



# LNG FUTURE AS SEEN BY TOTAL

Philippe Sauquet, President Gas & Power

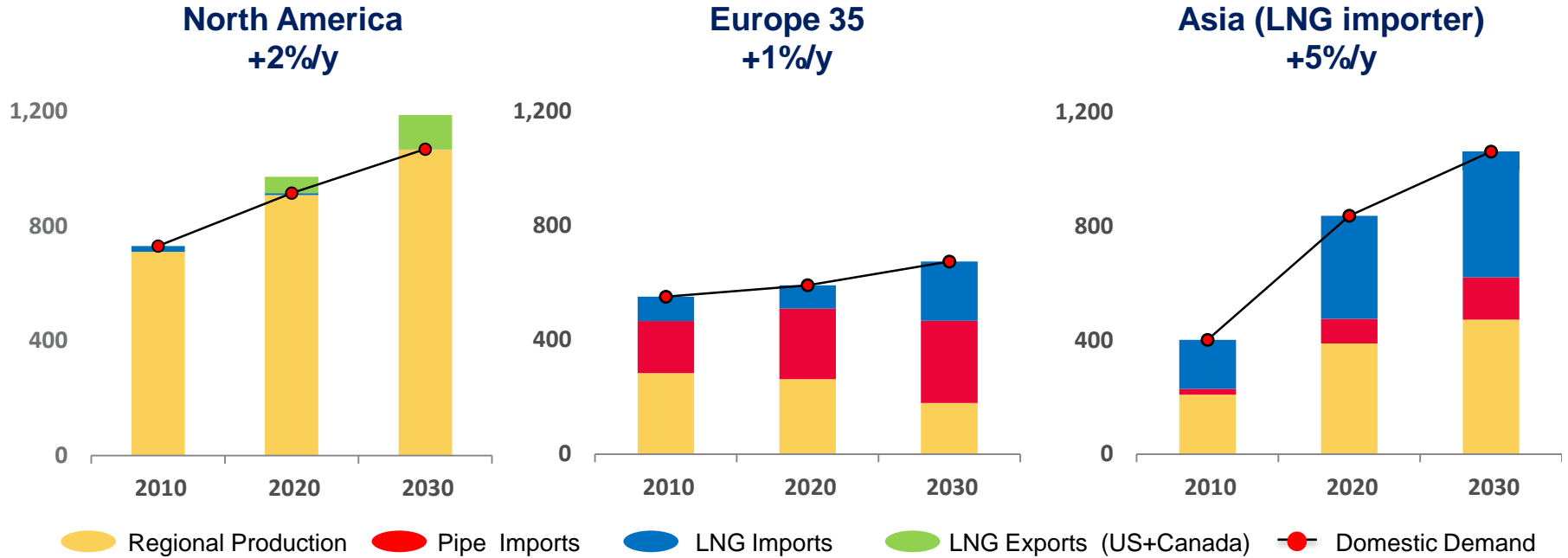
Tokyo, September 10<sup>th</sup> 2013

LNG Producer-Consumer conference

# INCREASING GLOBAL GAS DEMAND

Satisfaction of gas demand by region

Bcm/y



- 2010-30 global gas demand **+2% per year**
- **Fastest growth in Asia**

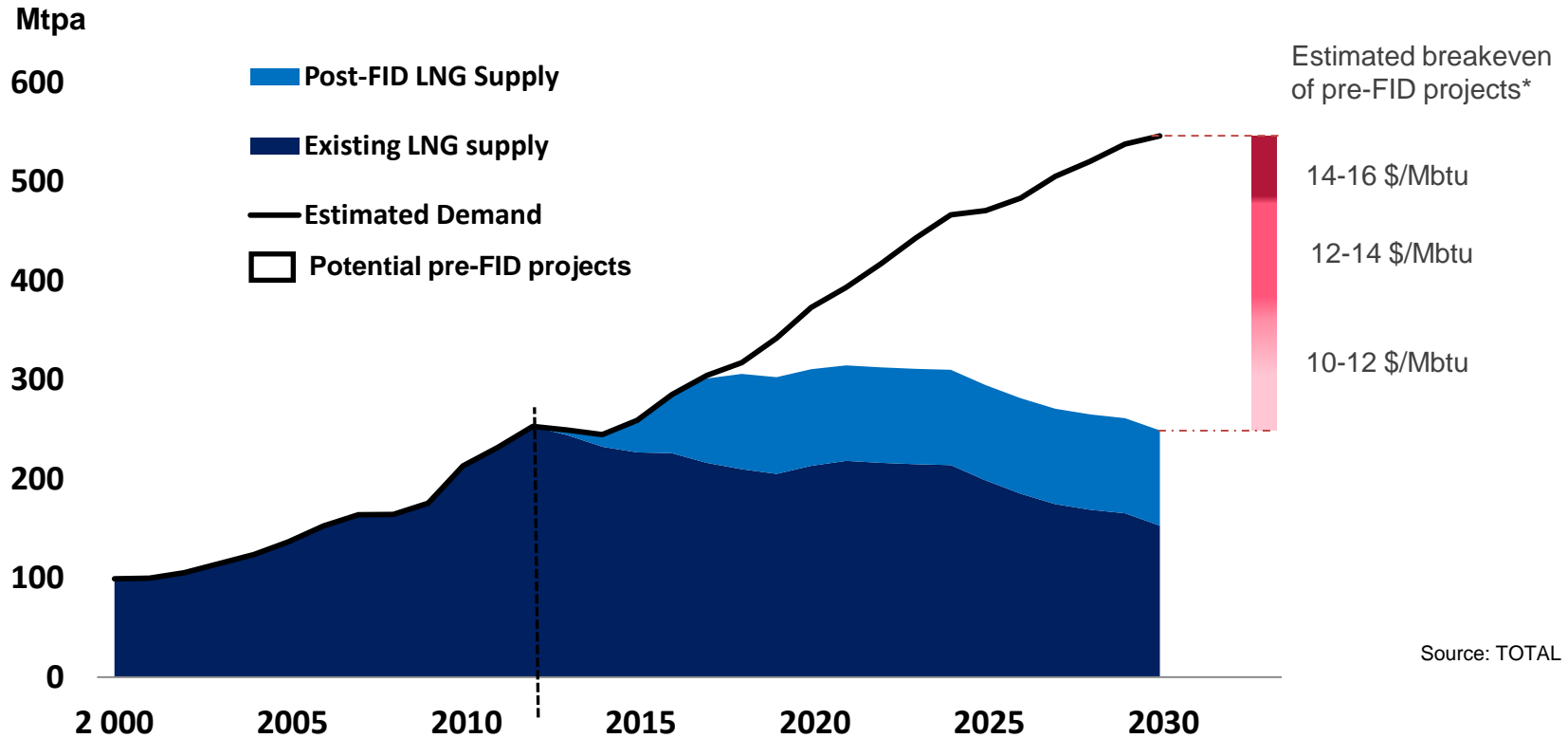
- **Need for increased LNG flows** to supply Europe and Asia

Asia: Bangladesh, China, India, Japan, Myanmar, Pakistan, Singapore, South Korea, Taiwan, Thailand, Vietnam

Source: TOTAL

# LNG : NEW PROJECTS NEEDED SOON

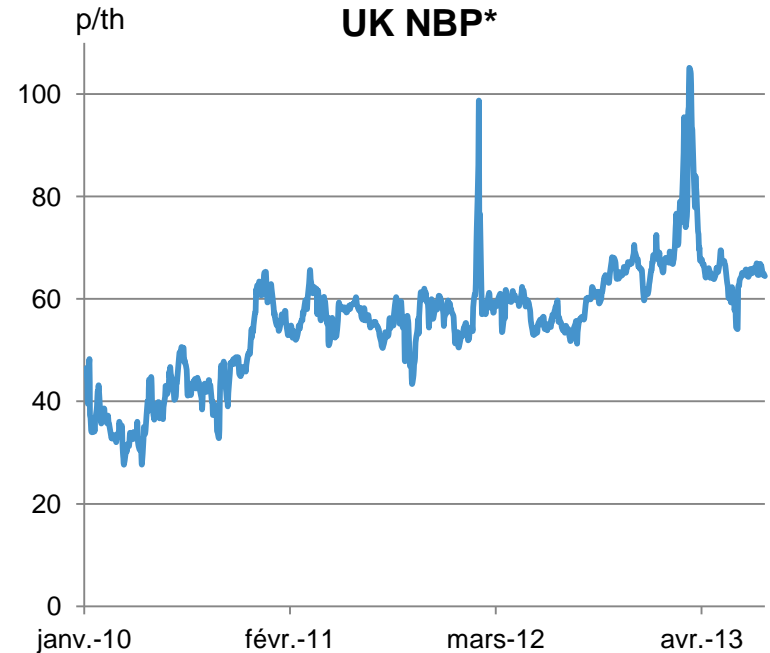
LNG demand 2030 vs 2010: +5% per year



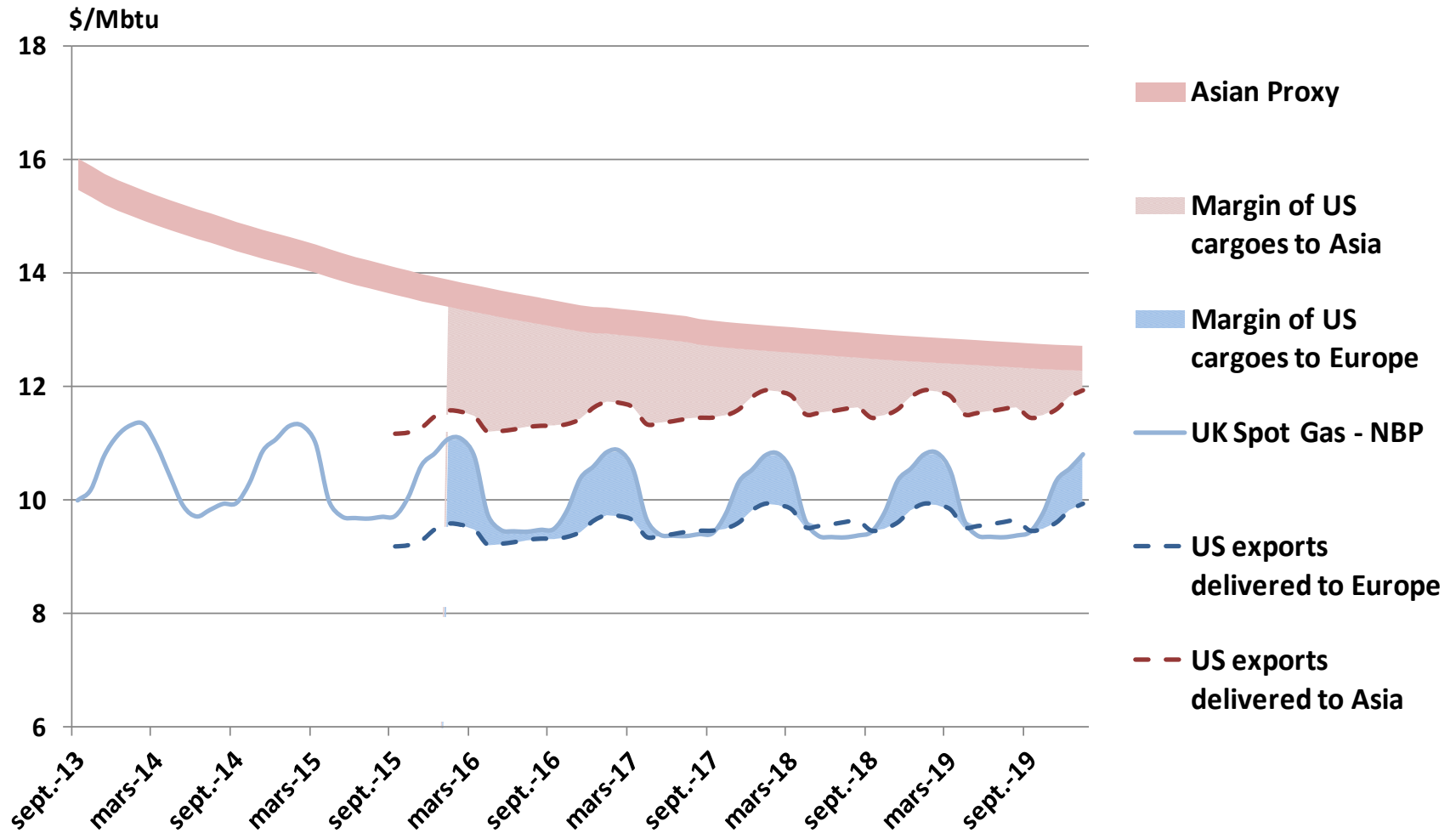
- Need of new supply **for 300Mt**
- **Competition between projects**
- **New producing areas** considered
- Need of mutually agreed terms **to allow FIDs**

# ASIAN LNG: OIL INDEXATION VS SPOT PRICING

- Only Asian Spot Market index (JKM) is illiquid (and higher than most LT contract prices)
- Relying on HH/NBP indexation might expose Asian Buyers to unjustified high volatility
- Need for project financing favors oil indexation, more liquid and transparent
- One exception however: North American liquefaction projects based on former regas.
- Oil indexation does not imply higher prices



# LNG : NO COMPELLING CASE FOR SPOT PRICING IN ASIA



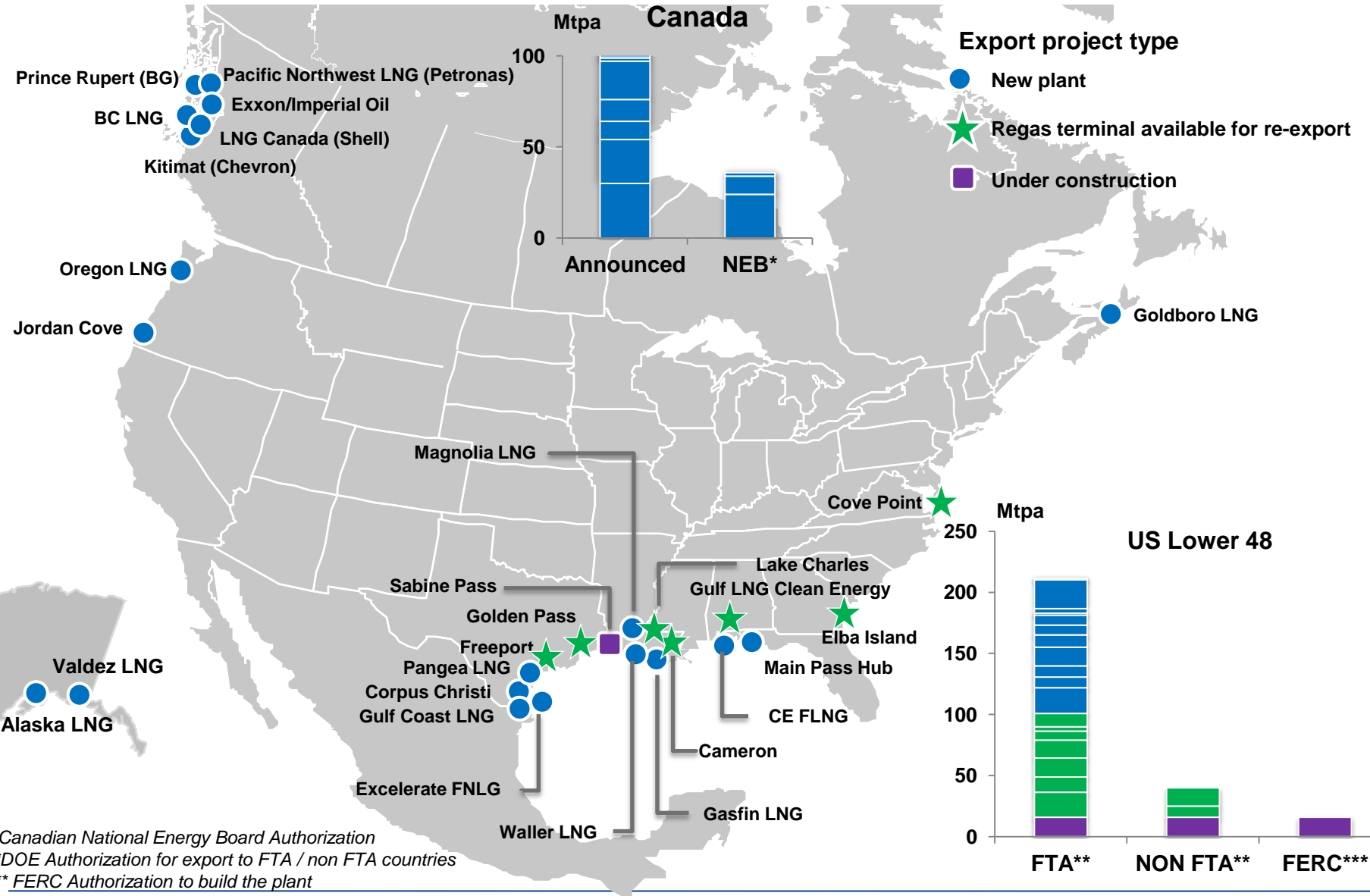
## CONCLUSIONS: “ADVICE TO A “FRIENDLY” ASIAN BUYER”

- Know your needs
- If madly in love with spot index, go to the US quick
- If not, forget about oil index phobia and negotiate best cocktail of what trustworthy suppliers can offer :
  - LT, MT, ST supply commitments
  - Flexibility
  - Reliability
  - Oil indexed price formulae
  - Hedging
  - ...
- Ample room to negotiate and agree on real key issues

# BACK-UP

# UNCERTAINTIES ON NORTH AMERICA LNG PROJECTS

## CAPACITIES & APPROVALS OVERVIEW



\* Canadian National Energy Board Authorization  
 \*\*DOE Authorization for export to FTA / non FTA countries  
 \*\*\* FERC Authorization to build the plant