Development Finance and Geothermal

Padraig Oliver, Analyst

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Even for innovative projects, international development finance is crucial

Total Costs (USDm)

- Gumuskyo: 49.5 USDm
- Olkaria III: 635* USDm
- Sarulla: 1,600 USDm

Source: CPI analysis
*includes re-financing debt
Flows of international public finance in projects in CIF countries

- **Projects in CIF countries**
  - Other sources: 0%
  - Grants/Equity: 1%
  - Guarantees: 4%
  - Concessional loans: 18%
  - Commercial loans: 24%
  - Total Costs (USDbn): 11.3

- **For exploration and test drilling**
  - 9%

- **For construction and operations**
  - 91%

- **No. of projects receiving types of support**
  - Only exploration: 4
  - Only construction: 23
  - Both phases: 4

*Note: preliminary estimates*
## What funds are available for the different project stages and risks

<table>
<thead>
<tr>
<th>Project stage</th>
<th>Early-stage, Exploration and Test drilling</th>
<th>Production drilling, field development, construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 - ongoing</td>
<td>$430m of risk capital</td>
<td>$1.5bn of concessional comercial capital</td>
</tr>
</tbody>
</table>

## Type of instruments available for each project stage

<table>
<thead>
<tr>
<th>Grants</th>
<th>Contingent grants</th>
<th>Insurance</th>
<th>Guarantees</th>
<th>Conc. Loans</th>
<th>Loans</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
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*Note: preliminary estimates*
Much more risk capital will be needed to meet country targets

- Indicative cost estimates per activity add up to a need of $13bn in risk capital to achieve deployment targets in 11 CIF countries;
- $30bn for production drilling; $41bn for construction

Source: CPI calculation based on ESMAP indicative cost estimates

Note: preliminary estimates
Questions

For projects:

- Origination of risk capital
- Best instruments in risk capital – contingency grants; insurance; guarantees
- Carbon emission solutions

For policy environment:

- The role of TA with government – how to engage
- Preference for IPPs vs state-owned developers

For the local financial sector:

- Due diligence for co-financing
- Exit stage left…