Sarulla Geothermal PP, Indonesia

Second Geothermal Dialogue
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Background of Sarulla

- Largest geothermal plant in the world (~320 MW)
- 20 years to reach financial close
- Falls under pre-Law 2003 regime
Project Structure

Sponsors
- Itochu
- Kyushu
- Medco
- Ormat

Concession Owner
(Pertamina)

Offtaker
(PLN)

EPC Contractor
(Hyundai & Medco Affiliate)

Drilling Contractor
(Halliburton)

Regulator
(Government of Indonesia)

SARULLA PROJECT

ADB (+ CTF & CCF)

JBIC

Commercial Banks

Loan + Mezzanine

BVGL

Political Risk Guarantee

Equity + Contingent Equity
## Financing Structure

<table>
<thead>
<tr>
<th></th>
<th>Debt</th>
<th>Equity</th>
<th>Other</th>
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<tbody>
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<tr>
<td><strong>Debt</strong></td>
<td></td>
<td></td>
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<tr>
<td>JBIC</td>
<td>Loan</td>
<td>Public</td>
<td>492 mn 30.4%</td>
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<tr>
<td>ADB</td>
<td>Loan</td>
<td>Public</td>
<td>250 mn 15.4%</td>
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<tr>
<td>Commercial banks</td>
<td>Loan</td>
<td>Private</td>
<td>329 mn 20.3%</td>
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<tr>
<td>CTF &amp; CCF</td>
<td>Mezzanine</td>
<td>Public</td>
<td>100 mn 6.2%</td>
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<tr>
<td><strong>Equity</strong></td>
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<tr>
<td>Itochu, Kyushu, Medco &amp; Ormat</td>
<td>Equity</td>
<td>Private</td>
<td>~ 350 mn 21.6%</td>
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<tr>
<td><strong>Other</strong></td>
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<tr>
<td>Pre-Completion Revenue</td>
<td></td>
<td>~ 100 mn 6.2%</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
<td></td>
<td>~ 1.6 bn</td>
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</table>
Government provides certainty to developers and lenders with long term Feed-in-Tariff

Note:
This graph is produced by CPI based on CPI’s own assessment, public data and interviews with Sarulla stakeholders.
Lenders provide loan with competitive market rates and long tenor

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The graph is produced by CPI based on CPI’s own assessment, public data and interviews with Sarulla stakeholders.
Sarulla’s lenders had a surprising appetite for risk
**Sarulla GPP: Early Takeaways**

**Challenges**
- Resource risks
- Tariff at low-end range & access to financing at suitable rates and tenors

**Responses**
- Detailed due diligence & resource analysis and coordinated drilling & construction program
- 30-year offtake, 20-year Government Guarantee (BVGL) + JBIC’s Political Risk Guarantee
Discussion Points

Project Context:
• Is the financial structure scalable and replicable to other projects in Indonesia / other regions of the world?
• What is the role of international public financial institution to ensure feasibility of this type of project and to scale-up geothermal development?

Policy Context:
• What can be improved to increase private sector’s participation in geothermal development in Indonesia going forward?
• How do recent regulatory/Feed in Tariff changes impact future development in Indonesia?
Thank You!