Workshop for further understanding the diversity of NAMAs by developing country Parties

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National GHG Inventory
UNFCCC Pledge

Chile’s Pledge

• Chile will take nationally appropriate mitigation actions to achieve a 20% deviation below the “business-as-usual” emissions growth trajectory by 2020, as projected from the year 2007.

• To accomplish this objective Chile will require international support.

• Energy efficiency, renewable energy, and Land Use Land Use Change and Forestry measures will be the main focus of Chile’s nationally appropriate mitigation actions.
Chile’s LEDS Initiative: MAPS-Chile

• A government led, multi stakeholder, participative process based on robust, national research and modeling to construct scenarios of economic development to 2020, 2030 and 2050 that are characterized by low greenhouse gas emissions.

• The results will serve as the technical input for:
  – Further presicion on the business as usual scenario to 2020
  – Identifying, evaluating, and validating the most viable, cost effective NAMAs in the short, medium and long-term
  – Decisions on the form and magnitude of Chile’s future legally binding commitment under the Durban Platform
Design and Development of Supported NAMA Proposals

- Since October 2010, the Ministry of Environment has been coordinating the design and development of supported NAMAs with the Ministries of Agriculture, Energy and Transportation.
- MoE has gathered information using a template format.
- This year, coordination will also include the Ministry of Housing and the Ministry of Public Works, as well as the waste sector.
Lessons Learned: NAMA Template Process

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✓ Centralized process for disseminating information with various Ministries on the national pledge and the ABC’s of NAMAs (including available support, importance of MRV)
✓ Template format generates awareness of key variables for NAMA development and a consistent/comparable presentation format
✓ Template shared between ministries through official means of communication ➔ Formalizes ministerial support and buy-in for the proposed actions
✓ Common format with ministerial support facilitates discussions with potential donor countries and internal discussions on the availability of resources

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✖ Requires pre-existing information or preliminary analysis to fully complete the template ➔ Importance of readiness and preparation phase and support for these
✖ NAMA ideas/proposals are not static and tend to evolve over time
✖ Further development required to receive support for implementation
### Supported NAMAs being developed

<table>
<thead>
<tr>
<th>Sector</th>
<th>NAMA Title and Objective</th>
<th>Cooperation to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td><strong>Off Grid NCRE NAMA</strong>: Incentive program for off-grid implementation of non-conventional renewable energy in industry and public-infrastructure</td>
<td>UK support to develop an MRV system for CER projects (10 MM USD from the Ministry of Energy of Chile)</td>
</tr>
<tr>
<td>Energy</td>
<td><strong>Price Stabilization Fund</strong>: Revolving fund to insure renewable energy projects against spot market price fluctuation</td>
<td>Private sector interest in the development of a business plan</td>
</tr>
<tr>
<td>Energy</td>
<td><strong>CSP NAMA</strong>: Installation of a 50 MW Concentrated Solar Power plant in Chile’s northern energy system</td>
<td>Investment Plan Approved by the Clean Technology Fund</td>
</tr>
<tr>
<td>Forestry</td>
<td><strong>Forestry NAMA</strong>: Rotating fund for forestation of marginal lands and management of native forests for carbon capture</td>
<td>Initial stages of cooperation with the Swiss Agency for Development and Cooperation</td>
</tr>
<tr>
<td>Transportation</td>
<td><strong>Santiago Transportation Green Zone</strong>: Low emission vehicles (taxis and Transantiago), bicycle promotion, transit management</td>
<td>Study financed by the UK Government</td>
</tr>
<tr>
<td>Transportation</td>
<td><strong>Electro-mobility Plan</strong>: market creation, charging infrastructure, R&amp;D</td>
<td>Study financed by the German Government</td>
</tr>
<tr>
<td>Waste</td>
<td><strong>Organic Waste NAMA</strong>: Pilot program for productive re-use of organic waste</td>
<td>Cooperation Agreement between Chile and Canada for the development of NAMAs in the waste sector</td>
</tr>
</tbody>
</table>
## Supported NAMAs being developed

<table>
<thead>
<tr>
<th>Sector</th>
<th>NAMA Title</th>
<th>Estimated Mitigation Outcome</th>
<th>Support Needed</th>
</tr>
</thead>
</table>
| Energy        | Off Grid NCRE NAMA                      | 425,981 tCO2/yr              | - Total cost: $60 mn USD  
- National funding: 17%                                                      |
| Energy        | Price Stabilization Fund                | 1,654,400 tCO2/yr            | - Initial tranche: $15 mn  
- National funding: TBD                                                        |
| Energy        | CSP NAMA                                | 129,300 tCO2/yr over 20 years | - Total cost: $100 mn USD  
- $68 mn approved by Clean Technology Fund                                      |
| Forestry      | Forestry NAMA                           | 912,000 t/CO2e in 20 years   | - $5.6 mn total technical support for 3 years  
- Chilean Government to provide forestry subsidies                              |
| Transportation| Santiago Transportation Green Zone      | 13,800 t/CO2/yr to 2020      | - Total cost: $17.7 mn USD over 2.5 years  
- National funding: 30%                                                        |
| Transportation| Electro-mobility Plan                   | 183,500 t/CO2/yr to 2020     | Phase I: $4.8 mn USD                                                    |
| Waste         | Organic Waste NAMA                      | To be determined             | Initial studies: $100,000 USD                                           |
Transformational Possibilities: Energy Sector

National Circumstances:
• Decreased supply of natural gas from external factors
• Unreliability of large-hydro (climate change, societal opposition)
• Need for 10,000 MW by 2020
• Private sector planned investment in coal
• 3,000-5,000 MW of competitive renewable energy potential
• RE potential constrained by strong fluctuation in market prices = limits investment access to financing

All 3 NAMAs are designed to avoid coal and promote the installation of renewable energy.
## Domestically Supported Mitigation Actions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Action</th>
<th>MRV Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoE</td>
<td>Ley N° 20.365: Tax credit for Solar Thermal Systems</td>
<td></td>
</tr>
<tr>
<td>MoE</td>
<td>Ley N° 20.572: Establishes Net Metering</td>
<td></td>
</tr>
<tr>
<td>Chilean Energy Efficiency Agency</td>
<td>Incentive Program: “Cambia tu Camión” (Renew your truck) = 754 tCO2/yr</td>
<td></td>
</tr>
<tr>
<td>AChEE</td>
<td>Pilot Energy Efficiency Program to increase energy efficiency in five “signature” public buildings</td>
<td></td>
</tr>
<tr>
<td>AChEE</td>
<td>Ministerial Order (interior and Energy) for the reduction of energy consumption in the public sector =&gt; registry platform and management support = 161 tCO2/yr</td>
<td></td>
</tr>
<tr>
<td>AChEE</td>
<td>Implementation of energy efficiency projects in 4 public hospitals</td>
<td></td>
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<tr>
<td>AChEE</td>
<td>Cogeneration project for regional hospitals</td>
<td></td>
</tr>
<tr>
<td>AChEE</td>
<td>Improvement of EE of public lighting</td>
<td></td>
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</table>
How NAMAs Change Lives: Health & Mobility

Traffic in Santiago  
Santiago Green Zone NAMA
How NAMAs Change Lives: Health & Sustainability

Trash Dump in Santiago  Bio-Digester
The NAMA Advantage

Supported and Unilateral NAMAs:

• Achieve action on a broad scale
• Improve the lives of citizens and promote sustainable development, health and mobility benefits in addition to reducing GHGs
• Help developing countries meet their GHG pledges.
• Allow developing countries to take advantage of low-cost mitigation opportunities rather than selling these to developed countries as offsets
• Are becoming principal international finance option, as CDM demand declines
Ambitious Action Should be Met with Ambitious International Finance

Public and Private Support

• Bilateral *implementation* funding has started to flow (e.g., Canada, Germany, UK, Norway)

• Public money for NAMAs should leverage private sector investment
  – NAMA investments in wind farms, urban development etc. instead of offsets
Broader MRV Metrics Can Demonstrate Progress and Build Domestic Support

**Bilateral donors** seek implementation progress & poverty reduction, not just GHG reductions

**Developing countries** sell GHG mitigation strategies to their citizens and political leaders based on sustainable development benefits

**CCAP recommends consideration of:**

- **Action metrics** indicating whether activities are occurring as planned.
  - Was the renewable feed-in tariff established?
  - Did the bus-rapid-transit get built?

- **Progress metrics** that show intended outcomes are happening as compared to a reliable baseline.
  - Percentage of electricity generated from renewable sources
  - Share of trips taken on public transit

- **Sustainable development metrics** that show progress towards economic, health, and social policy goals.
  - Increased access to energy, reduced air pollution
  - Job growth
Conclusions

• Supported NAMAs can make lives better for citizens while reducing GHGs

• Greater commitment to international financial support for NAMA implementation in 2012-15 is needed (public and private) to enable actions in developing countries

• Support for MRV needs to cover broader set of metrics including actions, progress, health benefits, and sustainable development

• These alternative metrics build support for climate action in host country Congresses and Parliaments
Thank you

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