Chile’s Green Bonds: An Overview of Progress Thus Far

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Ministry of Finance
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Towards 2018, discussions at the MoF referred to green bonds as an instrument that met several important objectives simultaneously.
The MoF began working on the development of the Green Bond Framework early on, following international best practice.

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<tr>
<th>Use of Proceeds</th>
<th>Clean Transportation</th>
<th>Energy Efficiency</th>
<th>Renewable Energy</th>
<th>Living Natural Resources, Land Use and Marine Protected Areas</th>
<th>Water Management</th>
<th>Green Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Evaluation and Selection</td>
<td>Selection of eligible green projects through a decision-making process by the Ministry of Finance</td>
<td>Green Bond Committee, led by the Ministry of Finance with the support of the main ministries in charge of the execution of the public budget, to review and validate the selection of eligible green projects</td>
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<tr>
<td>Management of Proceeds</td>
<td>Net proceeds to be transferred to the general account of Chile and each specific green bond issuance to be linked to a specific pool of eligible projects</td>
<td>Total value of eligible projects to be higher than the amount of issuance, to avoid the necessity to include new projects in event of projects no longer eligible, and includes previous year and current year expenditures and, if necessary, future expenditures</td>
<td>Until full allocation, unallocated proceeds managed in line with the liquidity management policy</td>
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<tr>
<td>Reporting</td>
<td>Annual reporting on:</td>
<td>Proceeds allocation (per category)</td>
<td>Output (e.g. km of train lines; installed capacity in MW) and impact indicators (e.g. CO₂ avoided, energy saved)</td>
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<tr>
<td>Green Sectors</td>
<td>Eligible Green Expenditures</td>
<td>Environmental benefits</td>
<td>SDG's contribution</td>
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</table>
| **Clean Transportation** | Promote public transportation and support to multimodal transport solutions  
Green Eligible Expenditures include:  
- Investment in public infrastructure and assets enhancing modal shift, electric public passenger transport:  
  - electrified metro lines: new lines, extension and renovation  
  - electric buses, charging stations for electric vehicles  
  - other public transportation like trams and trains  
  - intermodal infrastructure to connect different clean public transportation, system monitoring and control, passengers safety and security infrastructure and bicycle paths and parking  
- Subsidies or incentives to promote public transportation |  
Climate change mitigation  
Air quality improvement  
Greenhouse gas reduction through the promotion of low carbon mean of transportation |  
3 SDG: Good Health and Well-Being |
| **Energy Efficiency** | Support energy efficiency improvement in buildings and public spaces  
Green Eligible Expenditures include:  
- Energy efficiency investments in public buildings which result in savings higher than 20%; including (but not limited to) retrofit, thermal insulation and/or upgrading of air conditioning systems  
- Subsidies dedicated to energy efficiency improvements in housing, including (but not limited to) improvements on houses’ insulation  
- Public lighting improvements (e.g., replacement with LEDs) |  
Climate change mitigation  
Energy savings  
Greenhouse gas reduction |  
7 SDG: Affordable and Clean Energy |

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| **Renewable Energy** | Promote the development of renewable energy technologies  
Green Eligible Expenditures include:  
- Investments in projects from renewable non-fossil sources such as:  
  - Wind energy\(^a\) (onshore)  
  - Solar energy\(^b\) (onshore)  
  - Small run-of-river hydro plants (under 25MW)  
- Investments in solar/wind energy (onshore) projects that integrate energy generation and storage (Batteries)  
- Training programs to increase technical knowledge in vocational education centers in renewable energy installation |  
Climate change mitigation  
Long-term  
Low Carbon Infrastructure Provision  
Greenhouse gas emission reduction |  
9 SDG: Industry, Innovation and Infrastructure |
| **Living Natural Resources, Land Use and Marine Protected Areas** | Promote land, biodiversity preservation and marine protected areas  
Green Eligible Expenditures include:  
- Forestry  
  - Programs for the conservation and restoration of native and exotic forest  
- Management and maintenance of National Parks and Conservation Areas  
- Marine protected areas protection and surveillance (including research) |  
Climate change mitigation  
Conservation and sustainable use of terrestrial ecosystems  
Biodiversity preservation and protection of terrestrial ecosystems |  
15 SDG: Life on Land |
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<th>Environmental benefits</th>
<th>SDG's contribution</th>
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<tr>
<td>Water Management</td>
<td>Promote sustainable water management to ensure water supply</td>
<td>Water resources conservation</td>
<td>SDG 6: Clean Water and Sanitation</td>
</tr>
<tr>
<td></td>
<td>Green Eligible Expenditures include:</td>
<td>Climate change adaptation</td>
<td>SDG 9: Industry, Innovation and Infrastructure</td>
</tr>
<tr>
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<td>- Water distribution: Installation or upgrade of water efficient irrigation systems, construction or upgrade of sustainable infrastructure for drinking water (including research or studies)</td>
<td>Reduction of water consumption</td>
<td>SDG 9: Industry, Innovation and Infrastructure</td>
</tr>
<tr>
<td></td>
<td>- Waste water management: Installation or upgrade of waste water infrastructure including transport, treatment and disposal systems</td>
<td>Climate change adaptation and resilience, considering meteorological extreme events</td>
<td>SDG 13: Climate Action</td>
</tr>
<tr>
<td></td>
<td>- Water resources conservation: including protection of water catchment areas and prevention of pollution affecting water supplies</td>
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<td></td>
<td>- Flood defence systems against riverine inundations: including construction of reservoirs for the control of water flows</td>
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<td>Green Buildings</td>
<td>Green Building construction and retrofits, with a minimum of 30% carbon reduction in line with CBI standard</td>
<td>Climate change mitigation</td>
<td>SDG 9: Industry, Innovation and Infrastructure</td>
</tr>
<tr>
<td></td>
<td>Green Eligible Expenditures include:</td>
<td>Energy savings</td>
<td></td>
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<tr>
<td></td>
<td>- Design and construction of public buildings certified under:</td>
<td>Greenhouse emission reduction</td>
<td></td>
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<tr>
<td></td>
<td>&quot;Sistema Nacional de Certificación de Calidad Ambiental y Eficiencia Energética para Edificios de Uso Público&quot;</td>
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<tr>
<td></td>
<td>- Costs associated with retrofits to existing public buildings to meet &quot;Certificación Edificio Sustentable&quot; or improve the current certification level</td>
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In May-2019, the MoF announced it was ready to issue Green bonds.
As the first sovereign green bond issuer in the Americas, Chile also intends to set a benchmark for future sovereign issuances in the region.
Inaugural green bond issuances in 2019 accomplished several milestones.

2019 Republic of Chile’s Green Bonds:
Dual tranche USD & EUR (3.53% USD1,431 million long 30-year and 0.83% €861 million 12-year)

• First sovereign green bond issuance in the Americas and the first Sovereign Green Bond issuance in Euros issued by a non-European sovereign. USD Bond was the longest tenor debut green bond.

• Lowest yields obtained ever in both currencies (3.53% for the USD and 0.83% for EUR bonds), low spreads, record demand from global markets (12.8X for USD bonds, and 4.7X for the EUR bonds).

• Important broadening of Chile’s investor base towards institutional investors with green mandates.
Quickly followed by new green bond issuances in January-2020.

2020 Republic of Chile’s Green Bonds:

USD tranche (3.275% USD900 million on reopening of long 30-year and 2.55% USD750 million on a new 12-year)
EUR tranche (0.695% €694 million on reopening of 11-year and 1.299% €1,269 million on a new long 20-year)

Awards and Honors

• Green Finance 2019, The Banker.
• Green Bond of the Year-Sovereign, Environmental Finance Bond Award 2019.
• Financing, Netexplo Smart Cities Accelerator UNESCO 2019.
• Sovereign Issuer of the Year, LatinFinance Awards 2019.
• Green Bond of the Year for Latin America, GlobalCapital Sustainable and Responsible Capital Markets Awards 2019.
• Recognition for Innovation in Sustainable Finance 2019, Spanish Observatory of Sustainable Financing.
Chile’s green bond secondary market performance (thus far) in terms of levels and volatility does not appear to be that different from plain-vanilla bonds.

Source: Bloomberg (as of September 14th, 2020).

* Incorporates a 5bps extension to match the Green Bonds maturity.
Reporting on allocations and impact remain a key component of the post-issuance process.

2019 Green Bond Allocation and Pending Disbursements

Disbursements by Green Sector

Green Bonds 2019
Allocation & Environmental Impact Report
Global Sustainable Debt Issuance
Billions of USD, 2020 as of August 28th

Social Bond Issuances per Year
Billions of USD

Latin America cumulative green bond issuance
USD17.9bn in cumulative green issuance as of 30 June 2020

Source: BloombergNEF
Chilean corporates have also resorted to ESG issuances in international and domestic capital markets.

### ESG Issuances by Chilean Corporates in International Markets

<table>
<thead>
<tr>
<th>Issuer Name</th>
<th>Issue Date</th>
<th>Maturity</th>
<th>Currency</th>
<th>Amount Issued</th>
<th>Moody's</th>
<th>Use of Proceeds</th>
<th>Eligible Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inversiones CMPC SA</td>
<td>4/4/2017</td>
<td>4/4/2027</td>
<td>USD</td>
<td>500,000,000</td>
<td>Baa3</td>
<td>Green Bond</td>
<td>Sustainable forestry/water management, preservation of biodiversity and restoration of high conservation value forests, pollution prevention and control, energy efficiency</td>
</tr>
<tr>
<td>AES Gener SA</td>
<td>10/7/2019</td>
<td>10/7/2079</td>
<td>USD</td>
<td>450,000,000</td>
<td>Baa3</td>
<td>Green Bond</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>Celulosa Arauco y Constitucion SA</td>
<td>10/29/2019</td>
<td>1/29/2030</td>
<td>USD</td>
<td>500,000,000</td>
<td>Baa3</td>
<td>Sustainability Bond</td>
<td>Pollution prevention and control, sustainable water management, renewable energy, sustainable land use and forest management, preservation of natural resources and biodiversity, access to essential services, socio-economic advancement and empowerment</td>
</tr>
<tr>
<td></td>
<td>10/29/2019</td>
<td>1/29/2050</td>
<td>USD</td>
<td>500,000,000</td>
<td>Baa3</td>
<td>Sustainability Bond</td>
<td>Pollution prevention and control, sustainable water management, renewable energy, sustainable land use and forest management, preservation of natural resources and biodiversity, access to essential services, socio-economic advancement and empowerment</td>
</tr>
</tbody>
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### ESG Issuances by Chilean Corporates in the Local Stock Exchange

<table>
<thead>
<tr>
<th>Issuer Name</th>
<th>Year</th>
<th>Currency</th>
<th>Amount</th>
<th>Maturity (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aguas Andinas</td>
<td>2018</td>
<td>UF</td>
<td>1,500,000</td>
<td>7</td>
</tr>
<tr>
<td>Banco Estado</td>
<td>2018</td>
<td>CLP</td>
<td>50,000,000,000</td>
<td>4</td>
</tr>
<tr>
<td>Caja Los Héroes</td>
<td>2018</td>
<td>UF</td>
<td>1,000,000</td>
<td>6</td>
</tr>
<tr>
<td>ESVAL</td>
<td>2019</td>
<td>UF</td>
<td>1,500,000</td>
<td>25</td>
</tr>
<tr>
<td>Aguas Andinas</td>
<td>2019</td>
<td>UF</td>
<td>2,000,000</td>
<td>25</td>
</tr>
<tr>
<td>Hortifrut</td>
<td>2019</td>
<td>UF</td>
<td>1,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Caja Los Héroes</td>
<td>2019</td>
<td>CLP</td>
<td>40,000,000,000</td>
<td>6</td>
</tr>
<tr>
<td>CMPC</td>
<td>2019</td>
<td>UF</td>
<td>2,500,000</td>
<td>10</td>
</tr>
<tr>
<td>Inversiones La Construcción</td>
<td>2019</td>
<td>UF</td>
<td>2,000,000</td>
<td>8</td>
</tr>
<tr>
<td>SONDA</td>
<td>2019</td>
<td>UF</td>
<td>1,500,000</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: https://www.bolsadesantiago.com/bonos_verdes
Challenges ahead.

• Ensure green finance initiatives remain at the top of the agenda in the context of the economic recovery ahead; not only on the demand-side but also on the supply-side.

• Enhance capacity-building and the development of best practices across the public and private sectors;

• Generate conditions for even greater participation of Chilean issuers in this space;

• Broader development of financial instruments: maintain highest standards throughout the preparation process, and post-issuance (reporting);

• Possibility of broadening the scope in terms of financial instruments;

• More data allows for more research on several avenues:
  • Assessing impact of instruments on environmental metrics;
  • Existence of greenium? Liquidity? Volatility?
  • Relationship between environmental impact of Green bonds & at the issuer level overall.
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