



apppea

the voice of australia's  
oil and gas industry

# Future of Natural Gas Resources and LNG Markets

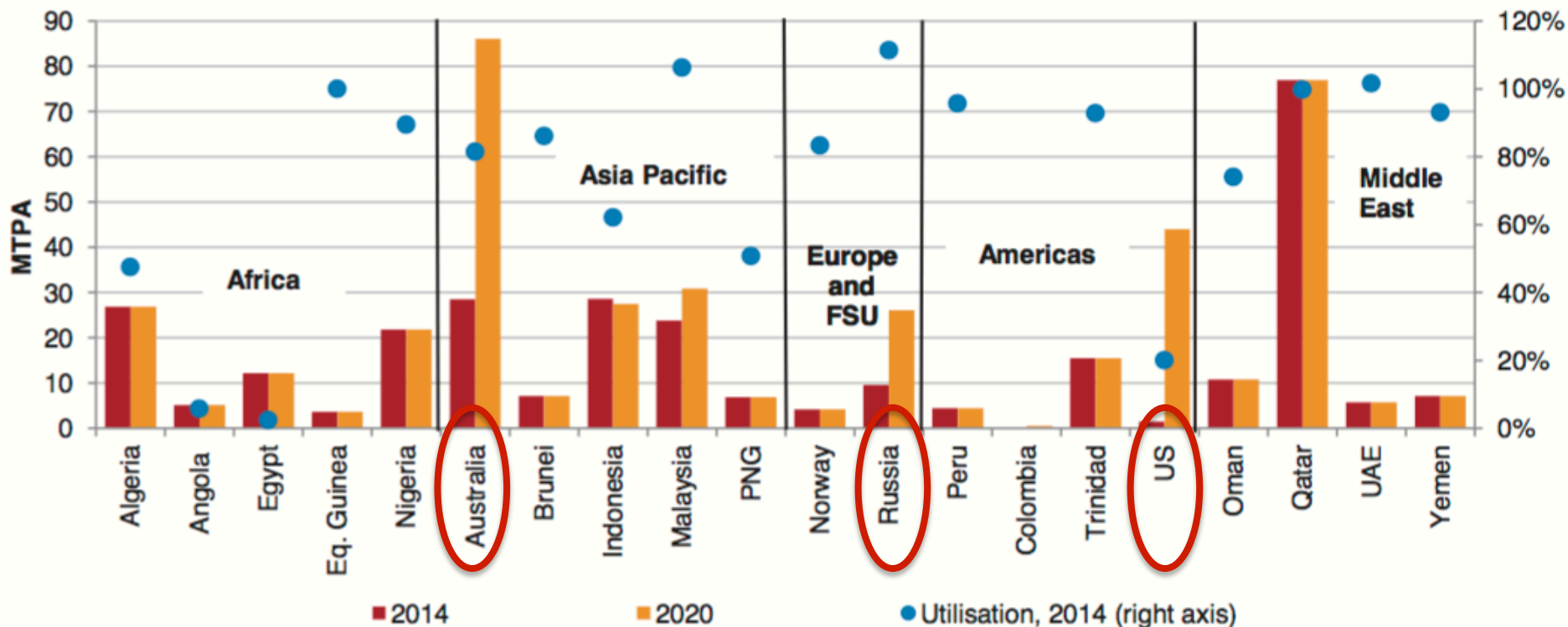
Rick Wilkinson  
Chief Technical Officer



October 2016

# Australia, Russia and USA and building material new LNG capacities to export gas

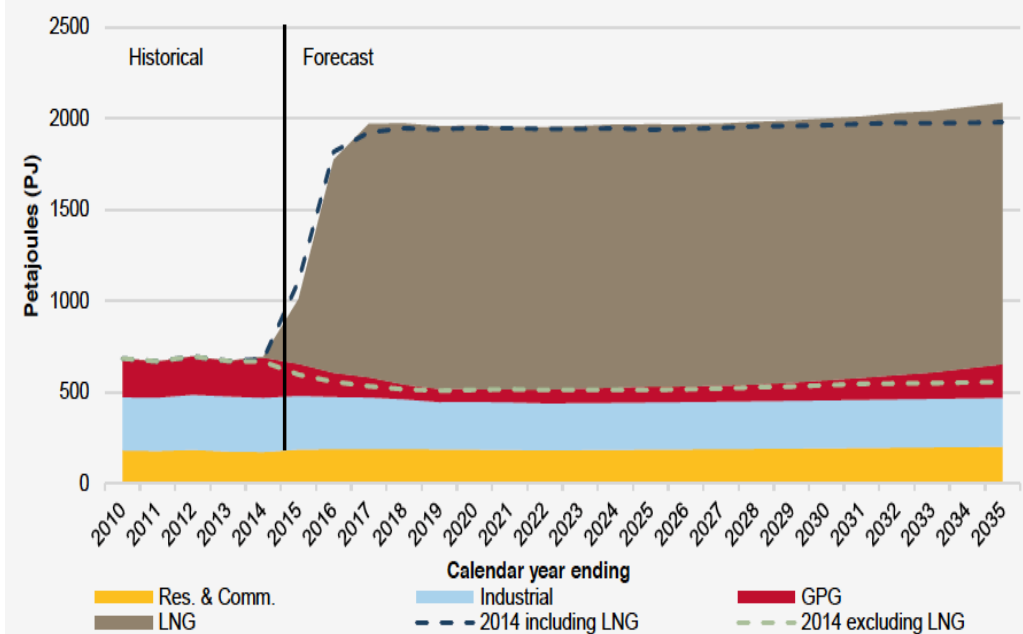
Liquefaction Capacity by Country in 2014 and 2020



Note: Liquefaction capacity only takes into account existing and under construction projects expected online by 2020

# CBM and LNG has had a major impact on the Australian domestic gas market

Eastern Australia total annual gas consumption (PJ pa)

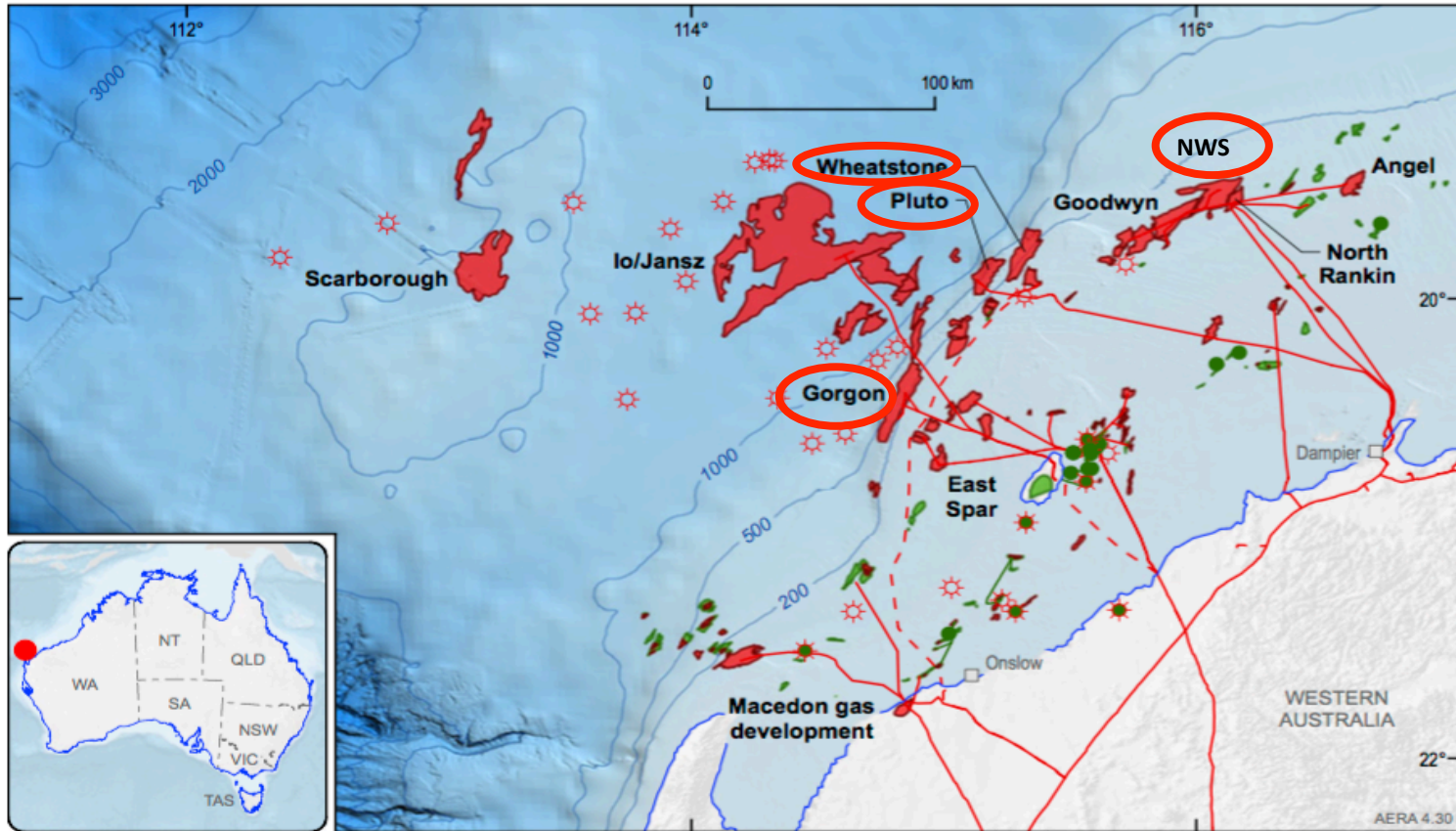


Source: EnergyQuest Quarterly Report Aug 2016; AEMO National Gas Forecasting Report 2015

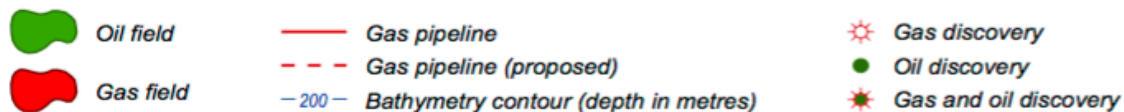


## June Quarter 2016 Sales Gas Production and Consumption (PJ)

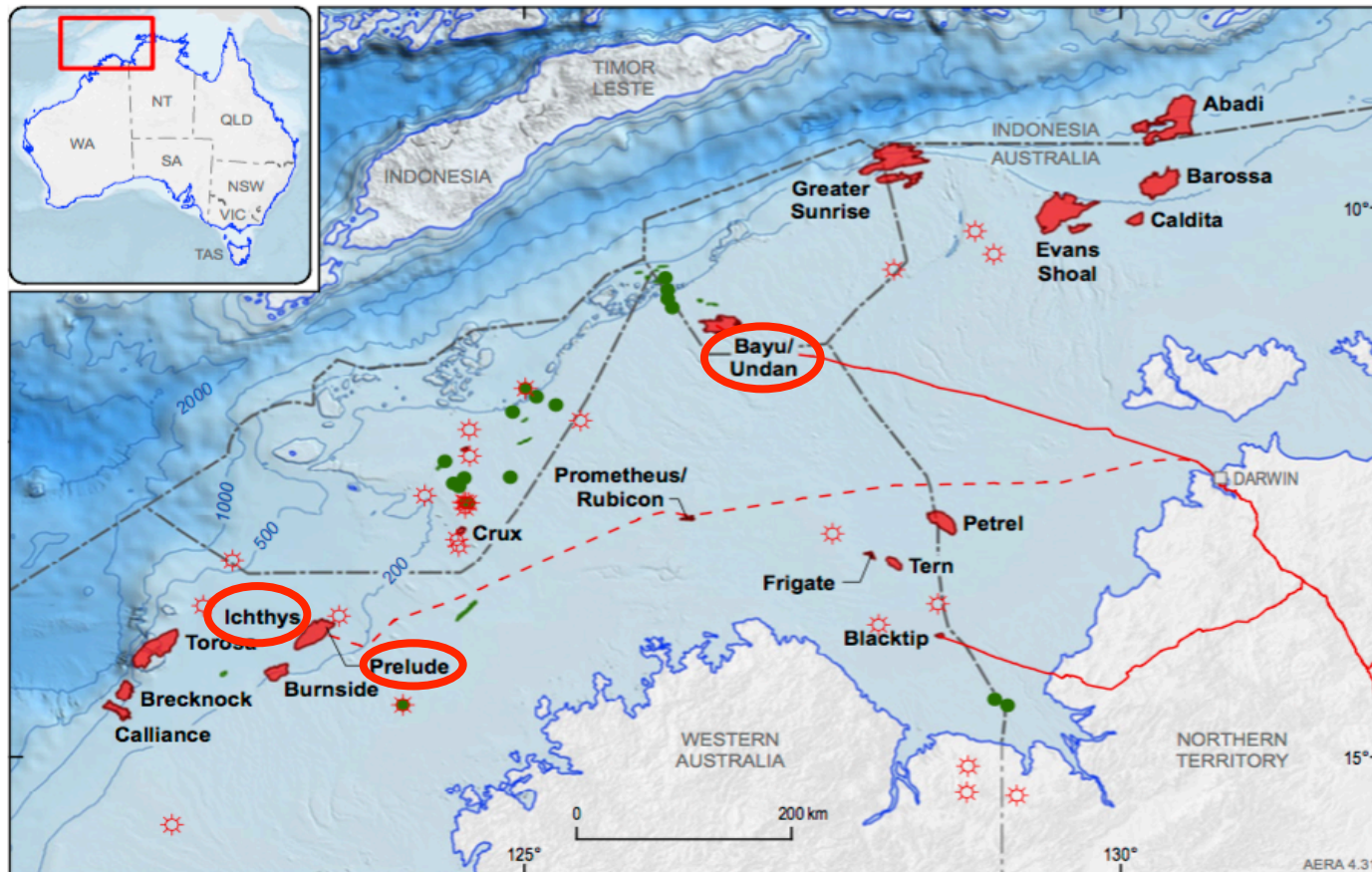
# Western Australia – Carnarvon Basin












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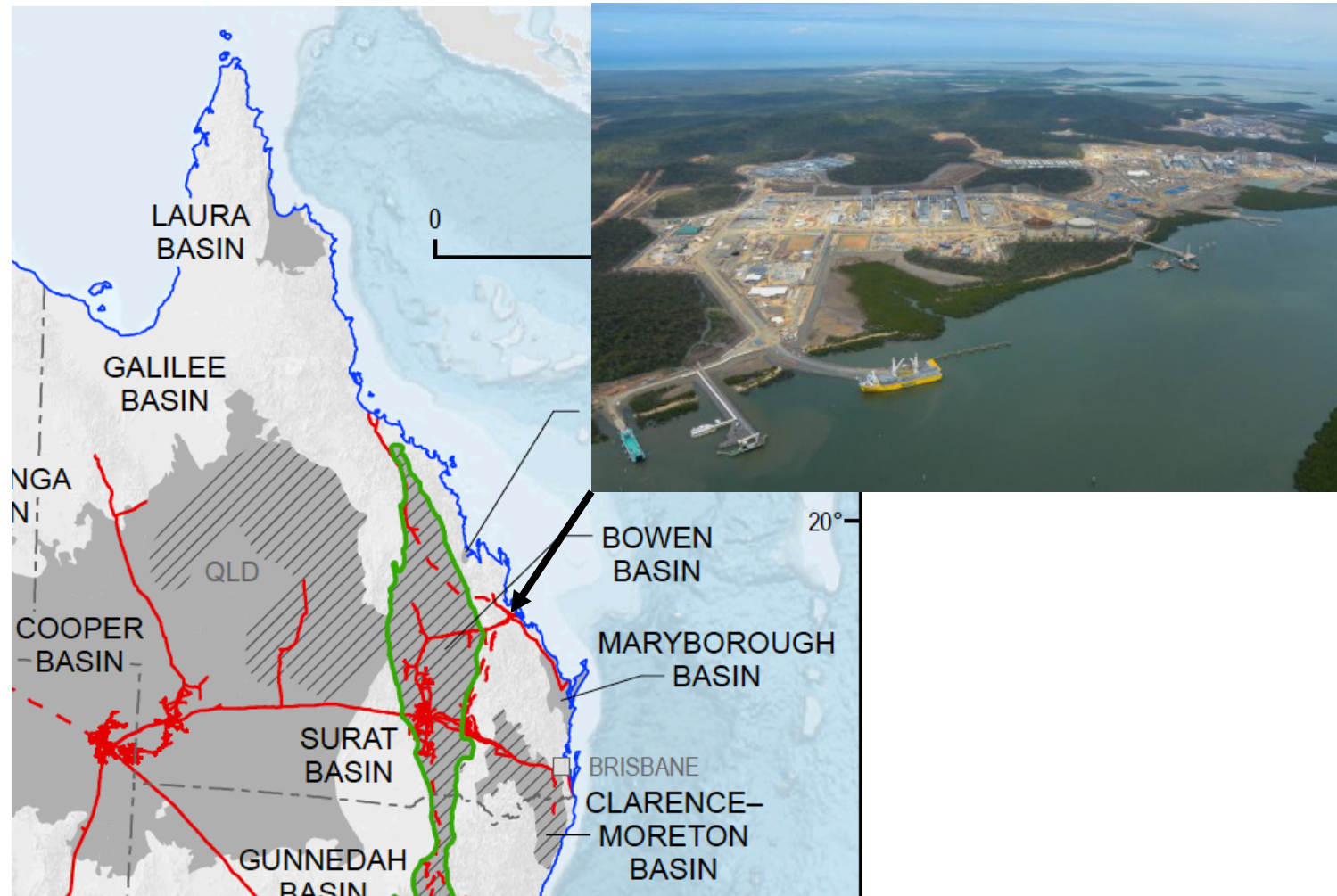
# Northern Territory/Western Australia – Browse Basin



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- |   |           |   |                                       |   |                       |
|---|-----------|---|---------------------------------------|---|-----------------------|
|  | Oil field |  | Gas pipeline                          |  | Gas discovery         |
|  | Gas field |  | Gas pipeline (proposed)               |  | Oil discovery         |
|   |           |  | Bathymetry contour (depth in metres)  |  | Gas and oil discovery |
|   |           |  | Scheduled area boundary (OPGGSA 2006) |   |                       |

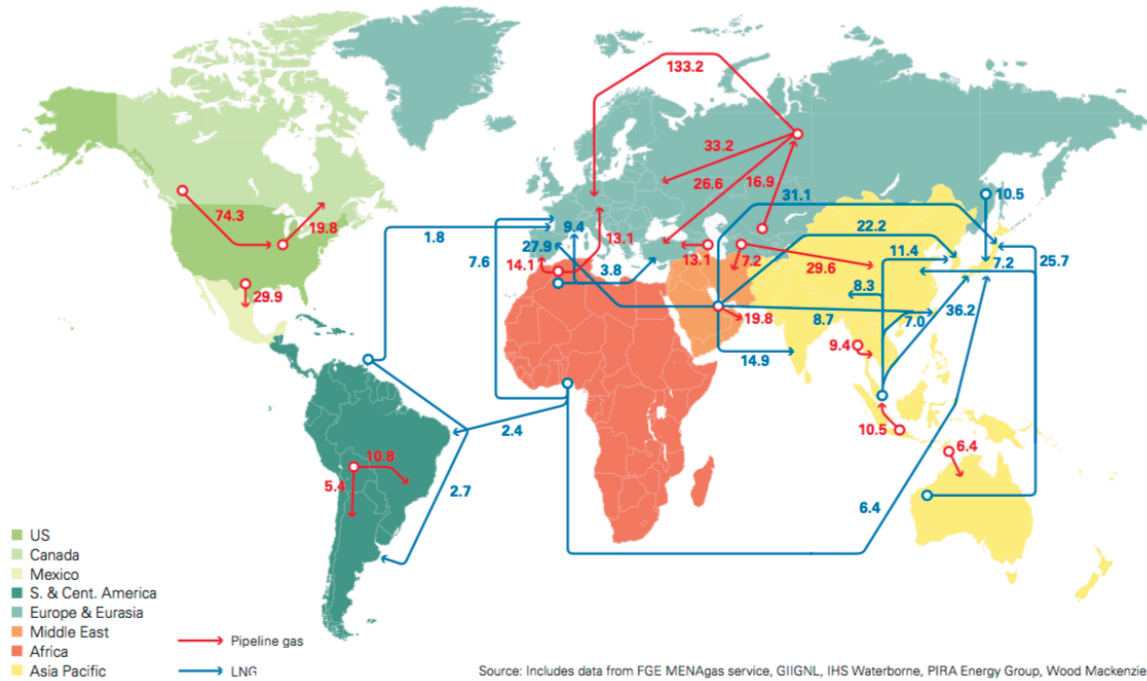
# Queensland Gas Fields



# LNG has many competitors including pipelines which move two thirds of global traded gas...

Gas Trade:	
(BCM pa)	
LNG	338
Pipeline	704
<b>Total</b>	<b>1,042</b>

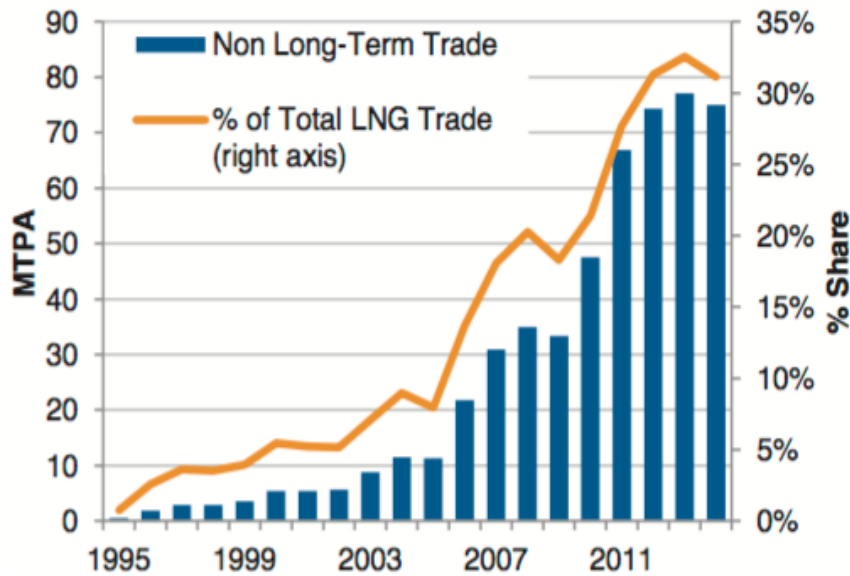
**Major trade movements 2015**  
Trade flows worldwide (billion cubic metres)



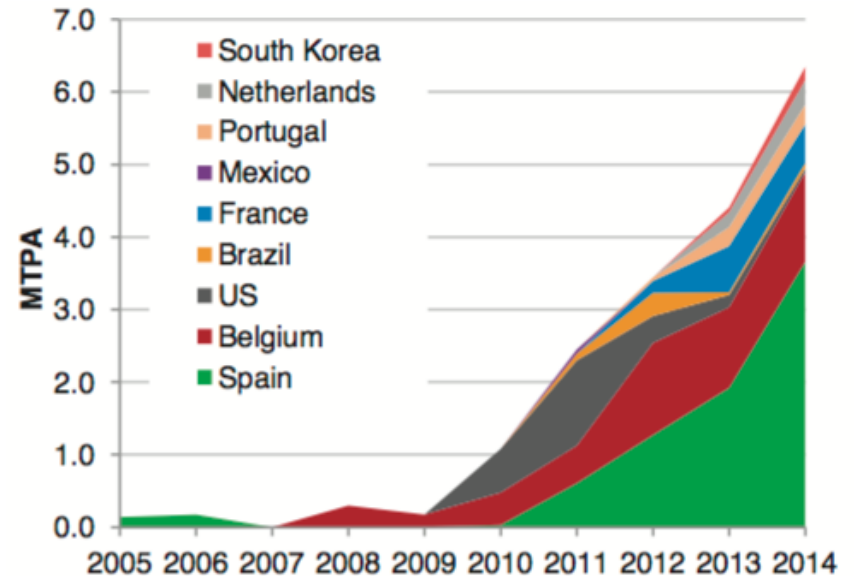
...before considering coal, nuclear or renewables

# To be competitive, LNG needs to build commercial and physical capacity to trade short term and optimise value

Non Long-Term Volumes, 1995-2014



Re-Exports by Country, 2005 - 2014



Source: IGU World LNG Report 2015