Indonesia LPG
Challenges and Opportunities

Daniel S. Purba
SVP Integrated Supply Chain - PT. Pertamina (Persero)
Introduction
- Indonesia at a Glance
- Pertamina Business Overview
- Downstream Business Practice

LPG Supply & Distribution
- Annual LPG Demand
- LPG Supply Figure & Sources
- Indonesia LPG Supply & Distribution

Future Challenges
- Indonesia LPG Supply-Demand Outlook
- Long Term Corporate Plan
INDONESIA AT A GLANCE

Area: 1,904,569 km²
Population: ±255 million
Population Growth Rate: 1.2%
Islands: 17,508
Inhabited Islands: ±4,000
Capital: Jakarta
Provinces: 34
Per capita Income: USD 3,511
Economy Growth Rate (2015): 4-5%
Population in Java and Sumatra dominate with **78.8%** from Total Population.
Pertamina’s Business Process

**Upstream**
- CRUDE OIL & REFINED PRODUCT IMPORTS
- DRILLING SERVICES
- NATURAL GAS
- TRANSMISSION LINES
- PRODUCTION FACILITIES
- LNG PLANT
- STEAM
- GEOThermal

**Midstream**
- TRANSACTIONS/EXPORTS
- GAS TRADING/TRANSMISSION
- REFINED PRODUCTS
- PROCESS
- LNG TRADING
- LNG SHIPPING
- ELECTRICITY

**Downstream**
- DISTRIBUTION THROUGH FUEL DEPOTS AND STATIONS: KEROSENE, GASOLINE, DIESEL, HSD, LPG
- MARKETING & TRADING
- ELECTRICITY DISTRIBUTOR

**Key Operating Companies**
- PT Pertamina EP
- PT Pertamina Hulu Energi
- PT Pertamina Geothermal Energy
- PT Pertamina EP Cepu
- PT Pertamina Drilling Services Indonesia
- ConocoPhillips Algeria Ltd.
- PT Elnusa Tbk.
- PT Pertamina Internasional Eksplorasi & Produksi
- PT Pertamina East Natuna
- PT Pertamina EP Cepu ADK
- PT Nusantara Regas (JV)
- ConocoPhillips Algeria Ltd.
- PT Elnusa Tbk.

**New & Renewable Energy**
- PT Pertamina Gas
- PT Arun NGL *)
- PT Badak NGL *)
- PT Nusantara Regas (JV)

**Non Core**
- PT Patra Jasa
- PT Pertamina Dana Ventura
- PT Pertamina Training & Consulting
- PT Pertamina Bina Medika
- PT Pelita Air Service
- PT Tugu Pratama Indonesia
- But since Pertamina is not the controlling shareholder of both companies, then they cannot be classified as Pertamina’s subsidiary.
# Key Company Highlights 2015

## Overview

<table>
<thead>
<tr>
<th>2015 Key Financial (USD Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue : 43.73</td>
</tr>
<tr>
<td>Net Income : 1.39</td>
</tr>
<tr>
<td>EBITDA : 5.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees (Group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27,429 persons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiaries : 23 units</td>
</tr>
<tr>
<td>JV &amp; Associates : 13 units</td>
</tr>
</tbody>
</table>

## Upstream

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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discoveries of Oil and Condensate Reserves (MMBO)</td>
<td>94.2</td>
</tr>
<tr>
<td>Crude Oil Production (MMBO)</td>
<td>101.6</td>
</tr>
<tr>
<td>Discoveries of Natural Gas Reserves (BSCFG)</td>
<td>876.8</td>
</tr>
<tr>
<td>Natural Gas Production (BSCF)</td>
<td>694.3</td>
</tr>
<tr>
<td>Steam Production Equivalent to Electricity (GWh)</td>
<td>3,056.8</td>
</tr>
</tbody>
</table>

- Upstream subsidiaries:
  - PT Pertamina EP
  - PT Pertamina Hulu Energi
  - PT Geothermal Energy
  - PT Pertamina EP Cepu
  - PT Pertamina Drilling Service Indonesia
  - PT Pertamina International EP
  - PT Pertamina East Natuna
  - PT Pertamina EP Cepu ADK
  - Pertamina EP Libya
  - ConocoPhillips Algeria Ltd
  - PT Elnusa Tbk

## Midstream

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gas Sales (BBTU)</td>
<td>46,445.0</td>
</tr>
<tr>
<td>Gas Pipeline (KM)</td>
<td>1,624</td>
</tr>
<tr>
<td>Gas Pipeline Capacity (MMSCFD)</td>
<td>7,920</td>
</tr>
</tbody>
</table>

## Downstream

<table>
<thead>
<tr>
<th>Refining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil, Gas and Intermediate Processing (Million Barrel)</td>
</tr>
<tr>
<td>Fuel Production Volume (Million Barrel) (Valuable Products)</td>
</tr>
</tbody>
</table>

- 6 refineries
  - Total capacity : 1,031 mbs/d

<table>
<thead>
<tr>
<th>Marketing</th>
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</thead>
<tbody>
<tr>
<td>Fuel Sales (Million KL) (10 Main Fuel Products)</td>
</tr>
<tr>
<td>Sales of Non Fuel Products (Million KL) (Gas, Lubricants, Petrochemical, and other Non-Fuel)</td>
</tr>
</tbody>
</table>

- 8 Marketing Operation Region
- 557 LPG Filling Station
- 62 Aviation Fuel Depo
- 21 LPG Terminal
- 109 Fuel Terminal
- 5155 Fuel Station
- 25 Fuel Gas Station
- 192 Tanker Vessels

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Source: Annual Report 2014

**Fortune Global 500**

123

Recognized as one of the Fortune Global 500 companies, ranked at 123 in 2014
Pertamina Refinery Units

New Tuban Refinery Project with capacity + 100 MBCD
Marketing Highlight:
• Dominates the downstream infrastructure and distribution network, comprised of pipelines, fuel stations, terminals, depots, and vessels
• Comprehensive coverage through 8 marketing and trading units, each covering one or more provinces
• Pertamina is the sole distributor of LPG in Indonesia

Public Services Obligation (PSO) Mandate from Government:
• One of Pertamina’s key roles is to distribute subsidized fuel and LPG in Indonesia under the PSO mandate
• Pertamina still maintains over 99% market share in supplying and distributing subsidized fuel and 100% market share in subsidized LPG
• Key advantage of already having a fully-integrated and extensive distribution infrastructure network

Pertamina’s Downstream Distribution Network:
- Retail fuel station: 5,155 units
- Gas pipelines: 1,624 km
- LPG filling plant: 557 units
- Tankers: 192 units
- Fuel terminals: 109 units
- Aviation fuel depot: 62 units
- LPG terminal & depot: 21 units
- Lube oil blending plant: 3 units
LPG ANNUAL CONSUMPTION

2011  4.2 Million MT  2012  5.1 Million MT  2013  5.3 Million MT  2014  6.0 Million MT  2015  6.4 Million MT

Average of annual Increasing Rate 11%

Estimate of demand in 2016 7.4 Million MT
Indonesia Supply Figures

<table>
<thead>
<tr>
<th>Year</th>
<th>Import</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2.06</td>
<td>2.20</td>
</tr>
<tr>
<td>2012</td>
<td>2.71</td>
<td>2.39</td>
</tr>
<tr>
<td>2013</td>
<td>3.30</td>
<td>2.42</td>
</tr>
<tr>
<td>2014</td>
<td>3.58</td>
<td>2.49</td>
</tr>
<tr>
<td>2015</td>
<td>4.17</td>
<td>2.32</td>
</tr>
<tr>
<td>2016 (est)</td>
<td>4.73</td>
<td>2.72</td>
</tr>
<tr>
<td>2017 (est)</td>
<td>5.83</td>
<td>2.39</td>
</tr>
<tr>
<td>2018 (est)</td>
<td>6.63</td>
<td>2.19</td>
</tr>
<tr>
<td>2019 (est)</td>
<td>7.24</td>
<td>2.06</td>
</tr>
</tbody>
</table>
Total LPG Consumptions for 2015 reached 6.4 million MTon.
Indonesia LPG Supply Sources in 2015

LPG Import Sources in 2015
- Middle East (92.7%)
- Africa (4.3%)
- Southeast & East Asia (1%)
- Australia (2.1%)
Supply Scheme to Main Terminal

Main Terminal:
- Tj. Uban (Inland Terminal)
  - Capacity 38,000 MT C3 & 50,800 MT C4
- Teluk Semangka (STS)
  - 3 VLGC as floating storage
- Kalbut (STS)
  - 3 VLGC as floating storage

Pertamina Own Fleet
- Pertamina Gas 1
  - (84000 m³)
- Pertamina Gas 2
  - (84000 m³)
LPG SUPPLY & DISTRIBUTION

Distribution Scheme from Main Terminal
1. Decreasing of LPG in Domestic Supply shall be balanced from import.
2. LPG demand growth is expected ± 5-7% until 2019

- Inland receiving terminal and storage facilities need to be built to replace existing floating facilities
- Government regulation on LPG specification is slightly different from LPG guaranteed specification from producers
LONG TERM CORPORATE PLAN

1. Upgrade Terminal Tg Sekong Storage Capacity

2. Build LPG Terminal Storage in East Java & West Java

3. Utilize LPG Storage Tanks in Terminal Bontang and Arun
Thank You