Global NAMA Financing Summit
The Role of Commercial Banks and Private Sector in NAMA Design and Finance

BANCOCIBCE
Rodrigo Violic G.
Chief Business Officer

Copenhagen, May 16, 2013
Chilean Main Economic Figures

**Gross Domestic Product**

- **Source:** Banco BICE
- **(f):** Forecast

**Inflation**
## Chilean Main Economic Figures (cont’d)

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</thead>
<tbody>
<tr>
<td><strong>Gross Domestic Product</strong></td>
<td>US$m</td>
<td>67,265</td>
<td>73,990</td>
<td>95,653</td>
<td>118,250</td>
<td>146,773</td>
<td>164,315</td>
<td>170,851</td>
<td>163,670</td>
<td>217,042</td>
<td>248,602</td>
</tr>
<tr>
<td><strong>GDP Growth</strong></td>
<td>%</td>
<td>2.2</td>
<td>4.0</td>
<td>6.0</td>
<td>5.6</td>
<td>4.6</td>
<td>4.6</td>
<td>3.7</td>
<td>-1.5</td>
<td>6.1</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td>%</td>
<td>2.8</td>
<td>1.1</td>
<td>2.4</td>
<td>3.7</td>
<td>2.6</td>
<td>7.8</td>
<td>7.1</td>
<td>-1.4</td>
<td>3.0</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Current Account Balance</strong></td>
<td>% of GDP</td>
<td>-0.9</td>
<td>-1.1</td>
<td>2.1</td>
<td>1.2</td>
<td>4.9</td>
<td>4.6</td>
<td>-1.9</td>
<td>2.6</td>
<td>1.5</td>
<td>-1.3</td>
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<tr>
<td><strong>Copper Price (average)</strong></td>
<td>US$/pound</td>
<td>0.7</td>
<td>0.8</td>
<td>1.3</td>
<td>1.7</td>
<td>3.0</td>
<td>3.2</td>
<td>3.2</td>
<td>2.3</td>
<td>3.4</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Exports</strong></td>
<td>US$m</td>
<td>18,180</td>
<td>21,651</td>
<td>33,025</td>
<td>41,974</td>
<td>59,380</td>
<td>64,510</td>
<td>55,463</td>
<td>70,897</td>
<td>81,411</td>
<td>78,813</td>
</tr>
<tr>
<td><strong>Copper Exports</strong></td>
<td>US$m</td>
<td>6,323</td>
<td>7,816</td>
<td>14,723</td>
<td>18,965</td>
<td>32,710</td>
<td>37,778</td>
<td>31,755</td>
<td>29,695</td>
<td>41,170</td>
<td>44,438</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>US$m</td>
<td>15,794</td>
<td>17,886</td>
<td>22,869</td>
<td>30,665</td>
<td>36,433</td>
<td>44,430</td>
<td>58,436</td>
<td>40,103</td>
<td>55,572</td>
<td>70,618</td>
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<tr>
<td><strong>Trade Balance</strong></td>
<td>US$m</td>
<td>2,386</td>
<td>3,765</td>
<td>10,156</td>
<td>11,309</td>
<td>22,947</td>
<td>24,131</td>
<td>6,074</td>
<td>15,360</td>
<td>15,325</td>
<td>10,793</td>
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<td><strong>External Debt</strong></td>
<td>US$m</td>
<td>40,504</td>
<td>43,067</td>
<td>43,515</td>
<td>46,211</td>
<td>49,497</td>
<td>55,733</td>
<td>63,732</td>
<td>72,991</td>
<td>84,142</td>
<td>98,579</td>
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<tr>
<td><strong>Reserves Central Bank</strong></td>
<td>US$m</td>
<td>15,351</td>
<td>15,851</td>
<td>16,016</td>
<td>16,963</td>
<td>19,429</td>
<td>19,910</td>
<td>23,162</td>
<td>25,373</td>
<td>27,864</td>
<td>41,979</td>
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<tr>
<td><strong>Exchange Rate (year end)</strong></td>
<td>Ch$</td>
<td>712</td>
<td>599</td>
<td>560</td>
<td>514</td>
<td>534</td>
<td>496</td>
<td>629</td>
<td>506</td>
<td>468</td>
<td>521</td>
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<td><strong>International Ratings</strong></td>
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<td>Standard &amp; Poors</td>
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<td>Moodys</td>
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*Source: Banco BICE*
Reasons to Invest in Chile

- Dynamic economy: CAGR of 5.5% from 1985-2010, the highest in Latin America
- Highly competitive: 30th of 139 countries worldwide in the 2010-2011 Competitiveness Ranking (1st in Latin America)
- Globally integrated: 21 trade agreements with 58 countries in the world
- Institutional and financial strength: economic stability, monetary discipline and strong political and fiscal environment
- Low country risk: A+ (Standard & Poor’s)
- Tax-friendly: one of the lowest corporate income tax rate in the world and bilateral agreements to avoid double taxation currently active with 22 countries
- High transparency: 21st of 178 countries and 1st in Latin America, according to Perceived Corruption Index
- Great business environment and economic freedom: 10th of 179 countries and 1st in Latin America, according to Economic Freedom Index
- Good quality of life, highly skilled work force and competitive human resources
- Good transport infrastructure and modern connectivity
- ...and excellent natural resources... but

Source: KPMG
Hence the question: if Chile is a such a great place to invest and has excellent natural resources, what is stopping green energy technologies from taking off? Is financing a significant barrier? Are there any other relevant aspects explaining the current situation?

Between October 2010 and July 2012, 52 NCRE projects have been filed for environmental approval.

As of February 2013:
- 896 MW NCRE in operation
- 398 MW NCRE under construction
- 7,473 MW NCRE with environmental approval
- 2,594 MW NCRE in process of obtaining environmental approval
- i.e. **10,000 MW NCRE** which have not started construction
- ...out of which **53% wind and 42% solar**
The Chilean Financial Sector: a Brief Overview

<table>
<thead>
<tr>
<th>Institution</th>
<th>Patrimonio Electivo</th>
<th>10%</th>
<th>30%</th>
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<tbody>
<tr>
<td>1 Banco de Chile</td>
<td>5.722</td>
<td>572</td>
<td>1.716</td>
</tr>
<tr>
<td>2 Santander Chile</td>
<td>5.715</td>
<td>572</td>
<td>1.715</td>
</tr>
<tr>
<td>3 Banco de Crédito e Inversiones</td>
<td>4.196</td>
<td>420</td>
<td>1.259</td>
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<tr>
<td>4 Banco del Estado de Chile</td>
<td>3.567</td>
<td>357</td>
<td>1.070</td>
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<td>5 Corpbanca</td>
<td>2.654</td>
<td>265</td>
<td>796</td>
</tr>
<tr>
<td>6 BBVA Chile</td>
<td>2.019</td>
<td>202</td>
<td>606</td>
</tr>
<tr>
<td>7 Scotiabank Chile</td>
<td>1.474</td>
<td>147</td>
<td>442</td>
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<tr>
<td>8 Banco Itaú Chile</td>
<td>1.200</td>
<td>120</td>
<td>360</td>
</tr>
<tr>
<td>9 Banco Security</td>
<td>866</td>
<td>87</td>
<td>260</td>
</tr>
<tr>
<td>Total Sector</td>
<td>22.830</td>
<td>2.283</td>
<td>6.849</td>
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- Chilean banks can legally lend up to **10%** of their respective capital and reserve base to any single borrower, on an unsecured basis, or up to **30%** of their respective capital and reserve base on a secured basis.

- Since 2007, Banco BICE has consolidated itself as market leader in project financing to the NCRE sector, with over **20 projects** for more than **200 MW** and **US$ 400 million** in total loans committed.

- Although few local banks have been involved in NCRE project financing during the last 6 years, sufficient experience has piled up and there are no lending limit restrictions.

- **23 private banks + 1 state-owned bank**

- **US$ 327 billion in total assets**, i.e. as of December 31, 2012 the Chilean Banking System represented **1.25x the Chilean GDP** (USD 265 billion), compared to 7.0x in Cyprus and 2.0x in the US.

- However, out of the 24 banks only **7** have participated in project financing to the NCRE sector during the last 5 years.
The Role of the Multilaterals in the Development of NCRE Projects

- IFC along with DnB Nor have financed one 20 MW small hydro project (2008) and one 46 MW wind farm (2009).

- Also, along with OPIC and DEG is in advanced negotiations to finance to solar PV projects in northern Chile.

- kfW and CORFO have also combined their forces to promote the NCRE sector through the provision of soft loans to the private banking sector for on-lending to NCRE developers.
Project Finance is a type of financing in which the different risks involved are identified and shared logically among Sponsors, Lenders and other Stakeholders, allowing for an adequate balance of risks and return between all parties involved.

...a closer look to this balance might give us a clue on what part of the equation is missing...
Risk Dimensions and the Role of NAMA as Mitigator

PSF

Sponsors
- Creditworthiness / Solvency
- Experience / Knowledge / Track Record
- Logical Capital-at-Risk
- Minimum IRR Criteria

Resource Assessment
- Methodology for Resource Assessment
- Length of Measurements / Data Quality
- Capacity Factor / Net Energy Produced @ P50 & P90

Engineering & Construction / O&M
- Bidding Process / Contractor Appointment
- Type of Contract
- Contractor’s Credentials / Track Record
- EPC & O&M Contractor’s Guarantees
- Proven Technology
- Capex & Opex / Benchmarks
- Manufacturer / Vendor

Technology

Market
- Merchant or PPA (offtaker’s creditworthiness, tenor)
- Offtaker of Last Resort
- Price Stabilisation Mechanism or “Virtual PPA”

Legal
- Title over Project Assets
- Overlapping with Mining Rights
- Concessions / Rights of Way
Risk Dimensions and the Role of NAMAs as Mitigator (cont’d)

- **Leadership**
- **Experience**
- **Relations with Stakeholders**

- **Pledge over SPV Shares**
- **Limited Recourse (pre-Completion)**
- **First Ranking Security over all Project Assets**
- **Debt Service Reserve Account**

- **Construction & Transportation + ALOP**
- **Operational**

- **Independent Engineer**
- **Legal**
- **Insurance**
- **Market**
- **Environmental**

- **Capex or Opex (tolling agreements)**
- **Rights of Way**
- **Compliance with Technical Regulation**

- **Environmental Approval**
- **ILO 169 Agreement**
Why can PSF NAMA make a difference….

Intraday Energy Spot Prices as of May 12, 2013

- Maitencillo 110
- Ancoa 220
- Charrúa 220
PSF NAMA: what do Private Banks need to make it work?

<table>
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<tr>
<th>Counterparty Risk</th>
<th>Energy Price</th>
<th>Tenor</th>
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<tbody>
<tr>
<td>• Ideally Rated</td>
<td>• Fixed at a level that secures at least 1.25x DSCR for P90 scenario</td>
<td>• Ideally it should provide start-up date flexibility</td>
</tr>
<tr>
<td>• Size of fund should guarantee performance in time</td>
<td>• Mitigate decoupling risk (i.e. different node prices for injection and withdrawal of energy to and from the trunk system)</td>
<td>• Similar to Loan</td>
</tr>
<tr>
<td>• Clear Governance &amp; Management</td>
<td></td>
<td>• Continuity in time</td>
</tr>
<tr>
<td>• Clear and simple rules of operation</td>
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Strong Contractual Arrangements in Place
Thank you