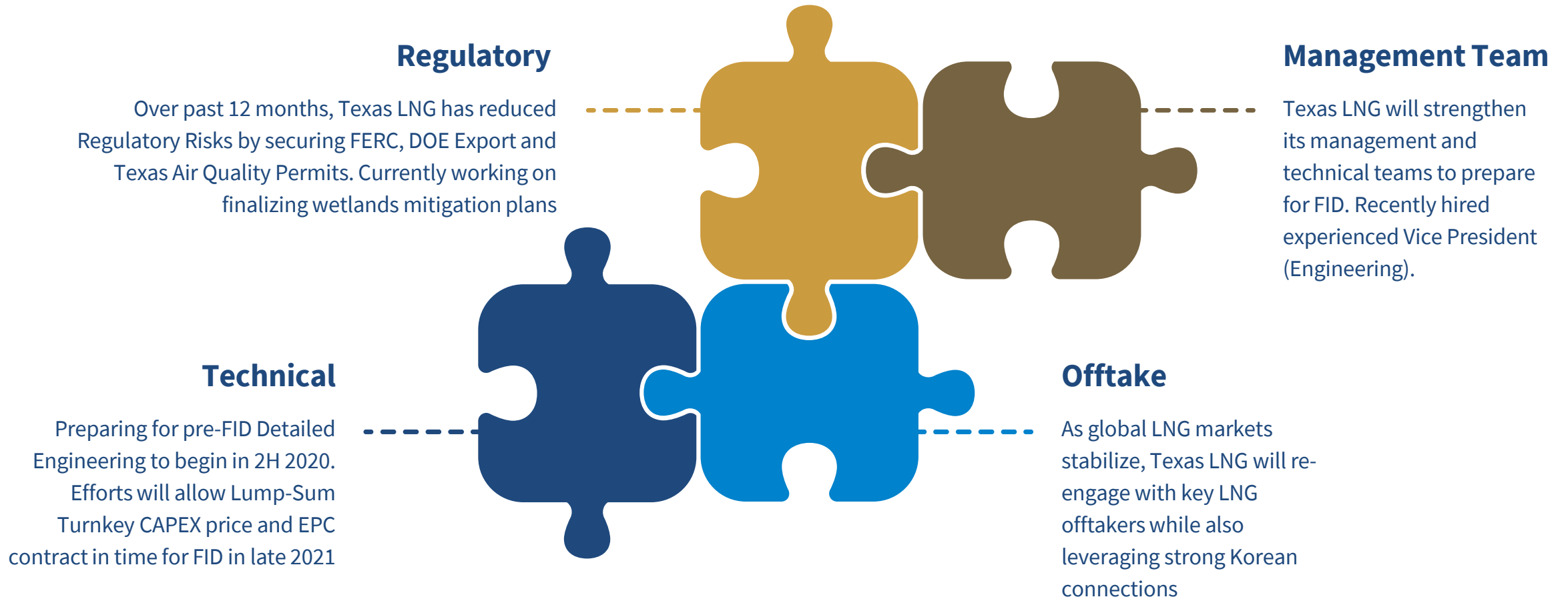
**Capacity for Self Consumption**

**Development Capabilities**

**Established Access to Financing**

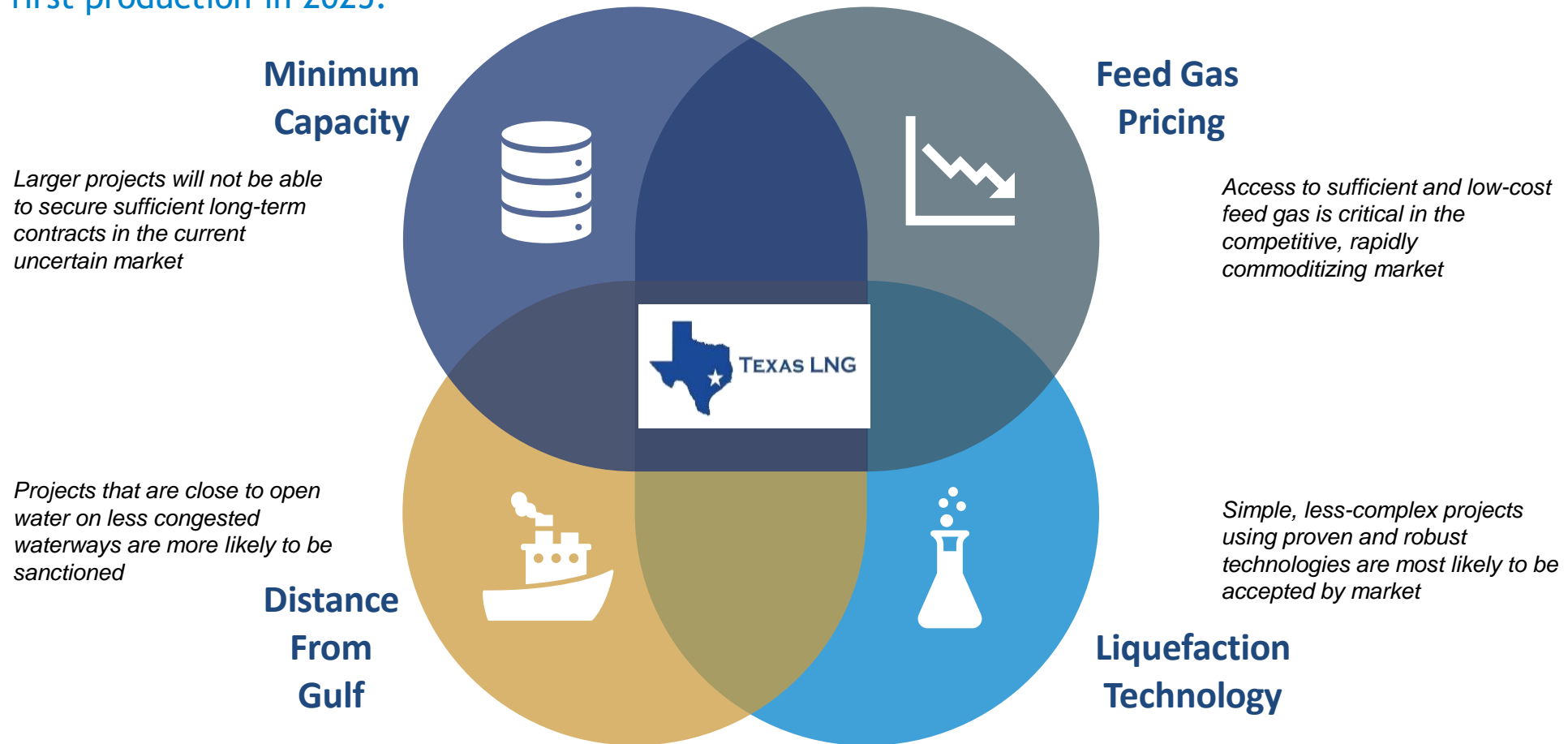
# Achievements and Priorities

Texas LNG is preparing for FID in late 2021



# Texas LNG Positioning

Current market conditions suited for projects that are realistically sized, have access to cheap gas, located close to the Gulf, and have minimal technical risks. Texas LNG meets all of these characteristics, and is on-track for FID in 2021, first production in 2025.





# Strengths in Texas LNG model highlighted by market volatility

Because US LNG is based on more flexible terms, there have been reported cancellations / deferment of US cargoes. This proves the strengths and advantages of the flexible US model, especially for customers!!

Texas LNG will be marketing and leveraging this flexibility as it seeks long-term contracts for its production.

## Texas LNG



Cost-Plus pricing based on cost of production and transport



Driven by natural gas supply / demand dynamics



Flexible. Customers always have option to change destination and can usually cancel liftings by paying the fixed costs only (liquefaction and some transport costs).

## Other non-US LNG exporters



Pricing not based on cost of production. Instead, pricing based on price that can be charged to market



Price usually linked to unrelated oil prices, which are volatile and politically 'charged'



NOT flexible. Only recent contracts allow redirection of cargoes. Customers liable to pay for all costs under strict take-or-pay terms if they cancel liftings.

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