

# Stable Supply of LNG for Energy Security of Asia

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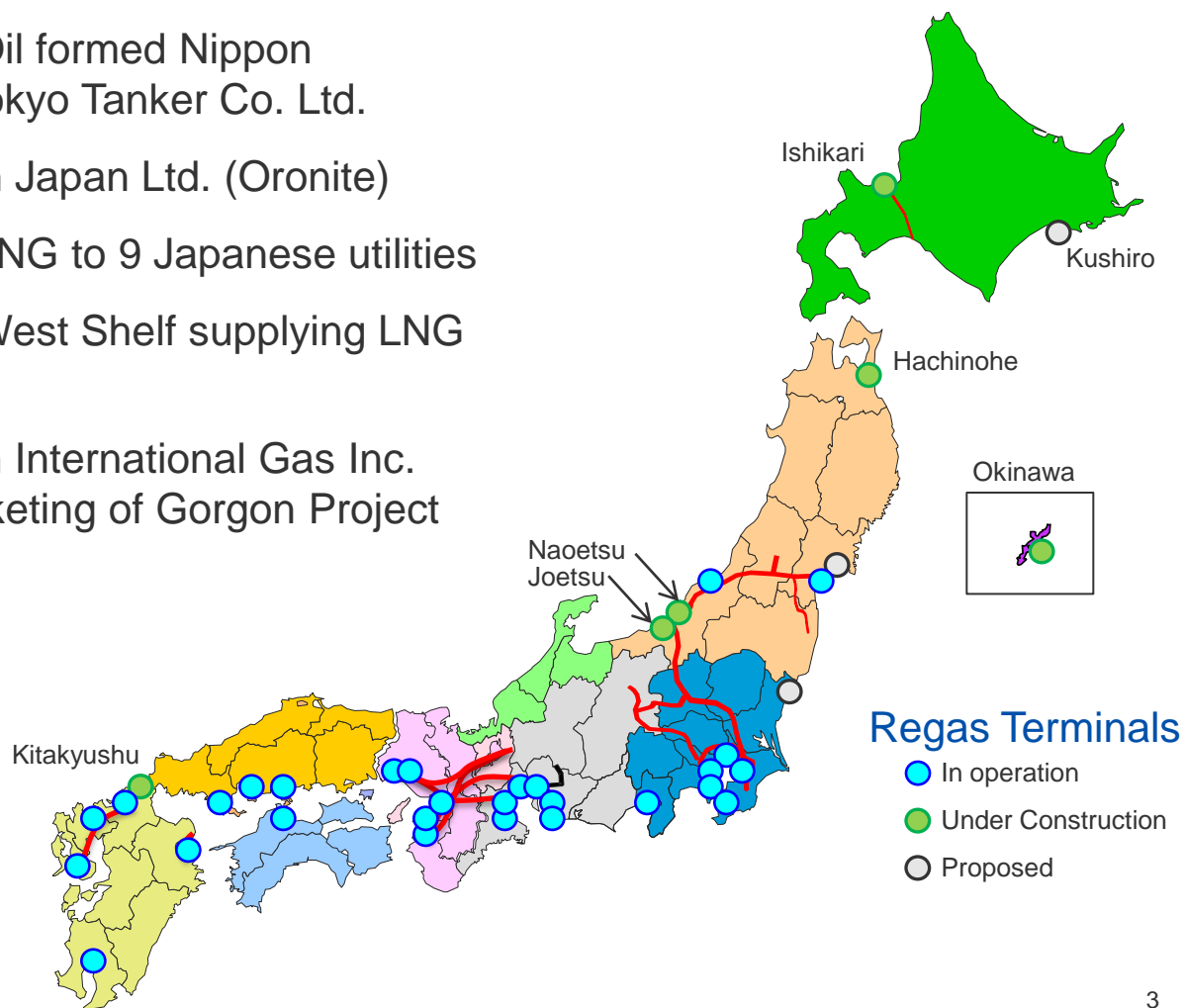
# Chevron History of Business in Japan



## Summary of Business History

- **1951** – Caltex and Nippon Oil formed Nippon Petroleum Refining Co. & Tokyo Tanker Co. Ltd.
- **1961** – Established Chevron Japan Ltd. (Oronite)
- **1977** – Bontang supplying LNG to 9 Japanese utilities
- **1989** – 1/6 owner of North West Shelf supplying LNG to 10 Japanese utilities
- **2003** – Established Chevron International Gas Inc. Japan office to support marketing of Gorgon Project

Source: Wood Mackenzie



# New LNG Projects

## Gorgon and Wheatstone in Australia



### Gorgon

- Chevron is operator with approximately 47% interest
- With an estimated 40 trillion cubic feet of natural gas, provides enough energy to power a city of 1 million people for 800 years
- 15 MTPA LNG facility on Barrow Island will supply gas to Asia:
  - Osaka Gas (1.375 MTPA for 25 years)
  - Tokyo Gas (1.1 MTPA for 25 years)
  - Chubu Electric (1.44 MTPA for 25 years)
  - GS-Caltex (0.5 MTPA for 15 years)
  - Kyushu Electric (0.3 MTPA for 15 years)
  - JX Nippon Oil & Energy Corporation (0.3 MTPA for 15 years)

### Wheatstone

- Initial two train 8.9 MTPA LNG development, expandable to 25 MTPA
- Multiuser hub secured via aggregation
- Once online, it will supply gas to Asia:
  - Tokyo Electric (20 years, 3.1 MTPA)
  - Kyushu Electric (20 years, 0.7 MTPA)

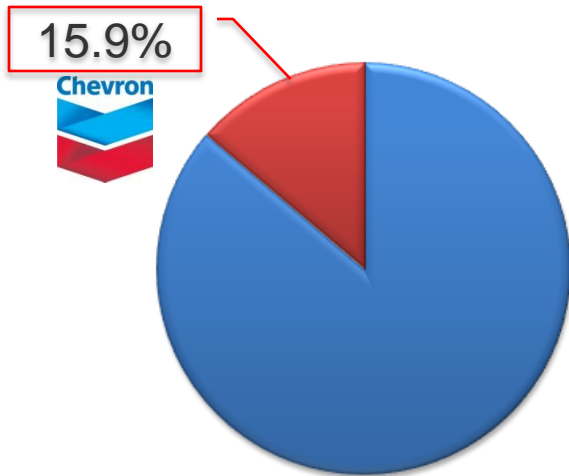




# Economic Impact of the Earthquake and Fukushima Incident & Chevron's Role in Contributing Energy Security of Japan

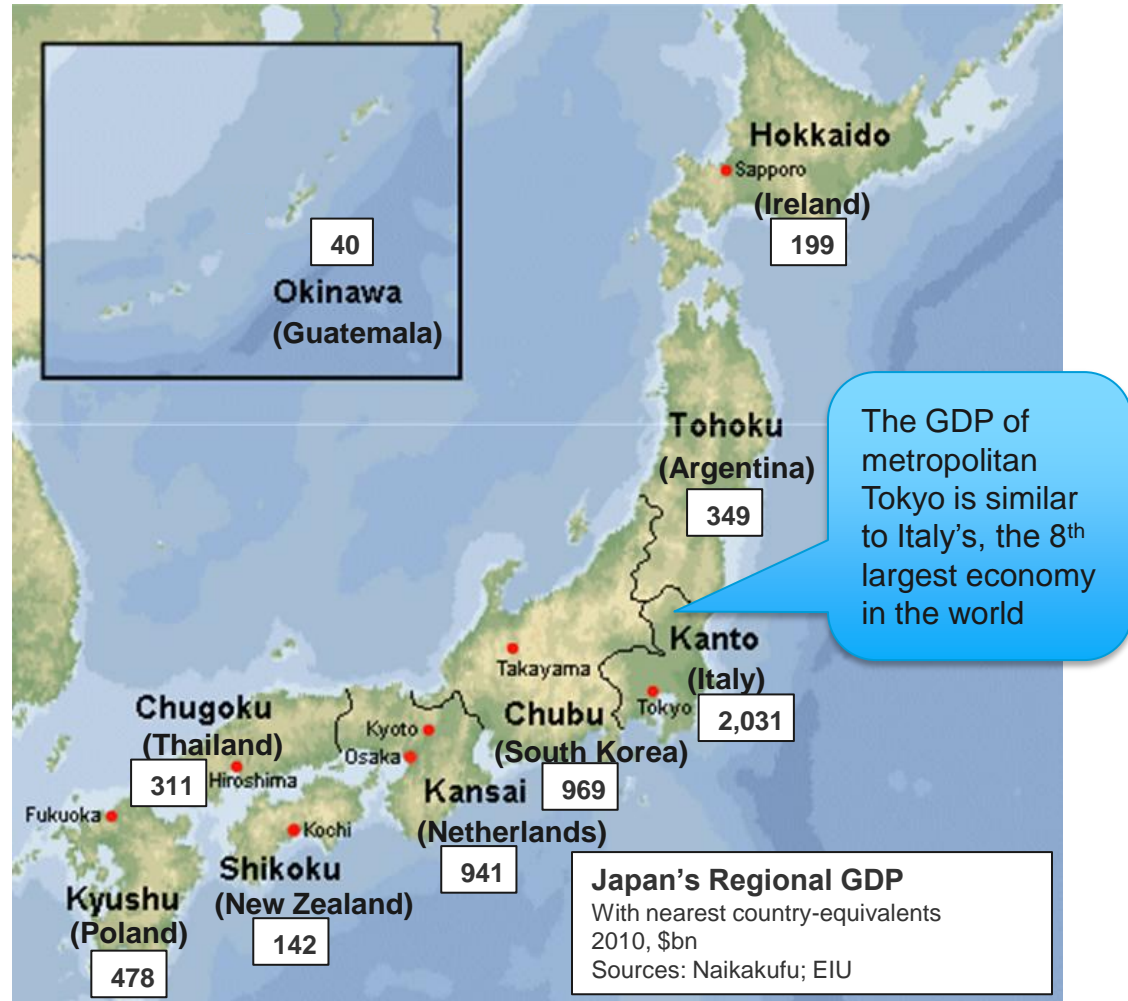


## Chevron's Contribution to Japan's LNG Supply, 2018



Source: Wood Mackenzie, November 2011

## Japan Regional GDP and Nearest Country-Equivalents

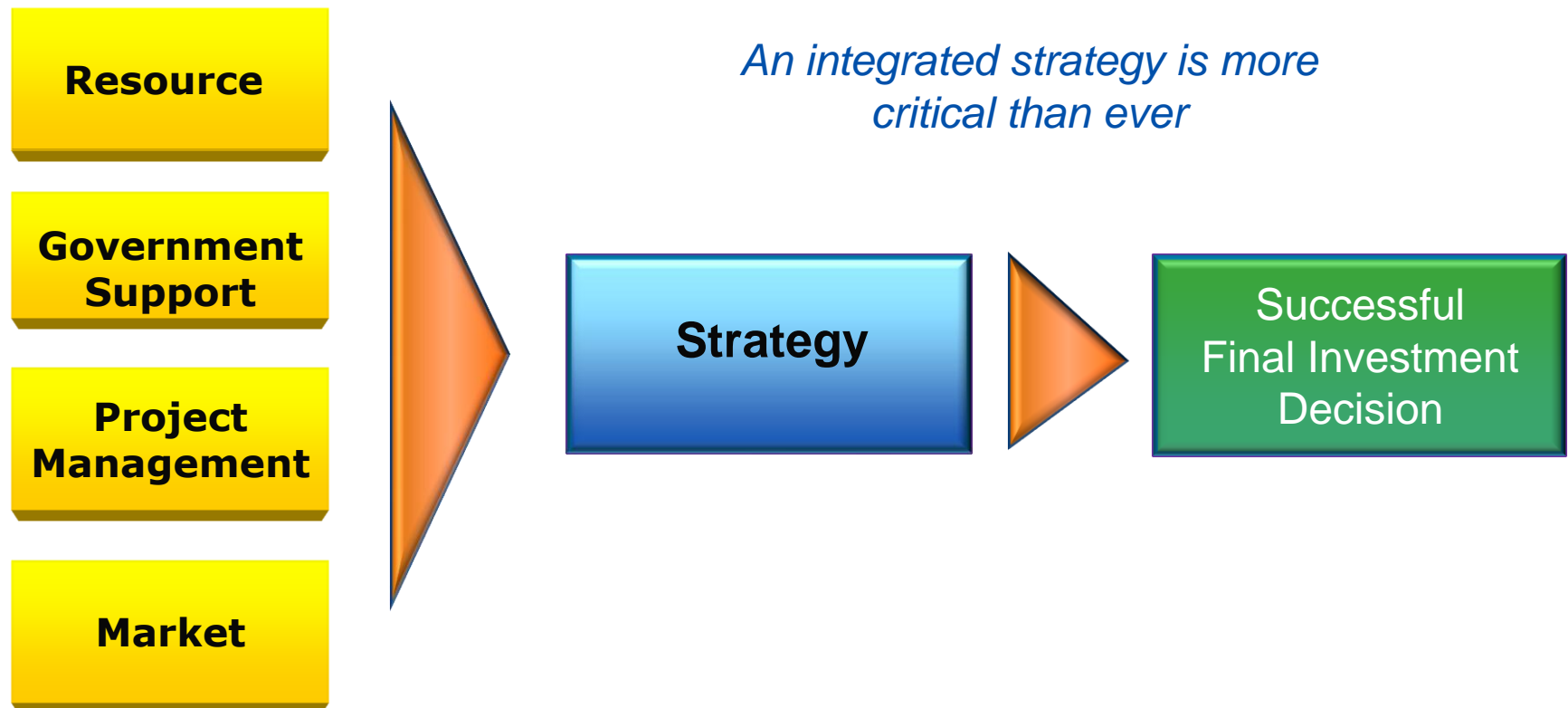


# Pacific Basin LNG Supply Projects

## Full Value Chain Megaprojects

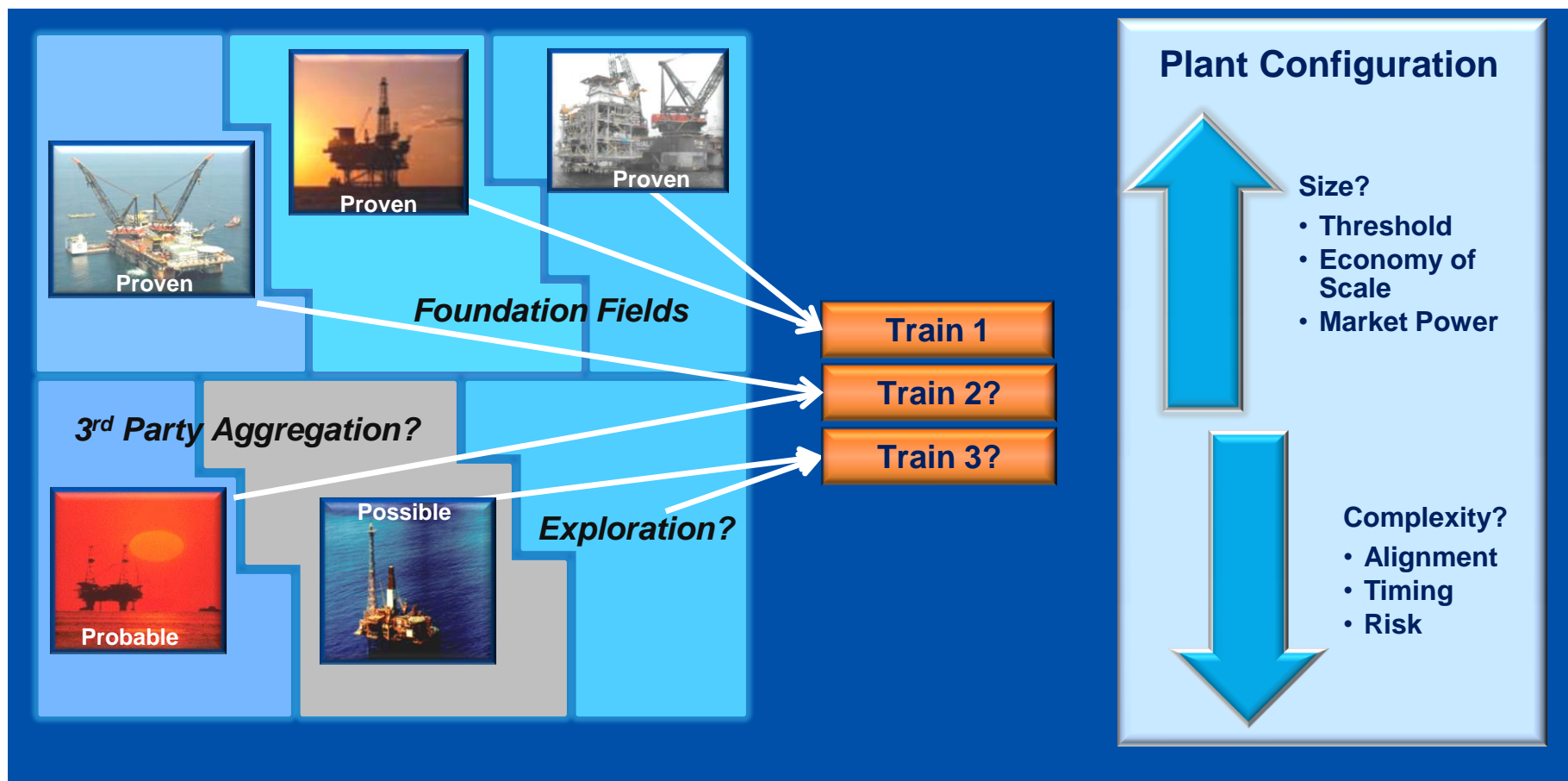


*Project elements are getting more complex*



# Resource Strategy

## Defining the Opportunity

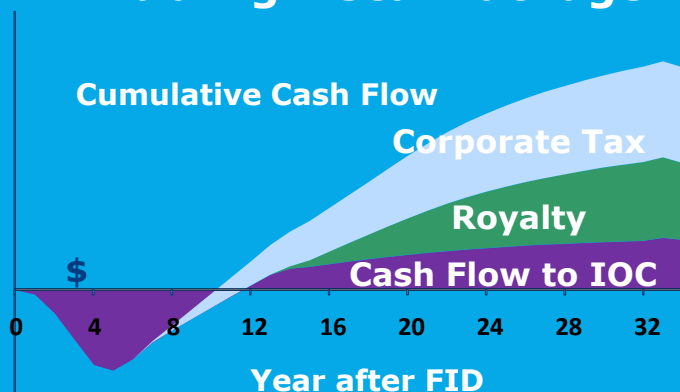


**Securing sufficient resources and determining optimal project structure could challenge execution timing**

# Government Support A Full Life Undertaking



## Enabling Fiscal Package



## Environmental Stewardship



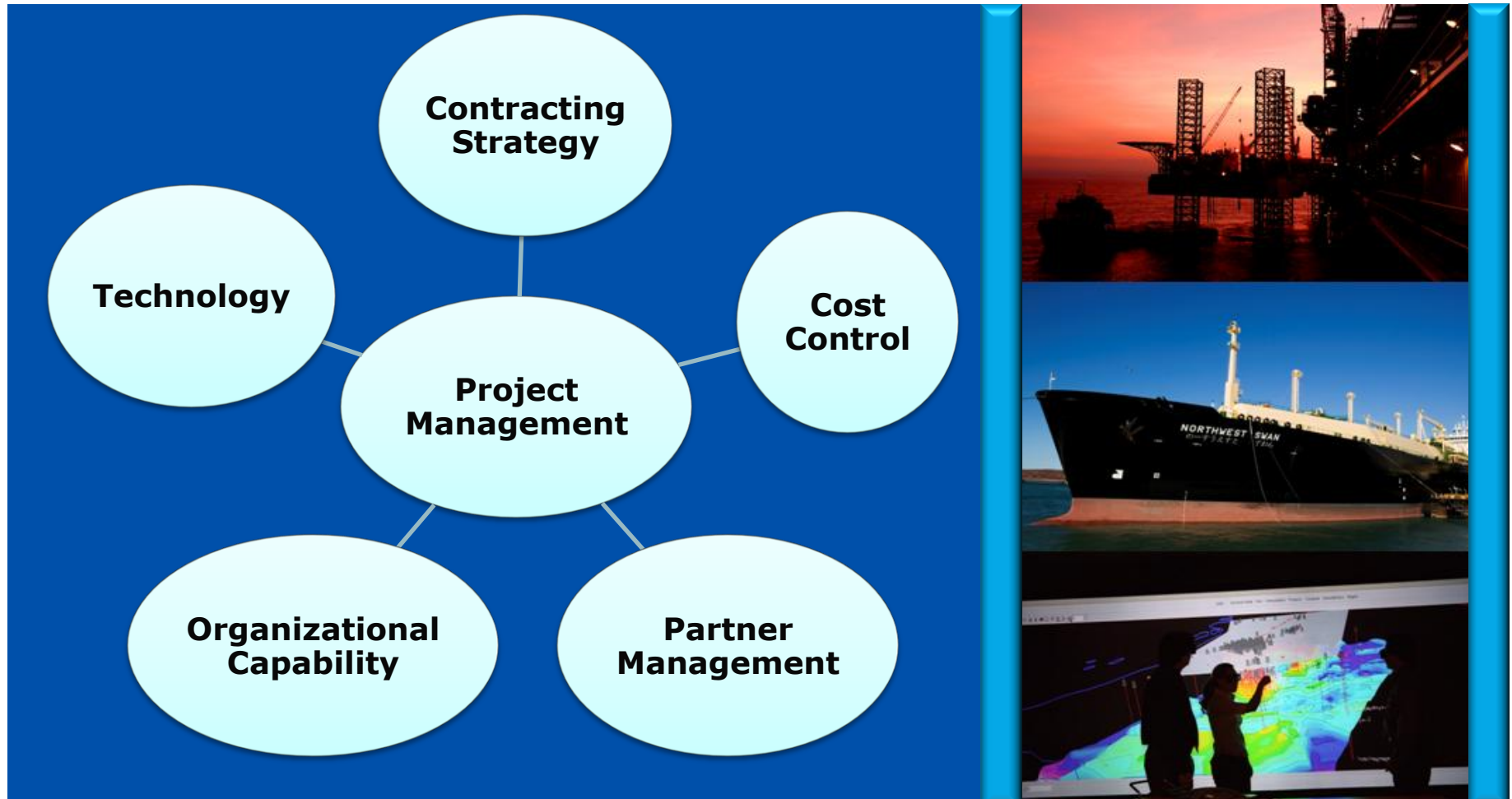
## Domestic Market Consideration



**Government objectives must be satisfied with solutions  
that are commercially viable**

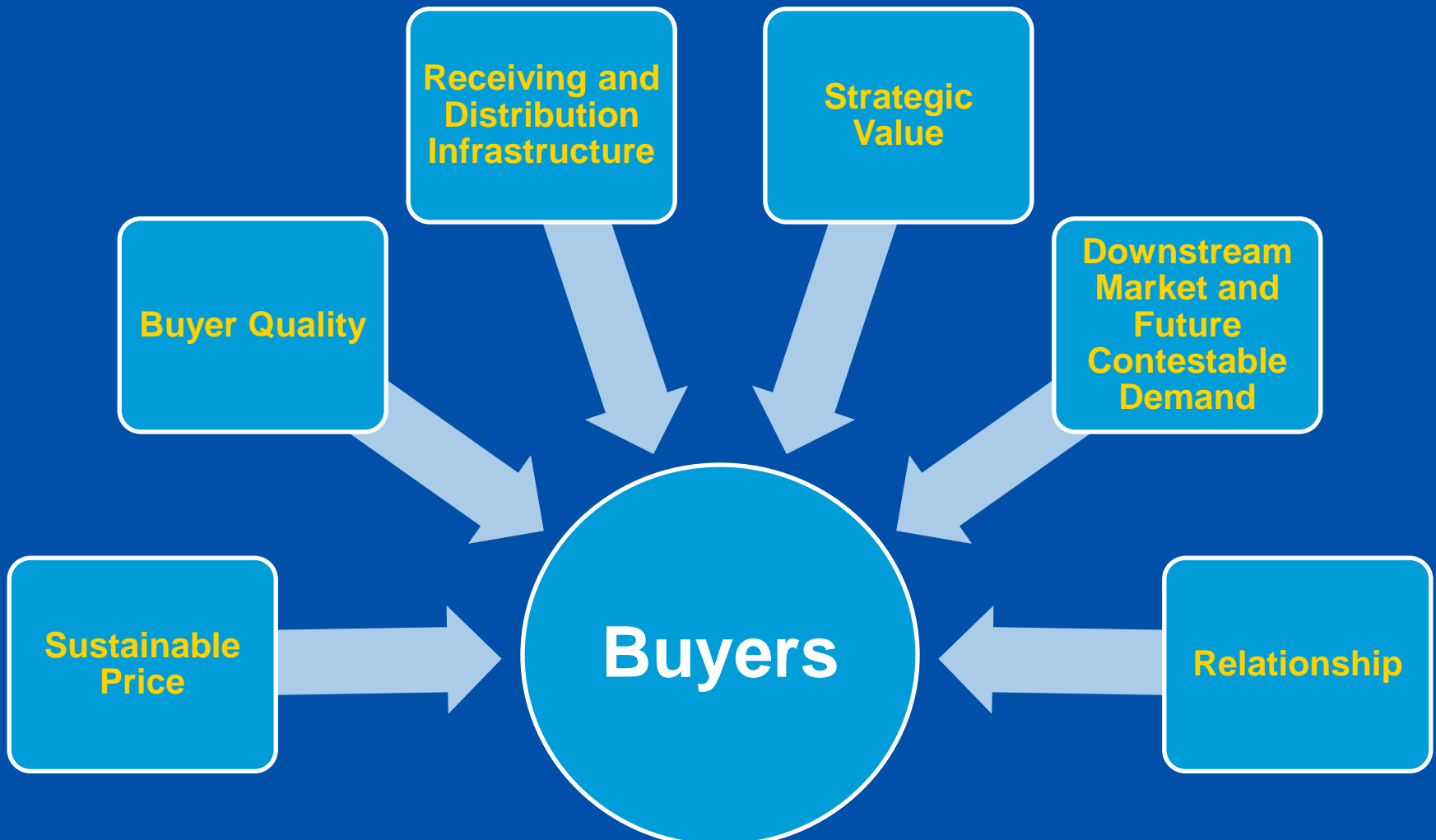


# Project Management Focusing on the Critical Factors



**Operators must have broad and deep capability**

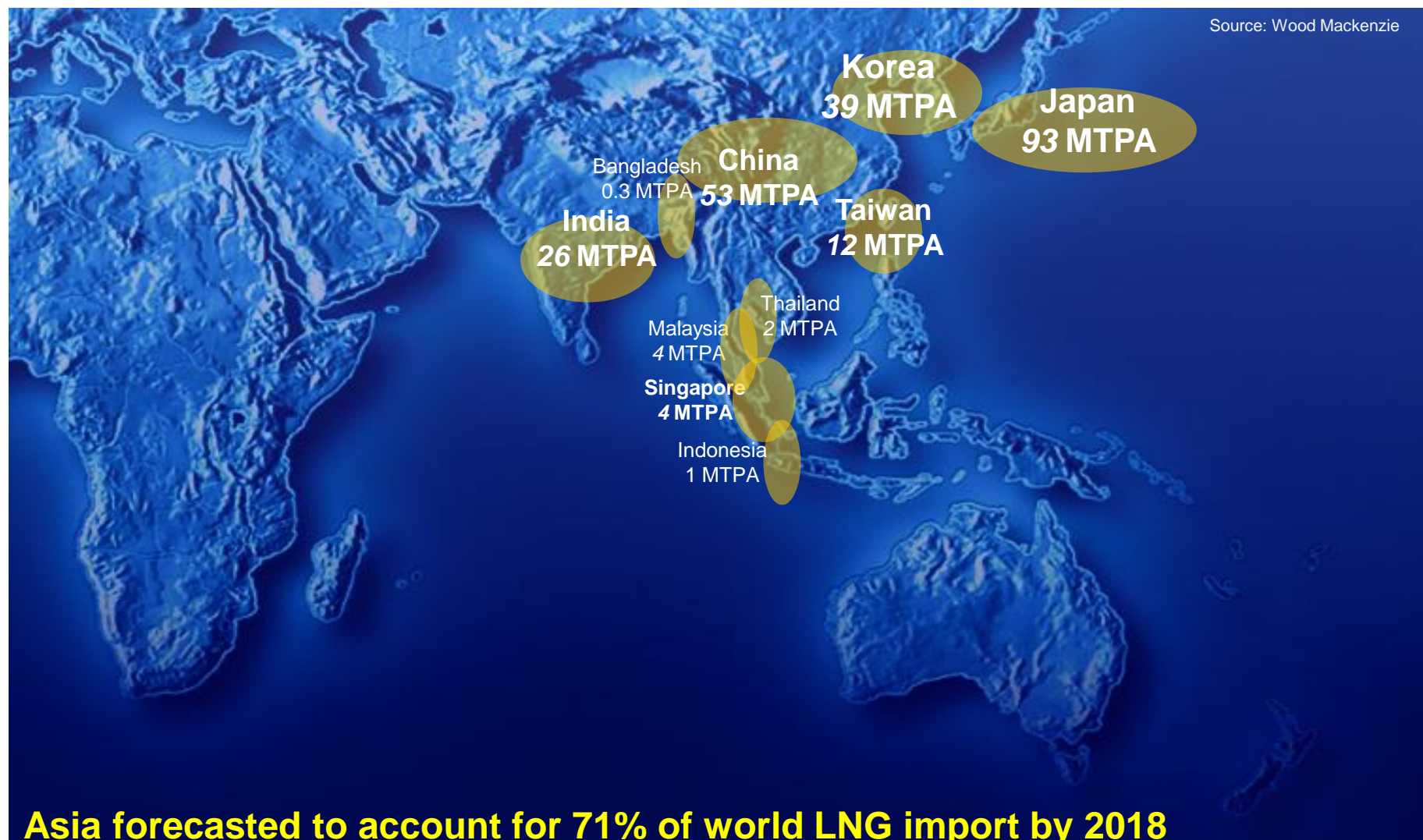
# Market Strategy: Solid Foundation Buyers



# Forecast Asia LNG Demand – 2018



Source: Wood Mackenzie



**Asia forecasted to account for 71% of world LNG import by 2018**

ありがとうございました

감사합니다

谢谢你

Thank You





# Chevron's Natural Gas Resources

