

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



**Gobierno
de Chile**

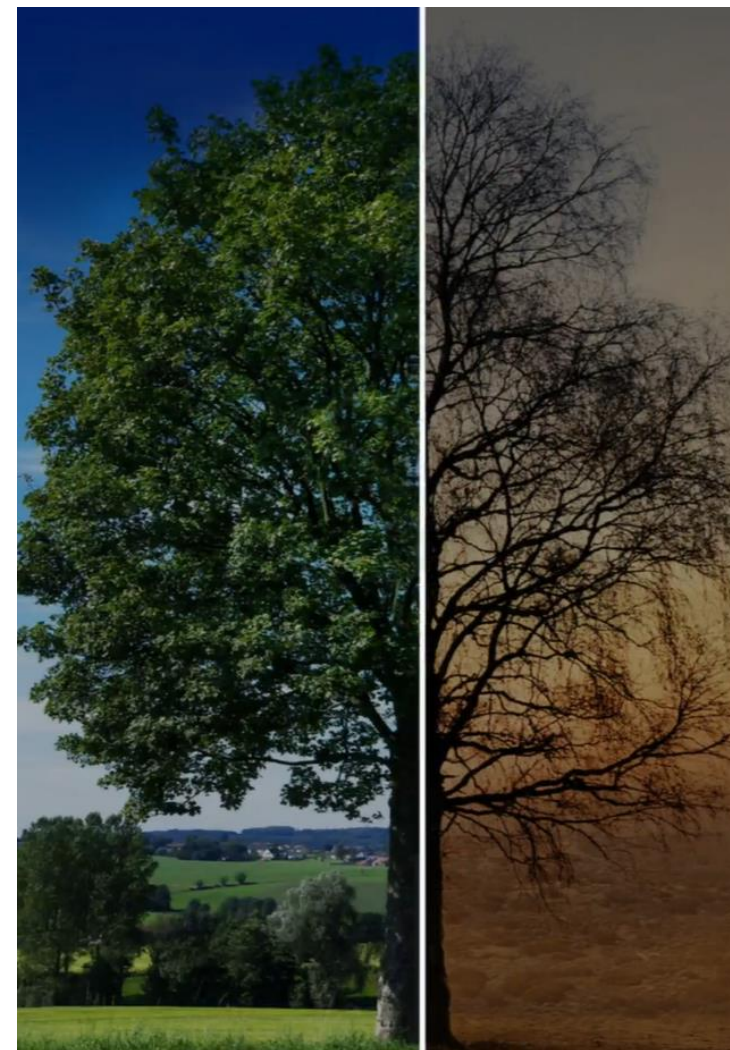
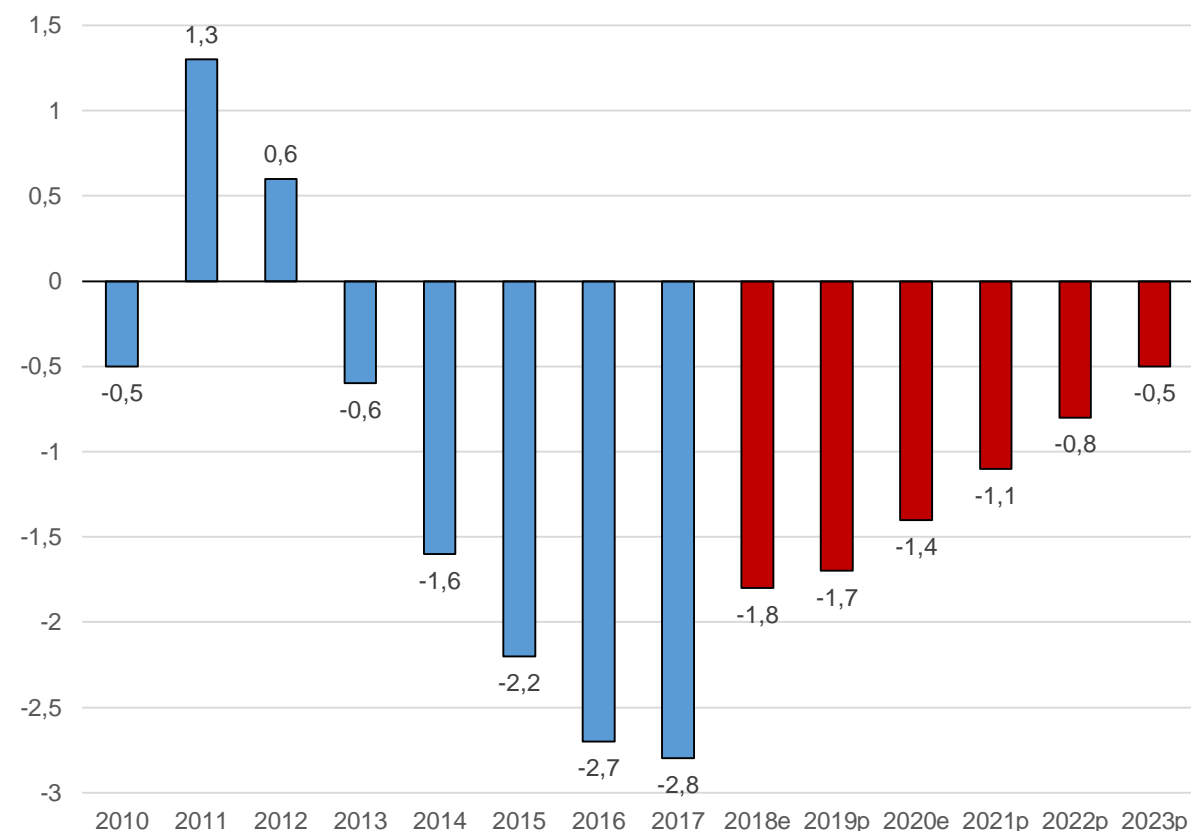
Ministerio de Hacienda

Andrés Pérez M.
Head of Advisors & Head of International Finance
Ministry of Finance
October 6th, 2020

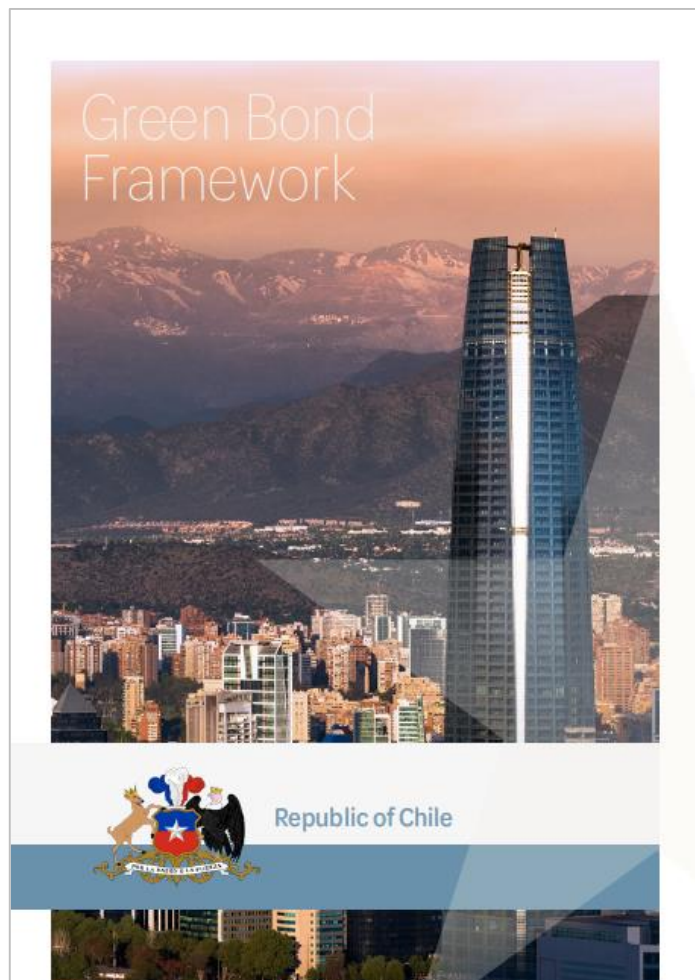
Towards 2018, discussions at the MoF referred to green bonds as an instrument that met several important objectives simultaneously.

Headline Fiscal Balance

Percent of GDP; Projected in October, 2018.








The MoF began working on the development of the Green Bond Framework early on, following international best practice.



Use of Proceeds	<div>Clean Transportation</div> <div>Energy Efficiency</div> <div>Renewable Energy</div> <div>Living Natural Resources, Land Use and Marine Protected Areas</div> <div>Water Management</div> <div>Green Buildings</div>
Project Evaluation and Selection	<ul style="list-style-type: none"> Selection of eligible green projects through a decision-making process by the Ministry of Finance 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
Management of Proceeds	<ul style="list-style-type: none"> 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 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 Until full allocation, unallocated proceeds managed in line with the liquidity management policy
Reporting	<ul style="list-style-type: none"> Annual reporting on: <ul style="list-style-type: none"> Proceeds allocation (per category) Output (e.g. km of train lines; installed capacity in MW) and impact indicators (e.g. CO₂ avoided, energy saved)
External Review	<ul style="list-style-type: none"> Second Party Opinion from Vigeo Eiris on the Framework CBI certification Annual Assurance Report by an external auditor on the allocation report and its conformity with the Framework

Green Sectors	Eligible Green Expenditures	Environmental benefits	SDG's contribution
Clean Transportation	<p>Promote public transportation and support to multimodal transport solutions</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> Investment in public infrastructure and assets enhancing modal shift, electric public passenger transport: <ul style="list-style-type: none"> electrified metro lines: new lines, extension and renovation electric buses, charging stations for electric vehicles other public transportation like tramways and trains intermodal infrastructure to connect different clean public transportation, system monitoring and control, passenger safety and security infrastructure and bicycle paths and parking Subsidies or incentives to promote public transportation 	<p>Climate change mitigation</p> <p>Air quality improvement</p> <p>Greenhouse gas reduction through the promotion of low carbon mean of transportation</p>	<p>3 GOOD HEALTH AND WELL-BEING</p> <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> <p>13 CLIMATE ACTION</p>
Energy Efficiency	<p>Support energy efficiency improvement in buildings and public spaces</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> Energy efficiency investments in public buildings which result in savings higher than 20%: including (but not limited to) retrofit, thermal insulation and/or upgrades of air conditioning system Subsidies dedicated to energy efficiency improvements in housing, including (but not limited to) improvement on houses' insulation Public lighting improvements (e.g., replacement with LEDs) 	<p>Climate change mitigation</p> <p>Energy savings</p> <p>Greenhouse gas reduction</p>	<p>7 AFFORDABLE AND CLEAN ENERGY</p> <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> <p>13 CLIMATE ACTION</p>

Green Sectors	Eligible Green Expenditures	Environmental benefits	SDG's contribution
Renewable Energy	<p>Promote the development of renewable energy technologies</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> Investments in projects from renewable non-fossil sources such as: <ul style="list-style-type: none"> Wind energy^a (onshore) Solar energy^a (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 energies installation 	<p>Climate change mitigation</p> <p>Long term Low Carbon Infrastructure Provision</p> <p>Greenhouse gas emission reduction</p>	<p>7 AFFORDABLE AND CLEAN ENERGY</p> <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> <p>13 CLIMATE ACTION</p>
Living Natural Resources, Land Use and Marine Protected Areas	<p>Promote land, biodiversity preservation and marine protected areas</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> Forestry <ul style="list-style-type: none"> 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) 	<p>Climate change mitigation</p> <p>Conservation and sustainable use of terrestrial ecosystems</p> <p>Biodiversity preservation and protection of terrestrial ecosystems</p>	<p>3 GOOD HEALTH AND WELL-BEING</p> <p>13 CLIMATE ACTION</p> <p>14 LIFE BELOW WATER</p> <p>15 LIFE ON LAND</p>

Green Sectors	Eligible Green Expenditures	Environmental benefits	SDG's contribution
Water Management	<p>Promote sustainable water management to ensure water supply</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> ♦ Water distribution: Installation or upgrade of water efficient irrigation systems, construction or upgrade of sustainable infrastructure for drinking water (including research or studies) ♦ Waste water management: Installation or upgrade of waste water infrastructure including transport, treatment and disposal systems ♦ Water resources conservation: including protection of water catchment areas and prevention of pollution affecting water supplies ♦ Flood defence systems against riverine inundations: including construction of reservoirs for the control of water flows 	<p>Water resources conservation</p> <p>Climate change adaptation</p> <p>Reduction of water consumption</p> <p>Climate change adaptation and resilience, considering meteorological extreme events</p>	<p>6 CLEAN WATER AND SANITATION</p>  <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 
Green Buildings	<p>Green Building construction and retrofits, with a minimum of 30% carbon reduction in line with CBI standard</p> <p>Green Eligible Expenditures include:</p> <ul style="list-style-type: none"> ♦ Design and construction of public buildings certified under "Sistema Nacional de Certificación de Calidad Ambiental y Eficiencia Energética para Edificios de Uso Público" ♦ Costs associated with retrofits to existing public buildings to meet "Certificación Edificio Sustentable" or improve the current certification level 	<p>Climate change mitigation</p> <p>Energy savings</p> <p>Greenhouse emission reduction</p>	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>  <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>  <p>13 CLIMATE ACTION</p> 

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.

Non-deal Roadshow and Investor Participation



- In 1H2019, Chile embarked non-deal roadshows in the US, Europe, and Asia. Recurring dialogue with key investors while identifying Green Bond portfolios was a key execution strategy

USD BOND BY REGION	TOTAL
USA	48%
EU / UK	36%
Others	16%

EUR BOND BY REGION	TOTAL
EU / UK	85%
Others	15%

Quickly followed by new green bond issuances in January-2020.

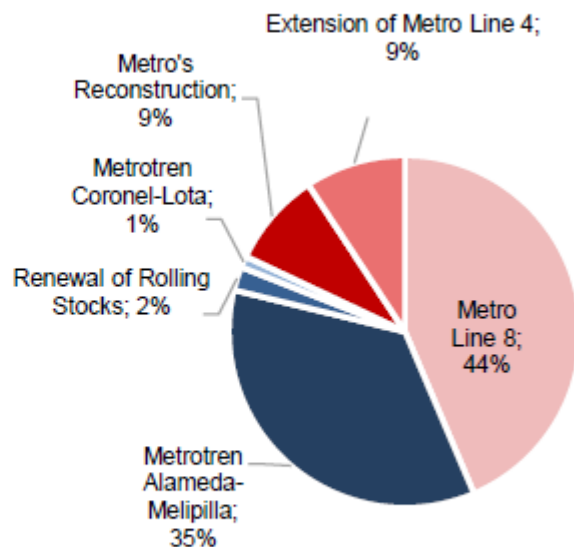
2020 Republic of Chile's Green Bonds:

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)

2020 Project Portfolio

- The 2020 Green Bond project portfolio totals USD 4.4 billion from the sector **Clean Transportation**, which includes the following projects:
 - Line 8 of Santiago's Metro
 - Extension of Metro Line 4
 - Metro's Reconstruction
 - Biotren Extension Coronel-Lota
 - Metrotren Alameda-Melipilla
 - Renewal of Rolling Stocks



Awards and Honors

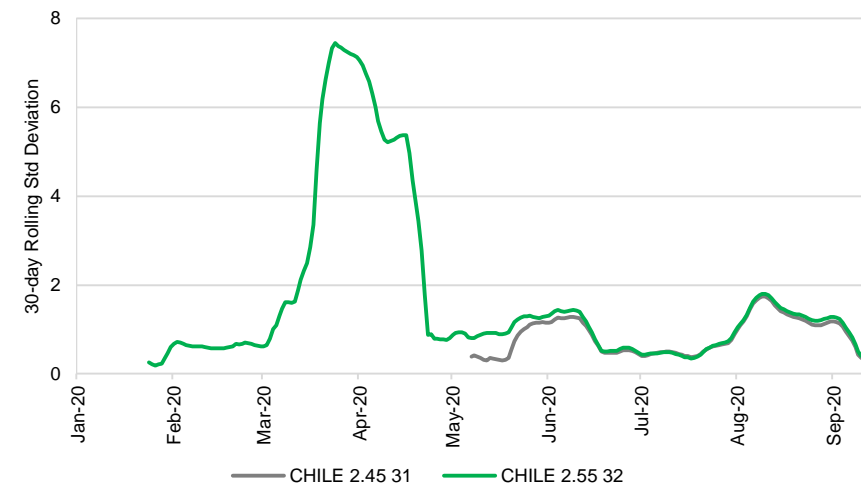
- Green Finance 2019, The Banker.
- Green Bond of the Year-Sovereign, Environmental Finance Bond Award 2019.
- Financing, Netexplo Smart Cities Accelerator UNESCO 2019.
- Sovereign Issuer of the Year, LatinFinance Awards 2019.
- Best Public Debt Office/Sovereign Debt Management Office in Latin America, GlobalMarkets 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.

Green USD Chile 32 Trades Similarly to USD Chile 31



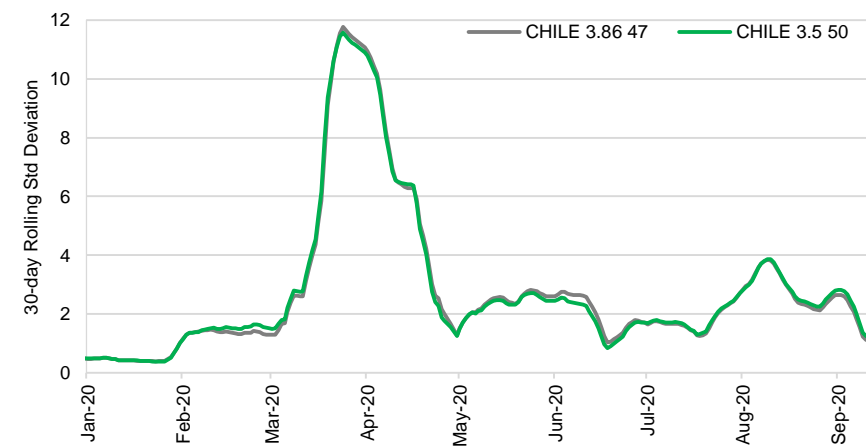
USD Chile 32 vs. USD Chile 31



Green USD Chile 50 Trades Inside USD Chile 47



Green USD Chile 50 vs. USD Chile 47

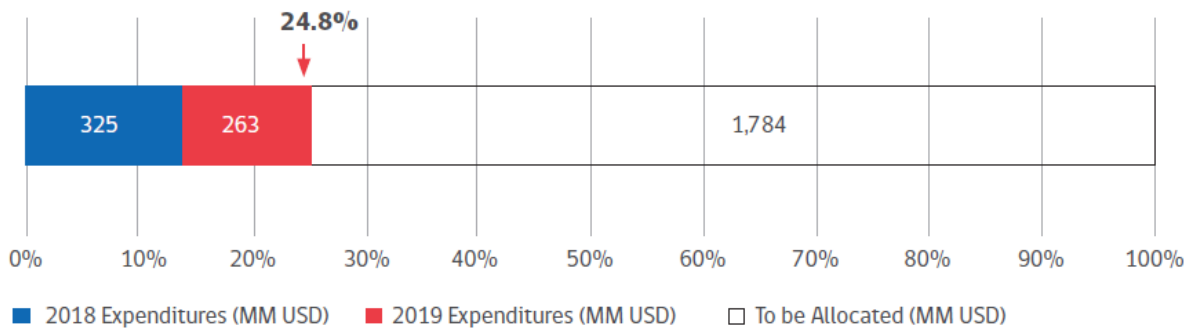


Source: Bloomberg (as of September 14th, 2020).

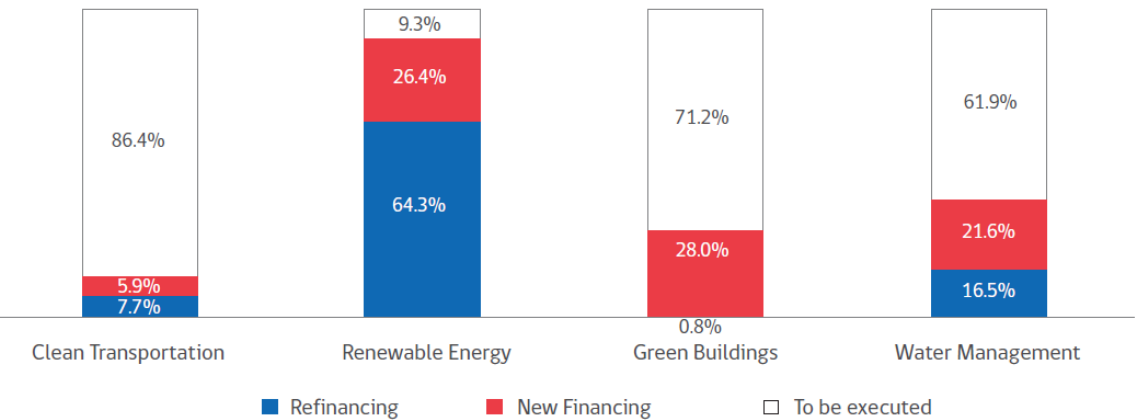
* Incorporates a 5bps extension to match the Green Bonds maturity.

Reporting on allocations and impact remain a key component of the post-issuance process.

2019 Green Bond Allocation and Pending Disbursements

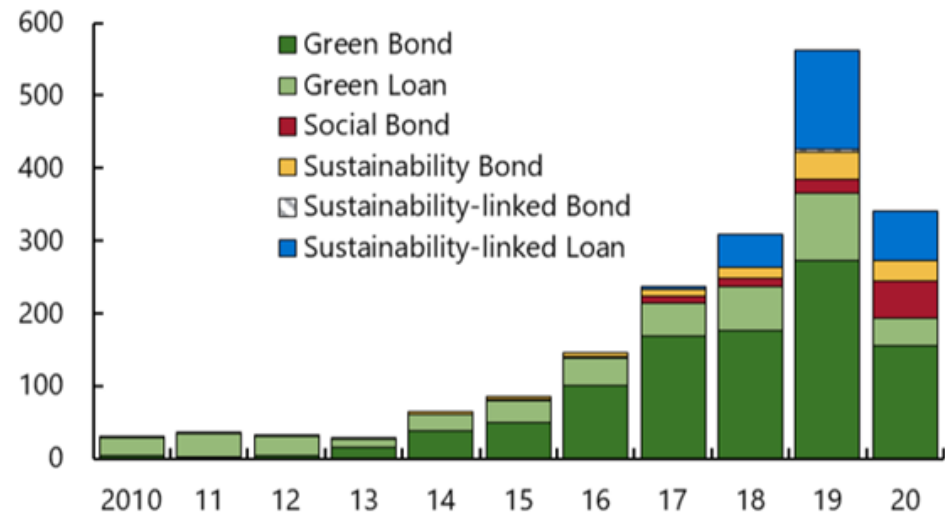


Disbursements by Green Sector



Global Sustainable Debt Issuance

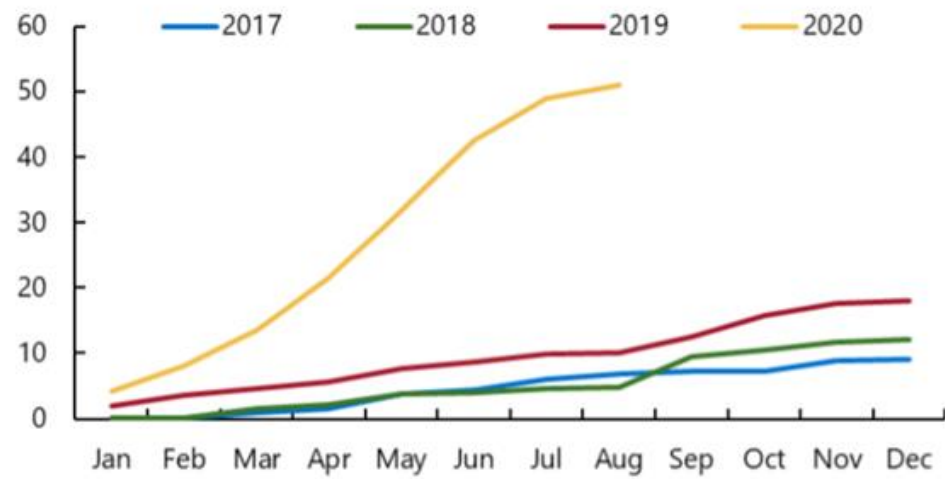
Billions of USD, 2020 as of August 28th



Source: BloombergNEF

Social Bond Issuances per Year

Billions of USD



Source: BloombergNEF

Latin America cumulative green bond issuance

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



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

ESG Issuances by Chilean Corporates in International Markets

Issuer Name	Issue Date	Maturity	Curr	Amount Issued	Moody's	Use of Proceeds	Eligible Categories
Inversiones CMPC SA	4/4/2017	4/4/2027	USD	500.000.000	Baa3	Green Bond	Sustainable forestry/w ater management, preservation of biodiversity and restoration of high conservation value forests, pollution prevention and control, energy efficiency
AES Gener SA	10/7/2019	10/7/2079	USD	450.000.000	Baa3	Green Bond	Renew able Energy
Celulosa Arauco y Constitucion SA	10/29/2019	1/29/2030	USD	500.000.000	Baa3	Sustainability Bond	Pollution prevention and control, sustainable w ater management, renew able energy, sustainable land use and forest management, preservation of natural resources and biodiversity, affordable housing, access to essential services, socio-economic advancement and empow erment
	10/29/2019	1/29/2050	USD	500.000.000	Baa3	Sustainability Bond	

ESG Issuances by Chilean Corporates in the Local Stock Exchange

Issuer	Year	Currency	Amount	Maturity (years)
Aguas Andinas	2018	UF	1.500.000	7
Banco Estado	2018	CLP	50.000.000.000	4
Caja Los Héroes	2018	UF	1.000.000	6
ESVAL	2019	UF	1.500.000	25
Aguas Andinas	2019	UF	2.000.000	25
Hortifrut	2019	UF	1.000.000	7
Caja Los Héroes	2019	CLP	40.000.000.000	6
CMPC	2019	UF	2.500.000	10
Inversiones La Construcción	2019	UF	2.000.000	8
SONDA	2019	UF	1.500.000	5

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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