Total as a leader in LNG Market: a contribution to Energy bridges between Russia and Japan

Michael BORRELL, Tokyo, November 06th, 2015
ACTIVE IN ALL SEGMENTS OF THE GAS VALUE CHAIN

<table>
<thead>
<tr>
<th>Gas Production</th>
<th>Shipping</th>
<th>Regasification</th>
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</thead>
<tbody>
<tr>
<td>50% of Total production in 2014</td>
<td>2014: 2 vessels</td>
<td>2014: 4 terminals</td>
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<tr>
<td>2020: 12 vessels</td>
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<td>2020: 5 terminals</td>
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</tbody>
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**Upstream**
- Liquefaction
  - 2014: 12 Mt capacity
  - 2020: 20 Mt capacity

**Midstream**
- Trading
  - 2014: 7 Mt traded
  - 2020: 15 Mt traded

**Downstream**
- B2B Marketing
  - Active in 7 countries
TOTAL - A GLOBAL LNG PLAYER UNDERSTANDING MARKET DYNAMICS

- Existing or under construction liquefaction projects
- Liquefaction projects under FEED or under study
- Existing regasification terminals
- Regasification terminals under construction
- Total’s contract post/pre FID

Energy Bridges Russia – Japan Conference – November 2015
STARTING UP LONG PLATEAU PROJECTS

GLNG
7.2 Mt/y capacity
Total 27.5%
Train 1 gas-in Aug 2015
Upstream operational, LNG plant being commissioned
Oil-indexed contracts to Korea and Malaysia

Ichthys
8.9 Mt/y capacity + 100 kb/d liquids
Total 30%
Overall progress >75%
First LNG in 2017
Oil-indexed contracts to Japan and Taiwan

Yamal
16.5 Mt/y capacity
Total 20%
Overall progress 33%
First LNG 2017
Oil & gas-indexed contracts, 50% in Europe, 50% in Asia
WORLD GAS DEMAND 2015/2035: ~ +2% / YEAR

North America: **enough reserves** to meet domestic demand and **LNG exports**

Europe: **limited potential growth** for gas (energy efficiency and competition with renewable/coal)

Asia: **LNG essential** to balance gas market despite increasing production and pipe imports
Europe is absorbing the excess of supply in the coming ten years. Additional pockets of demand might appear in India, China and South East Asia. After 2025, need of projects from new supply areas to be sanctioned.
Power demand is largely dependent on nuclear availability
LEVERAGING A CORE COMPETENCY

CAPTURING THE FULL VALUE CHAIN

Adding long plateau production

Global, well balanced and integrated position

Growing trading portfolio with increasing flexibility

Competitive new projects