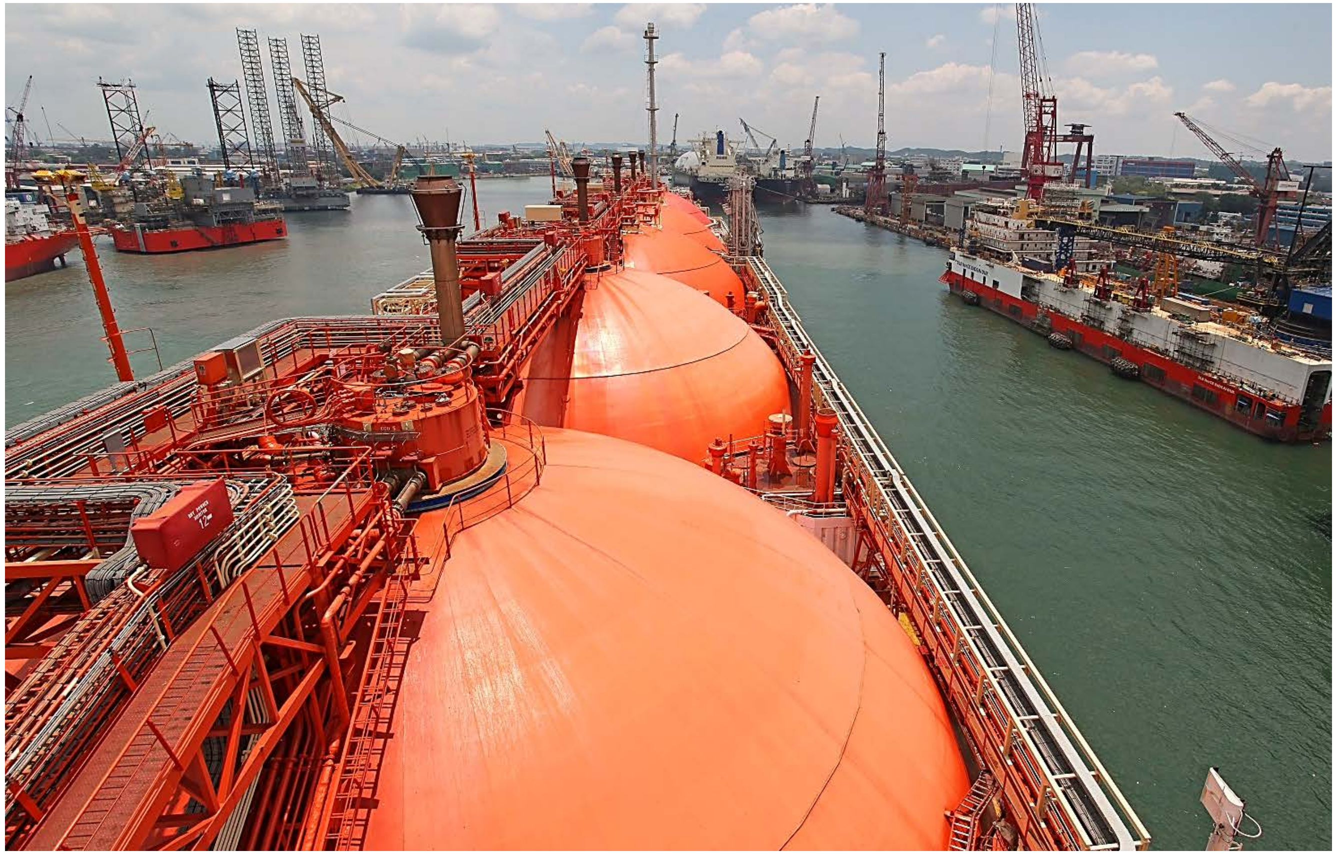

Fueling Growth, Empowering Delivery

Briefing to Analysts on Keppel's Gas Strategy

3 July 2017

Keppel Group

Disclaimer

This release may contain forward-looking statements which are subject to risks and uncertainties that could cause actual results to differ materially from such statements. Such risks and uncertainties include industry and economic conditions, competition, and legal, governmental and regulatory changes. The forward-looking statements reflect the current views of Management on future trends and developments.

The Keppel Group

Keppel meets the world's sustainable urbanisation needs through key businesses in Offshore & Marine, Property, Infrastructure and Investments

Offshore & Marine

- Rig design & construction
- Vessel conversion & repair
- Gas solutions & specialised vessels

Property

- Property development
- Investments

Infrastructure

- Energy & environmental infrastructure
- Infrastructure services
- Logistics & data centres

Investments

- Asset management
- Investments

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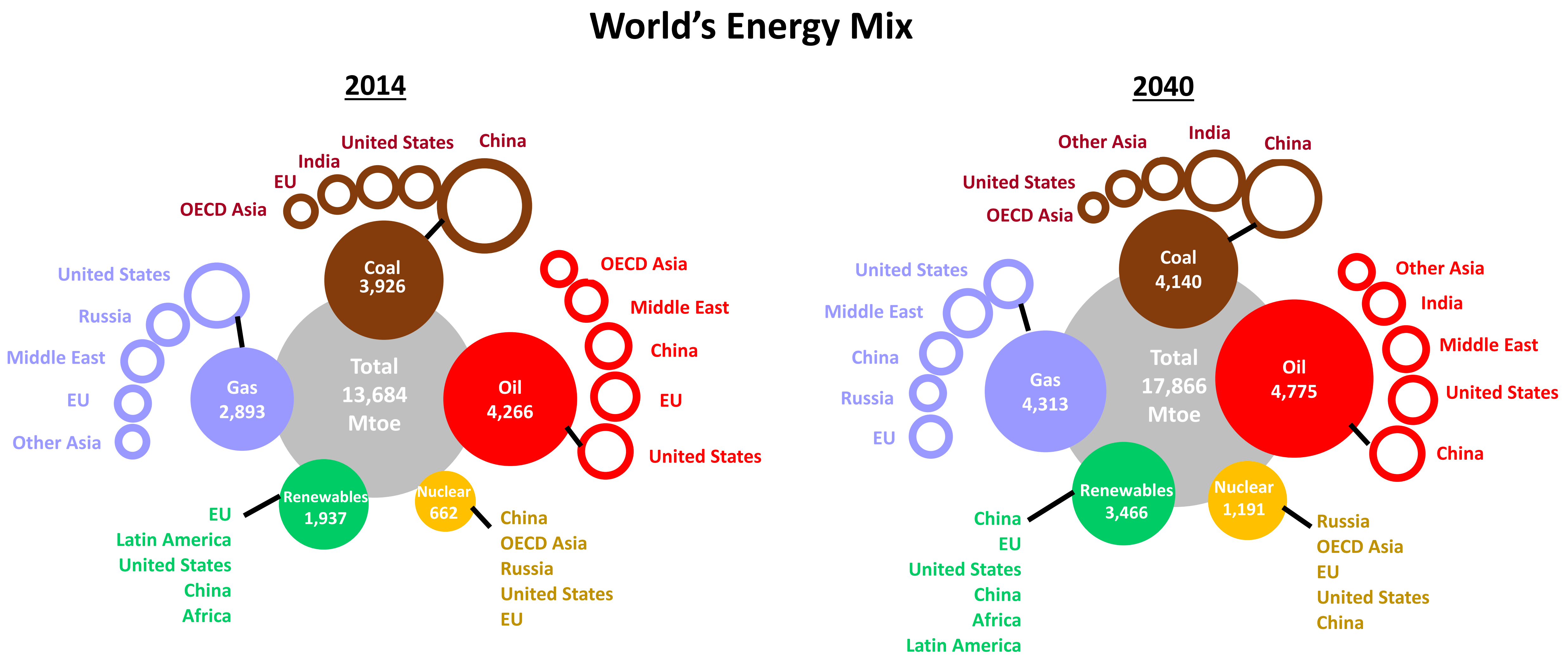
The Shift Towards Gas



Source: Global energy mix in 2040 - IEA World Energy Outlook 2016

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Natural Gas: Energy for the Future

ABUNDANT

- **85% of world's gas resources remain untapped**[2]
- Enough gas supply for 200 yrs[2]
- Gas prices expected to remain low in the long run

SUSTAINABLE

- **60%** less carbon compared to coal
- **20%** less carbon compared to oil
- Does not contain SOX nor NOX

TRANSPORTABLE

- **Liquefaction reduces gas volume by 600x.**
- Cryogenic boiling point of -160^{0}c
- **Expertise needed** for safe & efficient gas conversion, storage and delivery

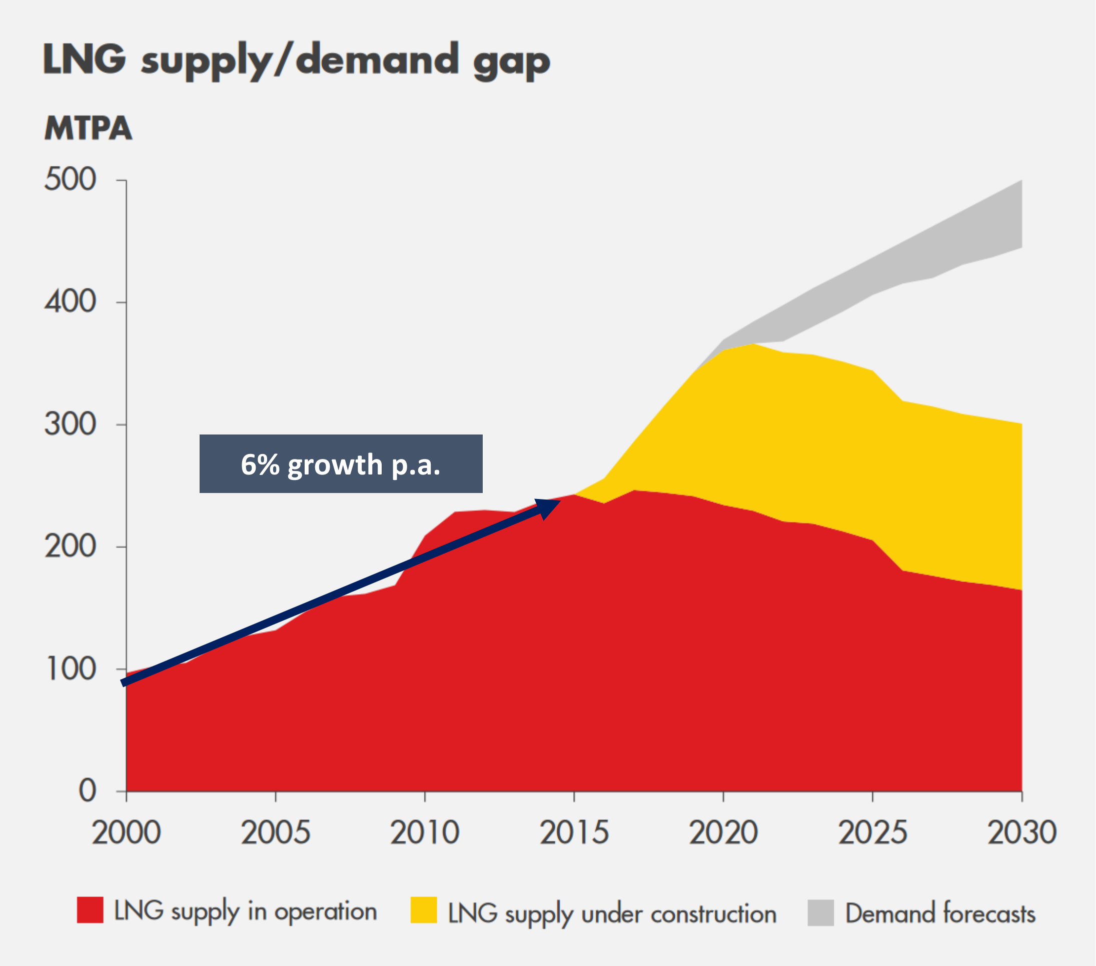
TRADABLE

- 1959: 1st LNG ship
- Share of LNG in gas trade:
  2000: 24%
  2016: **44%**
  2040: estimated **53%**[1]

1. Source: IEA World Energy's Outlook 2016
2. Exxon Energy Outlook 2017

Global Gas Outlook

New market drivers are emerging on the back of strong consumption growth. Sourcing for alternatives pipeline gas and coal remains a fundamental theme.



Source: Shell LNG Outlook 2017

2016 : 265MTPA TRADED, VOLUMES TO DOUBLE BY 2030

Policymakers increasingly choose Gas

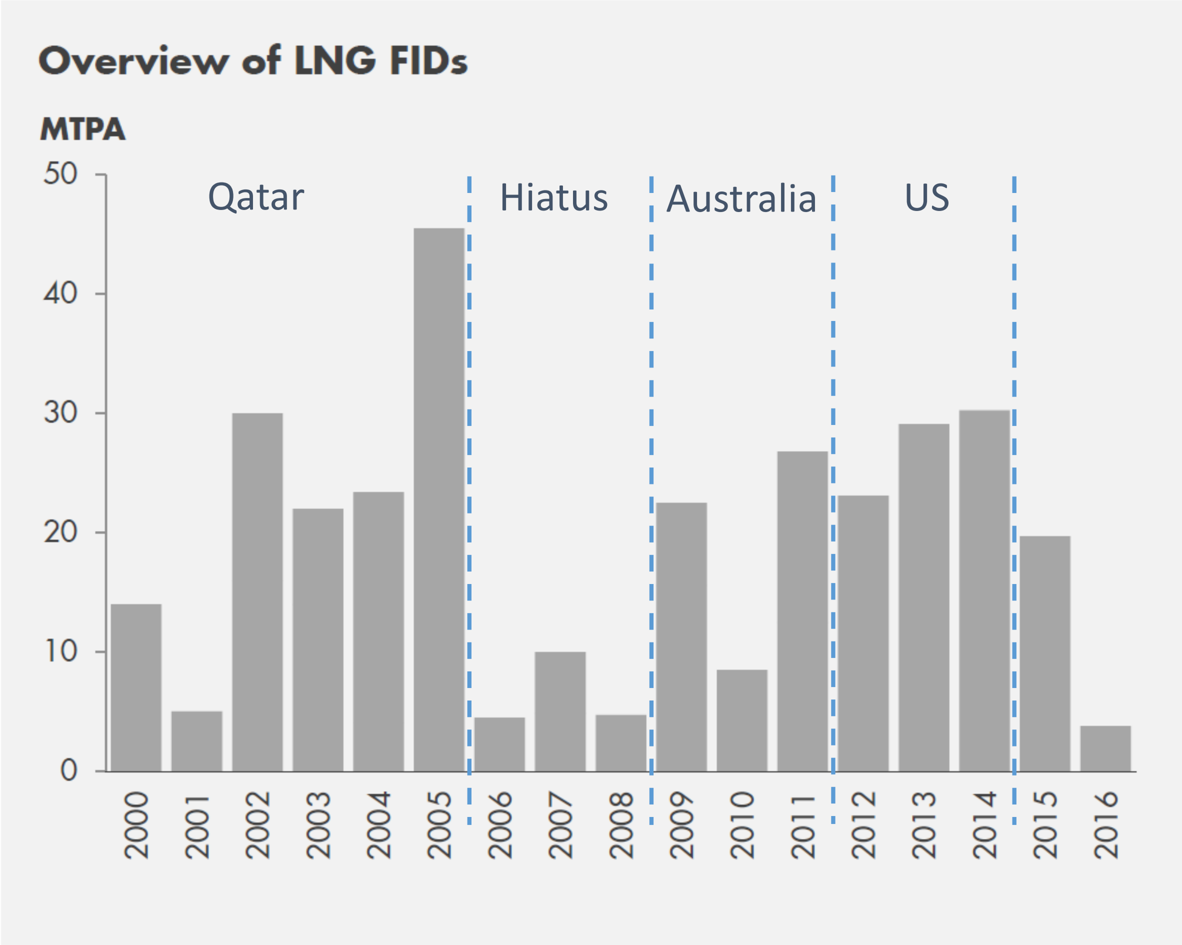
- China plans significant additional gas demand
- France & Canada join list of countries phasing out coal
- IMO's 2020 global sulphur cap for ships

New market drivers are emerging

- Traditional exporters becoming importers
- Need to balance pipe gas purchases for energy security
- Growth in use of LNG for transport
- Rise of small scale gas markets

Global Gas Outlook

Slow down in LNG projects amidst low oil price and high cost environment will pressure supply, while changing landscape presents new challenges and opportunities.



Source: Shell LNG Outlook 2017

2016 : ONLY 2 FIDs TOTALING 6.3MTPA

Market tightness expected over next decade

- Capital investment lowest since 2008
- IEA warns of underinvestment and energy complacency
- Additional liquefaction capacity required to meet rising demand after 2020

Opportunities for new cost-effective solutions

- Buyers are requiring enhanced contract flexibility
    - Shorter & smaller contracts
    - Destination flexibility

Keppel's Milestones in LNG

Venturing into Small-scale LNG
2017
- Building series of small-scale LNG carriers
- Completed world's 1st FLNG conversion

Moving into LNG as a marine fuel
2016
- Keppel-Shell JV won Singapore bunkering licence
- Implementing LNG Supply chain

Expanding solutions
2015
- Set up Gas Technology Development
- Established early customer engagement process

Scaling upstream
2013-2014
- Embarked on world's 1st FLNG conversion
- Took strategic 10% stake in Golar Hilli FLNG vessel

Entering midstream
2006-2011
- Completed world's 1st FSRU & FSU conversions

Charting 30 years of gas experience

Growing foundations
1987-1993
- Completed world's 1st FPSO conversion
- Repaired the most number of LNG carriers [ex-Japan]
- Built and owned power barges
- Established track record in turret fabrication

Keppel's Gas Value Chain

Integrating the gas value chain and providing solutions for the seamless delivery of LNG from end to end.

Empowering Gas Delivery

Keppel is positioned to meet emerging trends in the gas market with a suite of innovative solutions catering to the entire value chain.

Upstream | Midstream | Downstream

Gas to LNG → LNG to Users → LNG to Gas → Gas to Power → Gas as Fuel

Liquefaction

FLNG

Conventional LNG

FSRU | FSU | FRU | FSRP

Small Scale LNG

Carriers | FSRU | Power Barge

LNG for Transport

Bunker Barge | Gas-fuelled Vessel

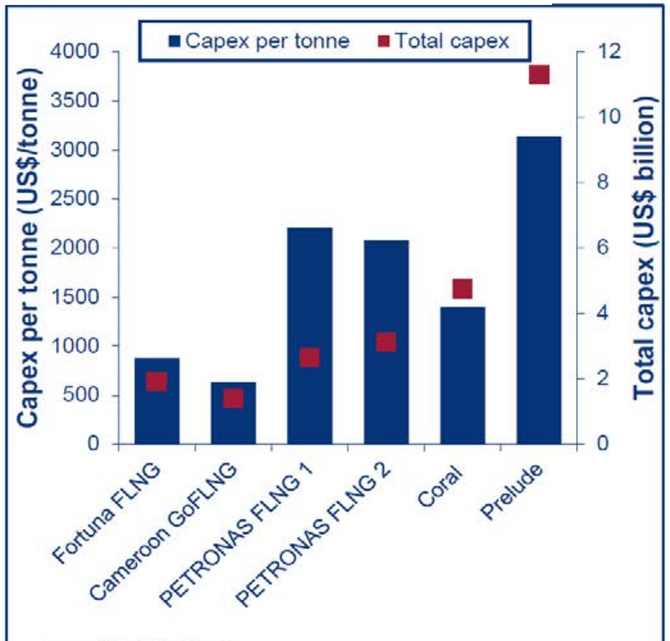
Liquefaction

Head start with Golar Hilli
- *Achieved FID at low oil prices*
- *Established upstream & midstream partners, offtake from oil major*
- *Replicable, scalable solution for further offshore*
- *Patent obtained for liquefaction technology*

Gas to LNG | LNG to Users | LNG to Gas | Gas to Power | Gas as Fuel

FLNG

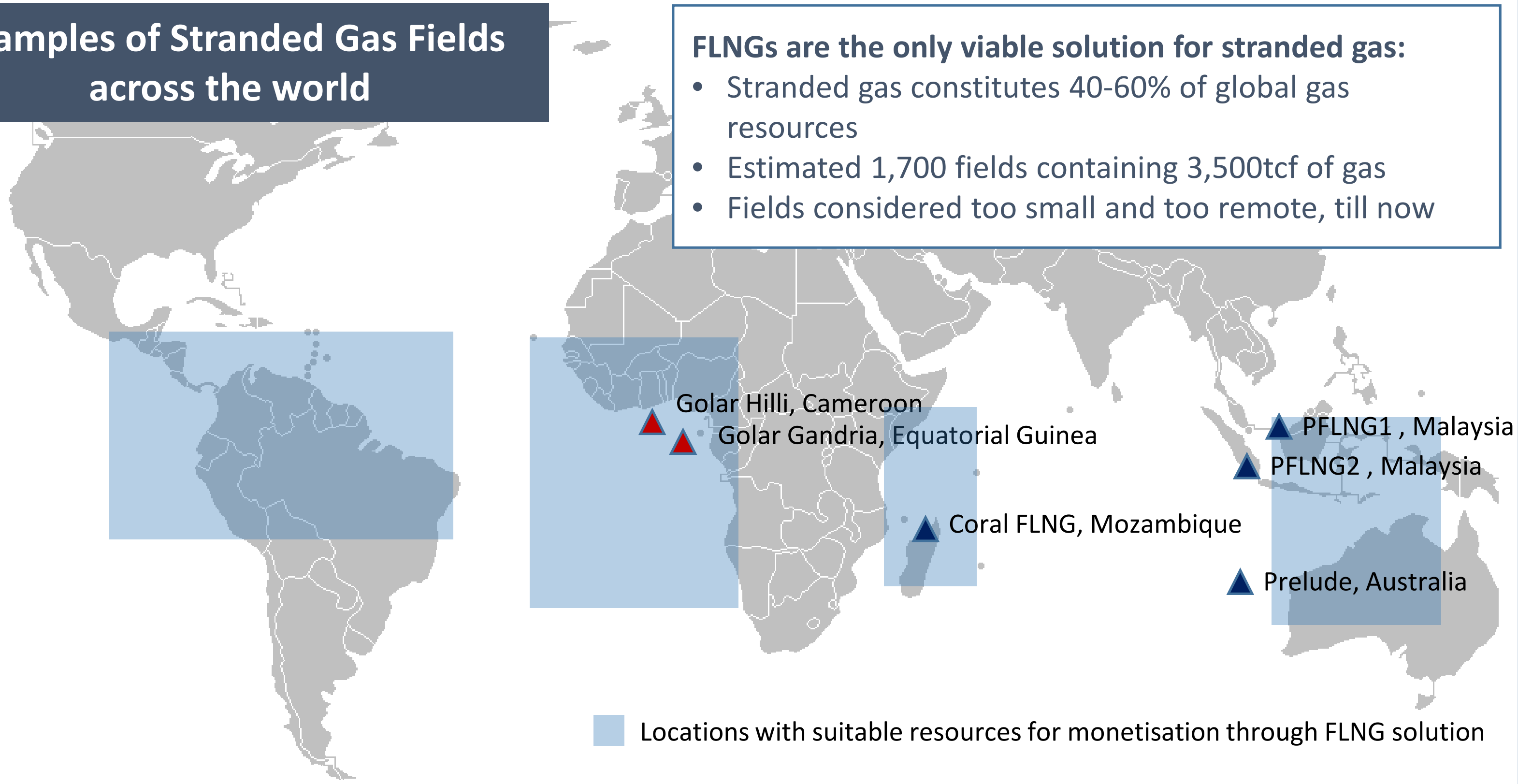
FLNG Capital Costs



Source: Wood Mackenzie

Examples of Stranded Gas Fields across the world

FLNGs are the only viable solution for stranded gas:
- Stranded gas constitutes 40-60% of global gas resources
- Estimated 1,700 fields containing 3,500tcf of gas
- Fields considered too small and too remote, till now



Source: IHS, United States Geological Survey (USGS)

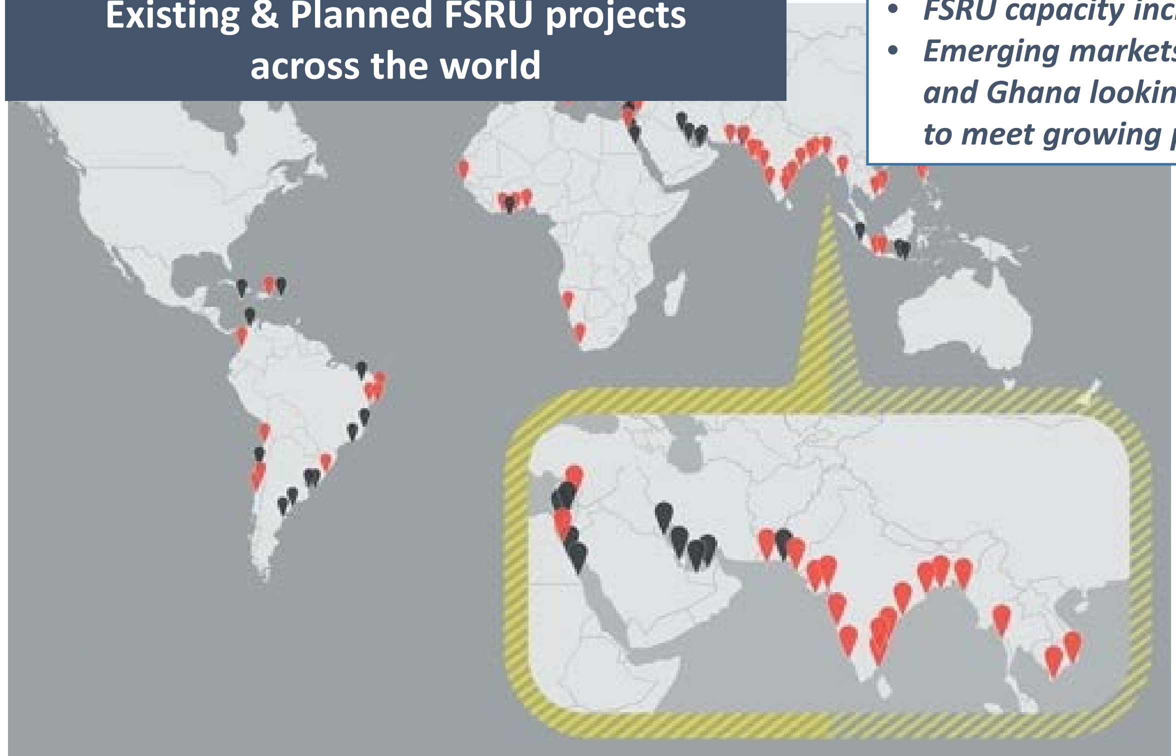
Conventional LNG to Power

Keppel's Track Record
- *World's leader in FSRU, FSU Conversions*
- *One-stop EPC solutions provider*
- *Collaboration with Moss Maritime for regasification solution*
- *Conversion reduces time-to-market, and increases responsiveness*

Gas to LNG → LNG to Users → LNG to Gas → Gas to Power → Gas as Fuel

FSRU, FSU and Powerships

Existing & Planned FSRU projects across the world



LNG Shipping 2016: 30 existing and planned FSRU-based projects and nearly 40 subject to detailed discussion

- *FSRU capacity increased by over 30% in 2016.*
- *Emerging markets including India, Bangladesh and Ghana looking for fast-track FSRU solutions to meet growing power needs*

6 NEW IMPORTERS in 2015 & 2016

Source: LNG Shipping May/June 2016

Small Scale LNG to Power

Integrating and enabling end-to-end solutions

- *Ability to stitch up value chain with key partners to meet demand for small-scale LNG markets*
- *Proprietary ship and regasification designs*

INDONESIA

- 85% electrified, 18,000 islands
- WoodMac forecasts power demand to grow by > 6%p.a., requiring US$80bn investment through 2025.

MEDITERRANEAN

- Stranded power and industrial demand in Med islands to be fulfilled by small scale LNG.

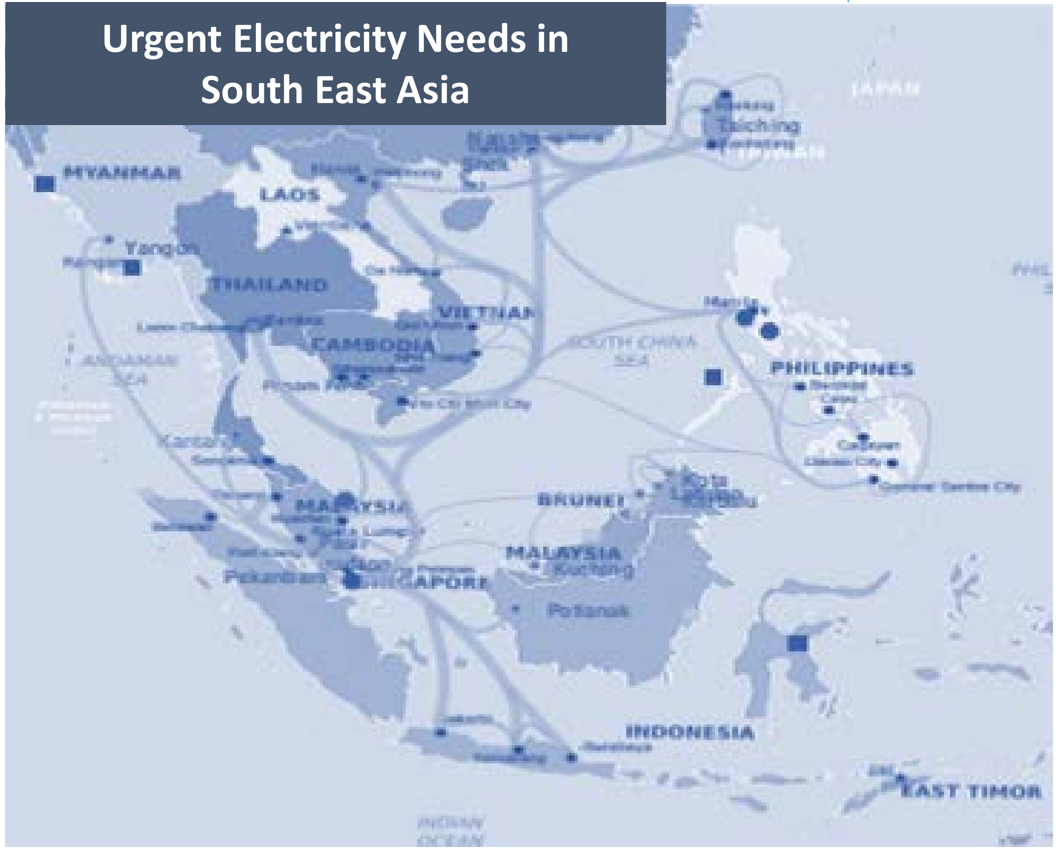
CARIBBEAN

- ‘hub and spoke’ LNG distribution projects for diesel conversion projects.

Gas to LNG → LNG to Users → LNG to Gas → Gas to Power → Gas as Fuel

LNG Carriers, FSRUs, ORUs, Power Barges

Urgent Electricity Needs in South East Asia



- ***Archipelagic island power poised to grow on the back of urgent power needs***
- ***Cheaper CAPEX & OPEX for Gas-fired plants***

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LNG for Transport

Total Solutions Provider

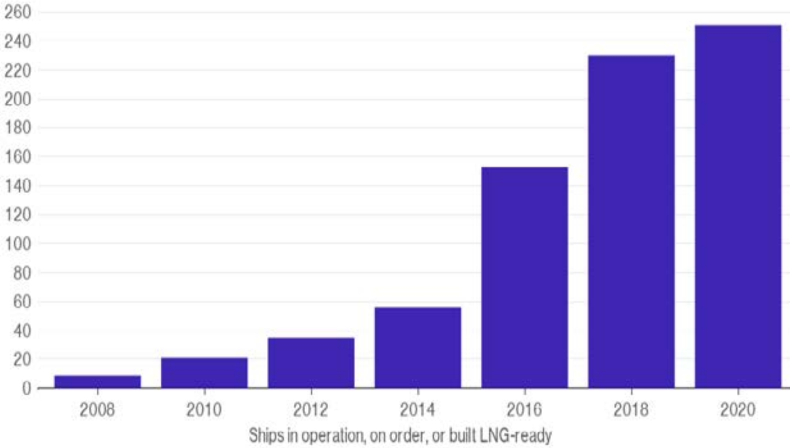
- *Keppel is implementing a reliable LNG bunkering supply chain*
- *Well-placed to provide secure and economical LNG to end users*

Gas to LNG → LNG to Users → LNG to Gas → Gas to Power → Gas as Fuel

Gas-fueled vessels, LNG bunker vessels

The Great Transition

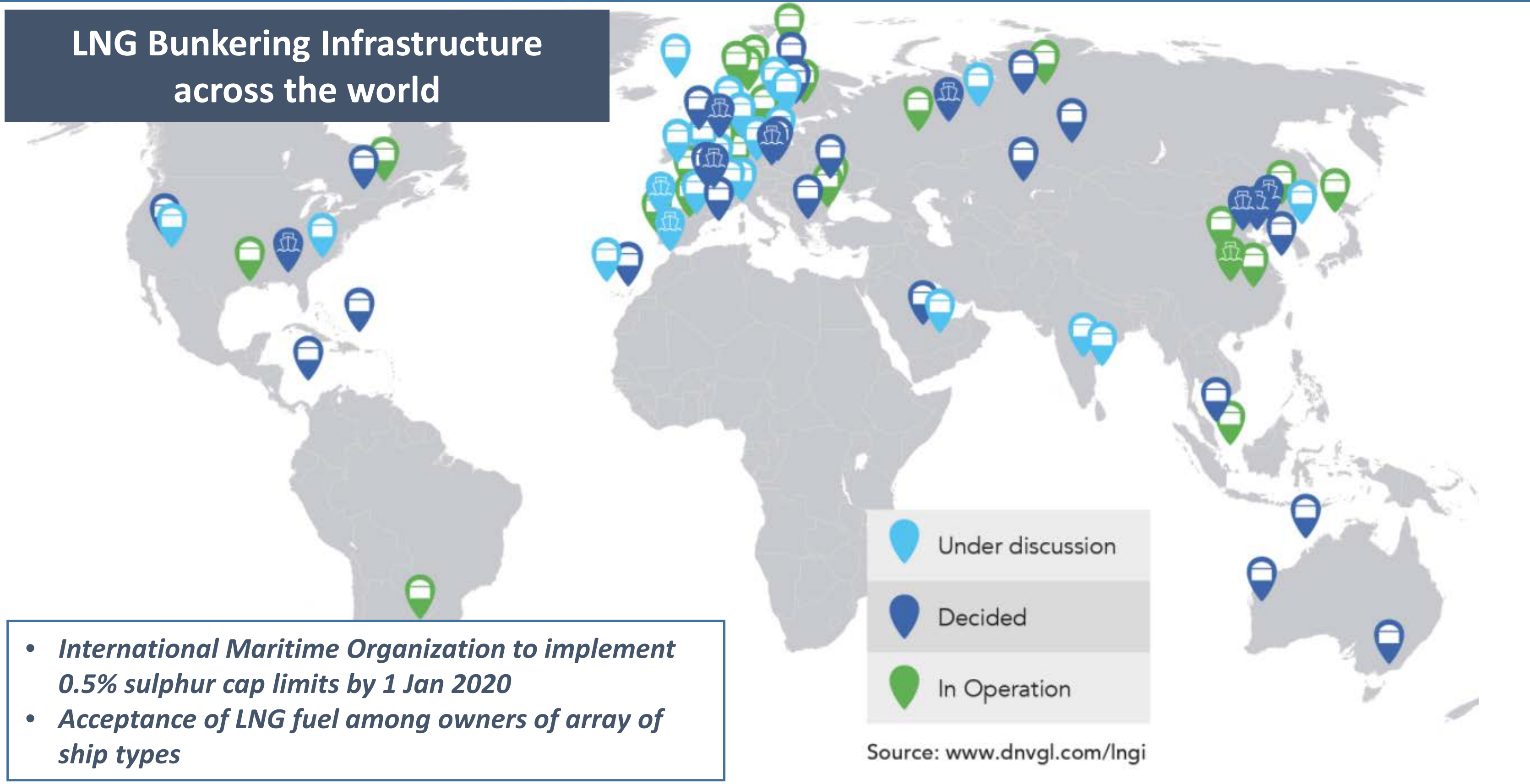
Number of ships set to run on LNG is surging



Source: DNV GL
*Excludes LNG carriers and inland waterway vessels

Bloomberg

LNG Bunkering Infrastructure across the world



Source: www.dnvgl.com/lngi

- *International Maritime Organization to implement 0.5% sulphur cap limits by 1 Jan 2020*
- *Acceptance of LNG fuel among owners of array of ship types*

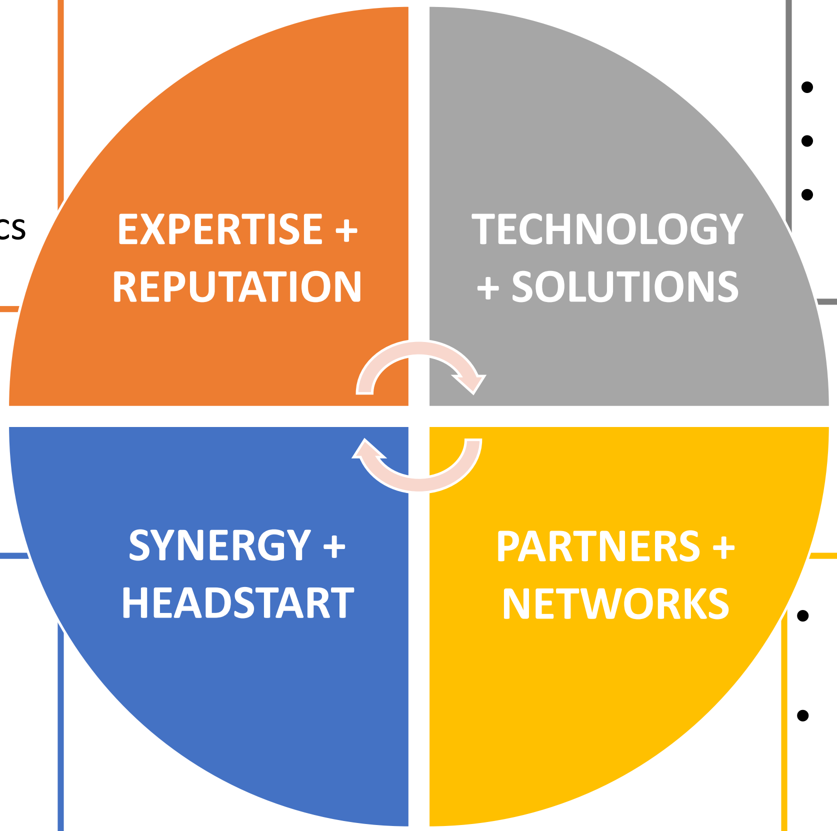
Keppel Group

Industry Partner & Enabler

Keppel provides innovative gas solutions, integrating them across the value chain to bring LNG from producers to consumers

- Proven track record:
  - World's leader in rigbuilding, vessel conversion and repair
  - Expert in turrets and cryogenics

- Dedicated gas technology arm
- In-house gas patents and designs
- Full suite of end-to-end gas solutions



- Tapping Keppel Group's strengths and synergies
- Establishing competitive edge with early head start

- Strong ties with longstanding customers and blue-chip partners
- Deep involvement with industry coalitions and organisations such as SGMF, SEA\LNG

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GOLAR HILLI FLNG Vessel, July 2017

Turning Vision into Reality