

# Republic of Chile's Green Bond Project Portfolio

Certified according to CBI Standards  
June 20, 2019



Disclaimer: The information on estimated disbursements and the corresponding environmental impact published in this document is only referential, and may change over time. Final information will be published in April of each year in the Green Bond Report at: <https://www.hacienda.cl/english/public-debt-office/green-bonds.html>. As stated in the Framework, "the first report will be published in the following year after the issuance" (pg. 13)

# Red Line 7 of Metro – Clean Transportation

Ministry of Transportation and Communications

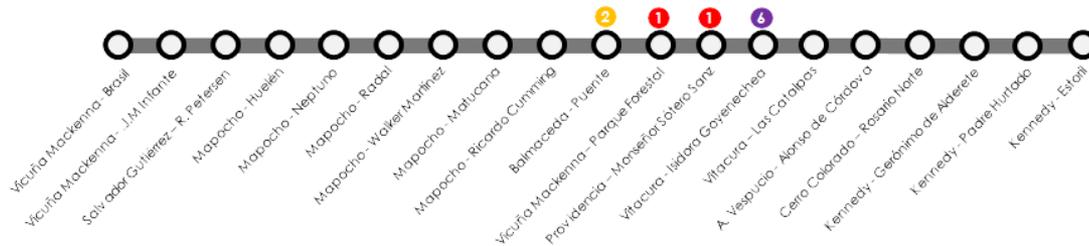
Metropolitana de Movilidad



This project considers the construction of roughly 26 km. of Metro's new Line 7 in Santiago by 2026, connecting the city from east to west, benefiting around 1.35 million users. The new line will cover new areas of the city, while also decongesting existing lines, thereby providing incentives for the use of clean of public transportation.

*This project will avoid annual emissions of*  
**32,862 tCO<sub>2</sub>** and  
**4.6 tons** of  
**Particulate Matter (PM 2.5)**

## Metro stations included in Line 7:



For more information, visit: <https://www.metro.cl/minisito/linea-3-y-6/futura-linea-7>

*This project involves a disbursement of*  
**US\$ 2.5 billion**  
*Which represents around of*  
**58%** of the total Portfolio

# Red Line 3 of Metro – Clean Transportation

Ministry of Transportation and Communications

Metropolitana de Movilidad



This project considers the construction of roughly 22 km. of Metro's new Line 3 in Santiago, connecting the city from north-west to east, benefiting around 1.1 million users. Line 3 will cover new areas of the city, while also decongesting existing metro lines, thereby providing incentives for the use of clean public transportation.

This project will **avoid annual emissions** of  
**170,300<sup>(\*)</sup> tCO2** and  
**7.4 tons** of  
**Particulate Matter (PM 2.5)**

Metro stations included in Line 3:



For more information, visit: <https://www.metro.cl/minisito/linea-3-y-6/linea-3>

(\*) This estimation does not include the annual emissions of CO2 derived from the electric consumption of the new metro line

This project involves a disbursement of  
**US\$ 303 million**  
Which represents around of  
**7%** of the total Portfolio

This project considers the construction of an extension of roughly 3.8 km. of Metro's new Line 3 in Santiago, by 2022, adding 3 new stations in the north-west part of the city and benefiting around 210 thousand users. This extension will integrate other transport means such as the suburban rail to Batuco-Quinta Normal, suburban buses and rural buses.

Metro stations included in the extension of Metro Line 3 consider other transport means and will help to decongest the north-western area of Santiago. The stations are the following:



For more information, visit: <https://www.metro.cl/minisito/linea-3-y-6/extension-linea-3>

*This project will avoid annual emissions of*

**1,246 tCO<sub>2</sub>** and  
**0.15 tons of**  
**Particulate Matter**  
**(PM 2.5)**

*This project involves a disbursement of*

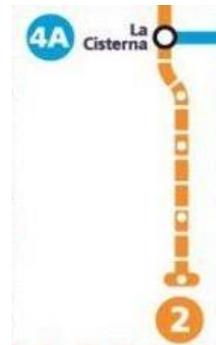
**US\$ 364 million**

*Which represents around of*

**8%** of the total Portfolio

This project considers the construction of an extension of roughly 5.1 km. of Metro's Line 2 in Santiago, by 2023, adding 4 new stations in the south part of the city and benefiting around 400 thousand users. The extension will facilitate access to public transportation in Santiago's periphery and alleviate congestion of the last station of Lines 2 and 4A.

Metro stations included in the extension of Metro line 2 will cover a peripheral area, offering clean public transport to a population that otherwise would use private means of transport



*This project will **avoid annual emissions** of*

**1,810 tCO<sub>2</sub>** and  
**0.21 tons of**  
**Particulate Matter**  
**(PM 2.5)**

*This project involves a disbursement of*

**US\$ 458 million**

*Which represents around of*

**11%** *of the total Portfolio*

For more information, visit:

<https://www.metro.cl/minisitio/linea-3-y-6/extension-linea-2>

This project boosts electromobility in the Metropolitan Mobility Network (RED) in Santiago by adding 600 new electric buses, 9 charging stations, and more than 140 smart bus stops equipped with wifi, USB chargers, information screens fueled by photovoltaic panels. The new fleet of electric buses has begun to phase out current gas-fueled buses, and will continue through 2021.

New electric buses and smart bus stops will be gradually included in RED



*This project will avoid annual emissions of*  
**Greenhouse gases**  
*and air pollution generated by*  
**Particulate Matter (PM 2.5)**

*This project involves a disbursement of*  
**US\$ 323 million**  
*Which represents around of*  
**7%** *of the total Portfolio*



# Renewal of Train Parts – *Clean Transportation*

Ministry of Transportation and Communications



This project includes the renewal of rolling stock for the wholly-electrified Santiago-Rancagua operations. This renewal will improve energy efficiency and the quality of the service.

The metro-train to Rancagua served to 19.3 million users during 2018



*This project will avoid annual emissions of*  
**Greenhouse gases** and air pollution generated by **Particulate Matter (PM 2.5)**

*This project involves a disbursement of*  
**US\$ 40 million**  
*Which represents around of*  
**0.9%** of the total Portfolio

## Solar thermal energy panels on houses – *Renewable Energy* *Ministry of Energy*

This project includes the installation of solar thermal energy panels on 2,578 social housing, in the regions of Arica y Parinacota, Tarapacá and Valparaíso. This project improves access to electricity with 100% clean and renewable sources. The program has a 68% degree of completion.

This project contributes to new sources of renewable energy in houses that have been affected to natural disasters occurred between the years 2014 and 2015



*This project will  
avoid annual  
emissions of  
241 tCO<sub>2</sub>e*

*This project involves a disbursement of  
US\$ 4 million  
Which represents around of  
0.1% of the total Portfolio*

*For more information, visit: [www.minenergia.cl/sst/](http://www.minenergia.cl/sst/)*

## Construction of Photovoltaic System – *Renewable Energy* *Ministry of Energy*

This project involved the construction of 151 stand-alone Photovoltaic systems to provide permanent electricity supply to the indigenous families of Isla Huapi, in the region of Los Rios. The project has cut the consumption of diesel for electricity production within the island.

*This project avoids  
annual emissions  
between  
49-206 tCO<sub>2</sub>e*

This project offers renewable energy sources in isolated areas, improving the access to electricity with 100% clean sources



*This project involves a disbursement  
of  
US\$ 0.8 million  
Which represents around of  
0.02% of the total Portfolio*

This project seeks to strengthen the photovoltaic market for auto-consumption in Chile through the installation of photovoltaic systems in public buildings, and the support for vocational education to foster the development of this type of technology.

In addition to the installation of solar panels in public buildings, which contribute to the strengthening of renewable energies, this program provides support in these topics to vocational education.



*This project will avoid  
the emissions of  
Greenhouse  
gases*

*This project involves a disbursement of*  
**US\$ 0.8 million**  
*Which represents around of*  
**0.02%** *of the total*  
**Portfolio**

For more information, visit:  
<http://www.minenergia.cl/techossolares/>



This project funds the design and/or construction of public buildings, such as: schools, border buildings, public libraries, police stations, among others, that reduce carbon emissions by at least a 30% and obtains the CES Certification. The design of these buildings consider the quality of interiors, energy efficiency, water management and waste management.

Projects included: Regional Library of La Araucanía (left) and MOP building in Atacama (right)



*This project will avoid the emissions of*  
**Greenhouse gases**

*This project involves a disbursement of*  
**US\$ 243 million**  
*Which represents around of*  
**7%** *of the total Portfolio*

*For more information about, visit:*  
<http://www.certificacionsustentable.cl/>

This project funds the monitoring, analysis, diagnostics and research on water resources, master plans of watersheds and water resources conservation strategies. Also funds analysis of water resources in the face of extreme events and climate change effects.

In the National Strategy of Water Resources, formulated in 2012, five strategic areas for water management were proposed:  
Efficient and sustainable management; better institutions; face shortages; social equity: coverage of rural drinking water; and an informed citizenship.



*This project will contribute with studies and research that will mitigate and adapt to events that are a consequence of climate change*

*This project involves a disbursement of*  
**US\$ 7 million**  
*Which represents around of*  
**0.2%** *of the total*  
*Portfolio*

For more information, visit: <http://www.dga.cl/Paginas/default.aspx>

# Acknowledgements



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