Progress of Mitsui’s LNG Projects

July 8th, 2019
Mitsui & Co., Ltd.
Participation in Arctic LNG 2 Project in Russia

1. Project Overview
2. Development Concept
3. Advantages of the Project
### Project Overview

| Site | Gydan Peninsula  
Yamalo-Nenets Autonomous District, Russian Federation |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Licensed Area</td>
<td>Utrennye gas condensate field</td>
</tr>
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</table>
| LNG Production Capacity | 19.8 million tonnes / year  
(3 trains total) |
| Project Company | Arctic LNG2 LLC |
| FID timing | 3Q, 2019 (Plan) |
| Estimated Costs | 21-23 billion USD\(^{(1)}\) |

<table>
<thead>
<tr>
<th>Participants (After Mitsui’s participation)</th>
<th>Novatek</th>
<th>60%</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>TOTAL</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>CNPC</td>
<td>10%</td>
</tr>
<tr>
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<td>10%</td>
</tr>
<tr>
<td></td>
<td>Japan Arctic LNG*</td>
<td>10%</td>
</tr>
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\(^{(1)}\)Estimation of Novatek

**Project Details**

- **Site:** Gydan Peninsula, Yamalo-Nenets Autonomous District, Russian Federation
- **Licensed Area:** Utrennye gas condensate field
- **LNG Production Capacity:** 19.8 million tonnes / year (3 trains total)
- **Project Company:** Arctic LNG2 LLC
- **FID timing:** 3Q, 2019 (Plan)
- **Estimated Costs:** 21-23 billion USD

**Participants**

- Novatek: 60%
- TOTAL: 10%
- CNPC: 10%
- CNOOC: 10%
- Japan Arctic LNG*: 10%

*Joint Venture of Mitsui and JOGMEC
Development Concept

- Upstream development of conventional onshore gas field.
- Liquefaction facilities on Gravity-Based Structure (GBS)
- Decrease of site work with modular liquefaction facilities
- Construction of GBS and facilities modules in dedicated yards

Production Start

- 1st Train: 2023
- 2nd Train: 2024
- 3rd Train: 2025-2026

(1) Estimation of Novatek
Advantages of the Project

- Integrated upstream development in the Yamalo-Nenets region based on competitive rich gas reserves
- Cost competitiveness based on optimized development concept
- Project location enables access to markets in Asia, Europe and other areas via Northern Sea Route
Mozambique Area 1 LNG Project

1. Exploration Block & Development History
2. Development Overview
3. Artist's Rendering
4. Features
Acquired interest in Area 1 exploration block

2008

Huge gas field discovered

2010

Marine concession agreement concluded with government

2014

Development plan approved by government

2018

Final Investment Decision

2019

Environmental assessment approved by government

Special LNG law enacted

Exploration Block & Development History

Development History

Ownership

Anadarko
ONGC/Oil India
ENH
Bharat
PTTEP

Mitsui E&P

26.5%
15%
20%
20%
10%
8.5%
Development Overview
Area 1 LNG Project

**Artist's Rendering**

- **LNG Production Volume**: 12 million tons / annum (2 trains)
- **LNG Storage Capacity**: 360,000 m³ (2 tanks)
- **Total Development Costs**: Approx. US$ 23 billion
- **Production Start**: CY 2024
Area 1 LNG Project

Features

- One of the world's largest natural gas reserves (75 trillion cubic feet)
- Located in East Africa, a new supply source
- Strategic location provides access to markets in the Far East, Asia, Europe, Central and South America, and others
- Strong support from the Mozambique government

<table>
<thead>
<tr>
<th>LNG sales destination</th>
<th>Annual sales volume (million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo Gas &amp; Centrica</td>
<td>260</td>
</tr>
<tr>
<td>Shell</td>
<td>200</td>
</tr>
<tr>
<td>JERA &amp; CPC</td>
<td>160</td>
</tr>
<tr>
<td>CNOOC</td>
<td>150</td>
</tr>
<tr>
<td>EdF</td>
<td>120</td>
</tr>
<tr>
<td>Bharat</td>
<td>100</td>
</tr>
<tr>
<td>Pertamina</td>
<td>100</td>
</tr>
<tr>
<td>Tohoku Electric Power</td>
<td>28</td>
</tr>
</tbody>
</table>

Total of over 11m tons
Quantitative Forecast

Unit: ¥ billion

- Profit after tax (energy segment)
- Core operating cash flow (energy segment)
- Profit after tax (LNG-related business)
- Core operating cash flow (LNG-related business)

Mar/19
Actual: 84.5
Forecast: 96.3

Mar/25
Forecast: 90-100

Mar/30
Forecast: 120-140

200-220
360° business innovation.