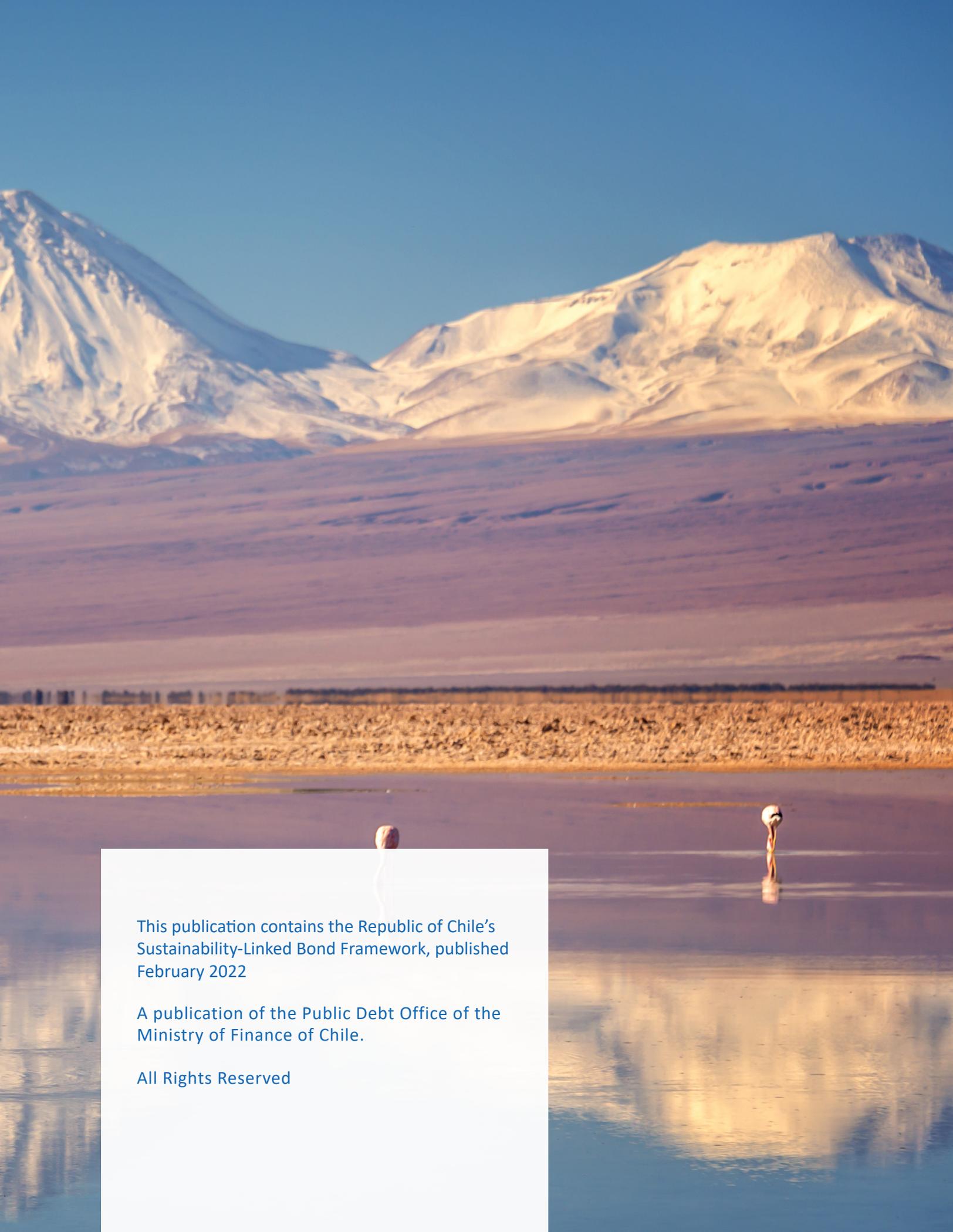




Chile's Sustainability-Linked Bond Framework

February 2022



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01

Chile's Commitment to Sustainable Development



The Republic of Chile (Chile) seeks to transition from a middle-income to a high-income economy through a sustainable path built upon three key pillars: economic, environmental and social.

Over the years, Chile has strengthened its commitment to climate change mitigation and environmental protection through both national and international initiatives. Heeding the imminent need to transition toward a net zero-carbon economy by 2050, various ministries, including the Ministry of Finance (MoF), have created specialized areas to address climate change and promote public-private cooperation.

The MoF, responsible for the country's fiscal policy, has taken on a key role in channeling public and private capital flows to support and comply with environmental commitments, as evidenced by a diverse assortment of initiatives. These initiatives include the establishment of the Public-Private Green Finance Roundtable (Mesa público-privada de Finanzas Verdes), the publication of the first National Financial Strategy to deal with climate change, and the adoption of the first Sovereign Green and Sustainable Bond Frameworks in Latin America. Reinforcing this sustainable development strategy, Chile has purposefully embedded sustainability criteria within its sovereign bond issuances to simultaneously encourage inclusive development and economic growth.

I. Sustainability Strategy

Chile adopted the 2030 Sustainable Development Agenda (the Agenda) in September 2015, an action plan on behalf of the people, the planet and prosperity, aimed at strengthening universal peace within a broader concept of liberty. In doing so, Chile committed to advance the Agenda's 17 social and environmental oriented goals. The UN Sustainable Development Goals (SDGs) have provided a general framework for Chile to design policies and initiatives that support sustainable and inclusive growth. In 2019, Chile published its second Voluntary National Report on the 2030 Sustainable Development Agenda.

Chile's adoption of the Agenda along with 193 United Nations (UN) member countries serves as one of many examples of its international cooperation. Over the last several decades, other examples include the ratification of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, as well as the Convention on the Rights of the Child. Chile is also a member of the Ibero-American Multilateral Agreement on Social Security (Convenio Iberoamericano de Seguridad Social), in addition to 25 other agreements with different countries. Parts of those agreements are included in Chile's currently-in-effect Constitution, which establishes a series of rights for all people, such as the right to live in a pollution-free environment, the right to good health, the right to education, freedom of employment and protection for the right to social security.

Chile's Nationally Determined Contribution (NDC)

In February 2017, Chile ratified the Paris Agreement by means of Supreme Decree N° 30 of the Ministry of Foreign Affairs and, in September 2015, presented its Intended Nationally Determined Contribution (INDC) before the United Nations Framework Convention on Climate Change. Since the submission of Chile's first NDC in 2015, the country has substantially advanced its development of policies and capacities related to climate change. Chile submitted an updated NDC in 2020 after making significant progress addressing the effects of climate change, in line with the demands of the science-based evidence related to climate change. The updated NDC addresses the major requirements of the scientific community and considers commitments in five areas: (i) social pillar for transition and sustainable development; (ii) mitigation; (iii) adaptation; (iv) integration; and (v) means of implementation.

The updated NDC includes a refreshed mitigation goal that replaces the previous emissions intensity indicator with unconditional absolute indicators. More specifically, Chile has included unconditional absolute indicators, with a goal of

95 metric tons of carbon dioxide equivalent (MtCO₂e) by 2030, an emissions maximum in 2025, and a greenhouse gas (GHG) emissions budget of no more than 1,100 MtCO₂e in the period 2020-2030.

Under the updated NDC, Chile has also committed to [update the Plan for Mitigation and Adaptation to Climate Change for Infrastructure Services through 2022](#). This plan was first introduced in 2017 and supports the development of sustainable infrastructure projects at the community, regional and national levels. Under this commitment, Chile has taken population and territory protection considerations into account, dealing with demands associated with urban and/or rural consumption in the projects' area of influence during each water-related public infrastructure project through 2030.

Environmental Regulation Complementary to the NDC

In 2015, Chile developed the National Energy Policy (Política Energética Nacional) (PEN), a long-term guiding instrument for the development of public policies. The document sets out three main goals: (i) to make Chile a climate change leader; (ii) to use energy to improve Chileans' quality of life; and (iii) to create a new productive identity for Chile through energy.

The initiative identifies over 60 targets for 2030, 2040 and 2050 in order to reach these goals. The emphasis of the PEN is to tackle climate change decisively, incorporating green hydrogen to the energy matrix for the first time as an opportunity to reduce Chile's main productive sectors' emissions. The PEN is fundamental within the path outlined by Chile's updated NDC, considering that the energy sector represents the majority of Chile's total GHG emissions. As part of the broader strategy, the first five-year process of the Long-Term Energy Planning (PELP) 2017-2022 was published in 2017. Both the PEN and the PELP policies are being updated, as required by national legislation, with final publication expected in 2022.



In February 2021, Chile approved an Energy Efficiency law¹ to foster energy efficiency across several sectors, including industry, mining, transport, and buildings, with the goal of reducing emissions by 2% per year until 2030, thereby reducing final energy consumption by 10% by 2030 and 35% by 2050. The energy efficiency law follows the 2013 Non-Conventional Renewable Energy Law, published in 2013, which promoted the diversification of energy sources into renewable energy and established Chile's target of generating 20% of its electricity from renewable sources by 2025².

In December 2021, the Ministry of Environment (MoE) published Chile's Long-Term Climate Strategy (LTCS), which consolidates several initiatives led by different members of the State. This document presents a long-term vision for Chile and compiles the commitments and contributions in mitigation, adaptation, and different sectorial areas as well as addresses internal coordination issues, cost-effectiveness analysis and its means of implementation and monitoring.

Chile is also developing additional legislation that is expected to support its environmental efforts. This includes a draft bill providing for principles, a governance system, management instruments and adequate financing mechanisms that allow for economic and social development with lower GHG emissions (Ley Marco de Cambio Climático, or Framework Law on Climate Change³) that

1. Note: Ley de Eficiencia Energética, Law No. 21.305 (Ministerio de Energía, 2021).

2. For more information, visit the following [website](#).

3. For more information, visit: http://www.senado.cl/appsenado/templates/tramitacion/index.php?boletin_ini=13191-12

is being discussed in Congress. The Framework Law on Climate Change aims to reduce vulnerability, increase resilience and guarantee compliance with international commitments assumed by Chile to confront the challenges imposed by climate change. The Framework Law on Climate Change provides for coordinated measures to articulate, execute, report and disseminate public policies for the comprehensive, participatory and transparent management of climate change adaptation and mitigation measures, with an inter-generational approach.

Chile is also in the process of strengthening its 2019 coal phase-out plan. By 2024, 11 coal plants will be closed (up from eight in the original plan) and, by 2025, a total of 18 plants could be closed or retrofitted to run on natural gas or biomass, accounting for 65% of Chile's coal-power plants. Eight have already shut down, most ahead of schedule, driven by falling costs of renewable sources. Moreover, Chile has committed to a [National Electromobility Strategy](#) that aims to have 100% of the sales of light and medium vehicles, public transport (buses, taxis and shared taxis) and large machinery to be zero-emissions vehicles by 2035.

At the international level, Chile is a member of the United Nations Framework Convention for Climate Change (UNFCCC). In this role, Chile participates with a local line in the Green Climate Fund. This Fund aims to promote the design and implementation of climate measures by developing countries, in order to meet Paris Agreement goals. To achieve this objective, the Fund operates as a provider of financial mechanisms, as part of the UNFCCC. As such, it offers financing for mitigation and / or adaptation projects as well as a readiness program⁴, which are promoted by the public or private sector of each country, and contribute to meeting the sustainable development goals and the NDC of the applicant countries.

4. The Readiness and Preparatory Support Program (the Readiness Program) supports country-driven initiatives by developing countries to strengthen their institutional capacities, governance mechanisms, and planning and programming frameworks towards a transformational long-term climate action agenda.

II. Rationale for Development of Sustainability-Linked Bond Framework

The issuance of Chile's sovereign green bonds started in 2019, and provided positive financial results while simultaneously demonstrating Chile's commitment to climate action.

Recognizing Chile's comprehensive commitment to sustainable development and in accordance with the Sustainable Development Goals established by the United Nations in 2015, the MoF decided to incorporate social aspects of sustainable development into its financing strategy in 2020. To do this, Chile adapted its Green Bond Framework to a Sustainable Bond Framework, incorporating the possibility of issuing not only green bonds, but also social and sustainable bonds, moving from a purely environmental perspective towards a sustainable one, taking into account the global nature of sustainable development, while incorporating a more complex vision of vulnerability.

Through this Sustainability-Linked Bond Framework (SLB Framework), the MoF, in coordination with the MoE, is further expanding its commitment to sustainable development. This SLB Framework, in conjunction with [Chile's existing Sustainable Bond Framework \(2020\)](#), will provide clear and transparent information to the market related to all future Green, Social, Sustainable, and Sustainability-Linked Bonds (SLBs).

Through the issuance of SLBs, Chile intends to leverage ambitious timelines to achieve strong sustainable outcomes that are relevant, core and material to Chile and the Chilean people. Chile expects that the issuance of its SLBs will build upon Chile's prior Green, Social, and Sustainable bond issuances and inspire other countries and companies to do the same.



02

Alignment with SLB Principles and Selection of KPI



This SLB Framework is aligned with the [ICMA Sustainability-Linked Bond Principles](#) published in June 2020, complying with the five core components outlined therein:

1. Selection of Key Performance Indicators (KPIs);
2. Calibration of Sustainability Performance Targets (SPTs);
3. Bond characteristics;
4. Reporting; and
5. Review and Verification.

I. Selection of KPIs

The selection of KPIs follows the environmental objectives set by Chile's updated NDC and, therefore, it is coherent with Chile's strategy of development. Particularly, the selected KPIs as well as their rationale can be found in Chile's LTCS.

Rationale for KPI 1

Chile is already experiencing the impact of climate change. Evidence is now pointing to a further in-

crease in temperatures nationwide, with greater intensity in the northern area (1.5°C-2.0°C above the historical average) and in the Andes mountains.

Chile, like all parties to the Paris Agreement, must implement the necessary actions to fulfill the commitments agreed in its updated NDC, and move towards inclusive and sustainable development. These contributions represent the core instruments guiding climate action to prevent the increase in global average temperature, raise global resilience, and mobilize public and private investments on a sustainable development path, balancing the environmental, social and economic variables.

National Context of GHG Emissions

In 2018⁵, Chile's total GHG emissions were 112,313 kilotons of CO₂e, representing an increase of 128% since 1990 and 2% since 2016⁶. The main GHG released in 2018 was CO₂ (78%), followed by CH₄ (13%), N₂O (6%), and fluorinated gases (3%).

The Energy Sector (related to fossil fuels consump-

KPI 1: GHG Emissions per year, measured in MtCO₂e

KPI	Greenhouse Gas Emission (GHG) per year, measured in MtCO ₂ eq.
Reference year	Chile's contribution is not based on a single reference year
SDG Alignment	SDG 13 Climate Action - Target 13.3: "Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning."
Methodology	IPCC Guidelines for national greenhouse gas inventories (2006) ⁷ .
	GHG emissions from sectors included in Chile's latest National Greenhouse Gases Inventory (NGHGI): Energy, Industrial Processes and Product Use (IPPU), Agriculture and Waste, excluding the LULUCF sector.
	GHG emissions include: carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃).

5. The last reported information is for 2018, reported in the 2020 NGHGI.

6. With the following comment "This information has been recently analyzed by the Team of Technical Experts (TTE), whose report concludes that the information is consistent with the UNFCCC reporting guidelines, for more information find the document at the following [website](#)."

7. 2019 IPCC refinement is being adopted.

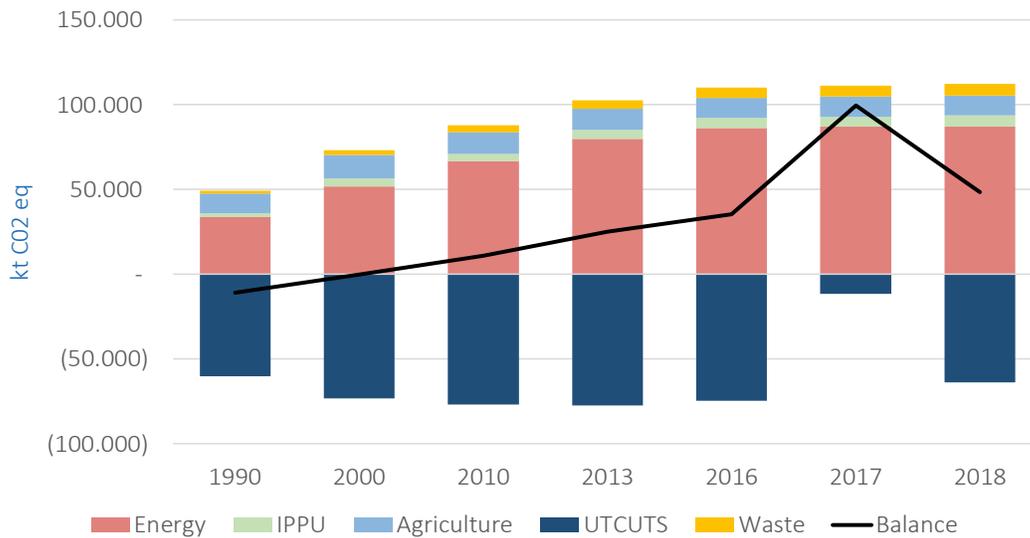
tion for energy generation and ground transportation) is responsible for most GHG emissions nationwide, accounting for 77% of total emissions in 2018. Other sectors include IPPU, representing 6%, Agriculture, representing 11%, and Waste, representing 6%, in each case of total 2018 emissions. The LULUCF sector is the only one absorbing GHG in Chile, and is consequently recorded as a sink in the emissions registry data available since 1990⁸. For further detail see **Figures 1A and 1B**.



FIGURE 1A - Chile's NGHGI: balance of GHG emissions (MtCO₂e) by sector, 1990-2018

Sector	1990	2000	2010	2013	2016	2017	2018
Energy	33,631	51,746	66,608	79,901	86,191	86,896	86,954
IPPU	2,224	4,804	4,280	5,085	5,977	6,080	6,611
Agriculture	11,835	13,709	12,921	12,597	11,881	11,724	11,789
LULUCF	(60,153)	(73,364)	(76,966)	(77,562)	(74,698)	(11,710)	(63,992)
Waste	1,519	2,743	4,134	5,095	6,107	6,516	6,958
Balance	(10,943)	(363)	10,976	25,117	35,458	99,505	48,321
Total	49,210	73,001	87,942	102,678	110,156	111,216	112,313

FIGURE 1B - Chile's NGHGI: balance of GHG emissions (MtCO₂e) by sector, 1990-2018



8. 2020 NGHGI: National inventory of GHG and other climate pollutants 1990-2018. December 2020.

Calculation Methodology and Governance Process

KPI 1 will be measured through the NGHGI, administered by the Climate Change Office of the MoE. The NGHGI covers the entire national territory and includes emissions and removals of carbon dioxide and emissions of methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

The reporting and verification framework is based on the agreements and action plans set forth in the UNFCCC and is grounded in the objective of the Paris Agreement, to have reliable, transparent and comprehensive information on GHG emissions, climate actions and support⁹.

For developing countries (i.e. Non-Annex 1 Parties) the requirement is to produce a biennial update report (BUR) on national emissions inventory.

The process of reporting and verification of the national inventory is summarized in terms of both an internal and external review:

- The internal review aims to document a comparison between the calculations elaborated by the internal teams, and those elaborated by external organizations. Each sectorial team applies their own source of comparison, using the IPCC 2006 Guidelines.
- The external review is based on the international consultation and analysis process of the UNFCCC, which includes two steps: (i) a technical analysis by a team of independent experts¹⁰ and (ii) a facilitative sharing of views in the form of a workshop. The workshop consists of a presentation followed by oral questions and answers by the parties to facil-

itate transparency and learning opportunities among them.

To produce the inventory calculation there are different technical sectorial teams that gather the information, calculate the GHG emissions of each sector, and fine-tune the sectorial inventory. That data is then reviewed and compiled by a Technical Coordination Team and approved in its final version by the sectorial teams. Additional information on the governance that manages this information can be located in Chile's updated NDC.

Since 2015, a guarantee and quality control system has been implemented, aligned with best practices of the IPCC to assure the quality of the process. Pursuant to such system, each sectorial technical team is responsible for applying all the quality control procedures in their calculations. Each of these procedures are listed and checked as implemented (or not), and they can add comments to facilitate the procedure to other professionals. In addition, each inventory is subject to quality control by professionals directly involved in its elaboration, as well as to an external review of the inventories provided by independent qualified experts, which is the mechanism defined by the UNFCCC and the Paris Agreement through its reinforced transparency framework.

For the external review process, there will be a technical analysis, which will begin once the BUR is submitted. The product of the review process is a summary report that will be published on the UNFCCC website¹¹.

Rationale for KPI 2

Transitioning to a high-income economy requires the development of a reliable, inclusive, competitive, and sustainable energy sector. Given the growing demand for energy to meet the needs

9. More information visit the following [website](#).

10. For example, the 2018 National Inventory of Greenhouse Gases was reviewed by an external technical expert provided by the Latin American Network of Greenhouse Gases National Inventories; Red Latinoamericana de Inventarios Nacionales de Gases de Efecto Invernadero – RedINGEI.

11. The documents of the latest review cycle of Chile are available on the following [website](#).

of society and the economy, achieving Chile's climate change objectives requires a transformation of the Chilean energy matrix¹².

As one of the 60 targets outlined in Chile's newly drafted PEN 2050, Chile aims to generate 100% of its energy emissions-free by 2050. The achievement of this goal is measured by means of ambitious targets focused on increasing renewable energy production, particularly from non-conventional sources, and reducing reliance on coal and other fossil fuels.

Given the instrumental role that the transition toward clean energy sources plays in Chile's strategy to achieve emissions neutrality, Chile has decided to incorporate the 2028 and 2032 NCRE generation target as a principal KPI in this SLB Framework.



KPI 2: Non-Conventional Renewable Energy, as a percentage of total generation in the National Electric System

KPI	Non-Conventional Renewable Energy (NCRE) Generation, as the percentage generated in the National Electric System, measured in megawatt hours (MWh).				
Reference year	27% NCRE in 2021				
2018-2021 Performance		2018	2019	2020	2021
	% NCRE	17%	19%	22%	27%
SDG Alignment	SDG 7 Affordable and Clean Energy – Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.				
Methodology	The KPI, which covers Chile's entire energy grid, will be measured through the Gross Monthly Generation SEN (MWh), Open Energy database, published by the National Energy Commission (CNE) with data from the National Electricity Coordinator, a technical body of public law. This platform, among other duties, records and saves the data related to generation, transport and distribution of the National Electric System (SEN) and is the official source of information for Chile.				
	For these purposes, NCRE refers to energy coming from the following sources: wind, small run-of-river hydro (plants up to 20 MW of installed capacity), biomass, biogas, geothermal, solar and ocean energy, and green hydrogen.				

12. The energy sector alone accounted for 77% of Chile's total emissions in 2018.

National Context of Electricity Consumption in Chile

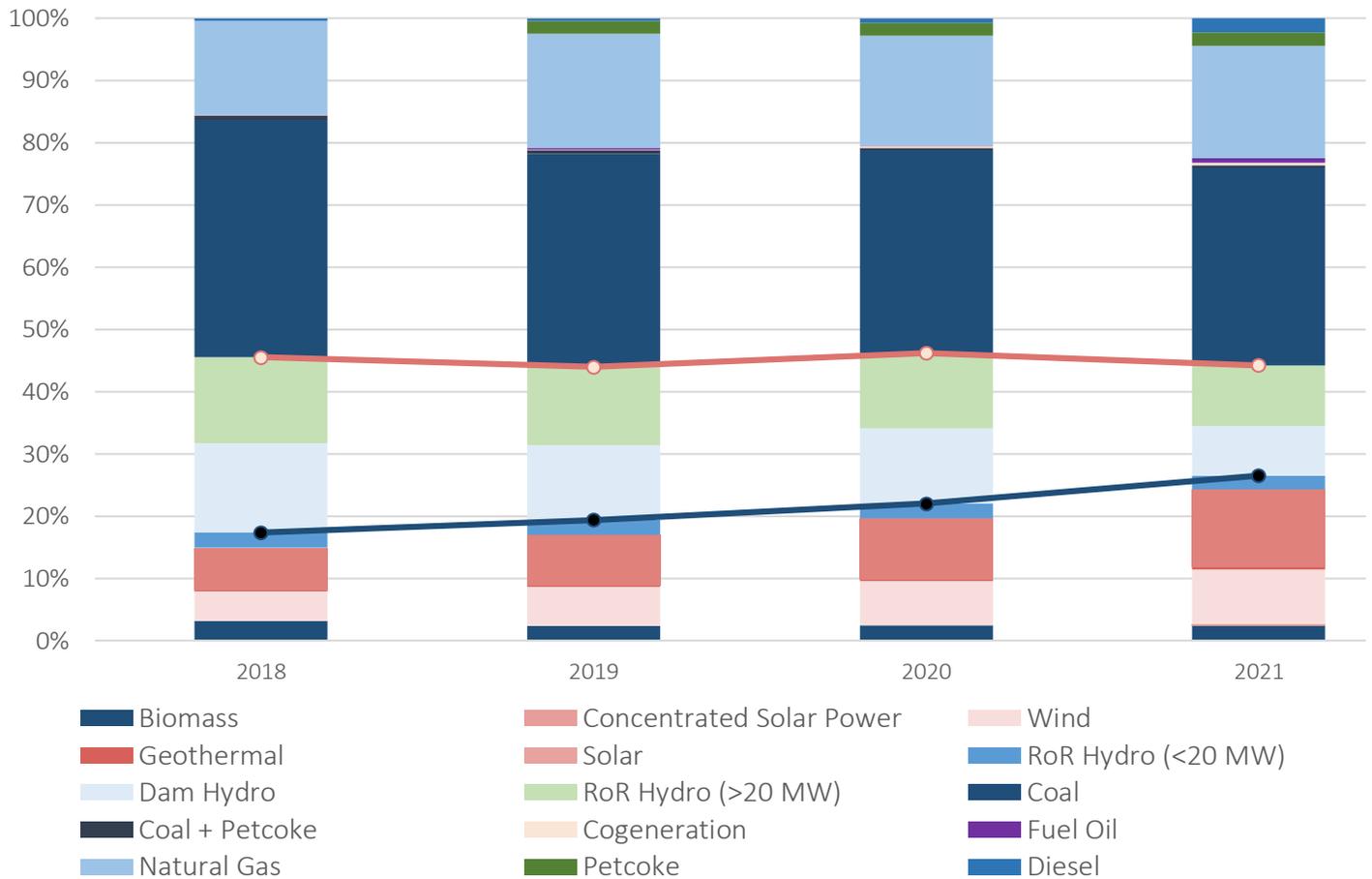
Until 2017, Chile's electrical system comprised two interconnected systems, which operated independently of each other: SIC (Sistema Interconectado Central de Chile) and SING (Sistema Interconectado del Norte Grande de Chile). In 2018, both networks merged, creating the SEN. In 2021, NCRE sources in Chile included biomass,

concentrated solar power, wind, geothermal, solar photovoltaic (PV), and small-scale hydropower. For the avoidance of doubt, large-scale hydropower (with installed capacity above 20 MW) is excluded from the definition of NCRE.

The following table represents the proportion of electricity production in SEN for both NCRE sources, and renewable sources as a whole:

	2018	2019	2020	2021	2028 (e)	2032 (e)
% NCRE	17%	19%	22%	27%	50%	60%

FIGURE 2 - Diversification of Chilean Energy Matrix by generation technology, 2018-2021



Source: Open Energy database, published by the CNE with data from the National Electricity Coordinator.

Calculation Methodology and Governance Process

The Gross Monthly Generation SEN database contains information by plant, identifying the power plant, the technology and the monthly generation measured in MWh. Therefore, this KPI will be calculated annually using the following formula that identifies the energy coming from NCRE:

$$\text{KPI 2} = \frac{\sum \text{NCRE gross generation}}{\sum \text{energy gross generation}} \times 100$$

- The internal information review process includes internal actors of the electricity market, i.e. the National Electric Coordinator, the generating companies and an external panel of experts. Each generating company reviews the information on electricity generation on a monthly basis due to the fact that the Coordinator prepares the economic balances of energy where the remuneration of each company is calculated.
- If there are divergences between the com-

panies and the Coordinator, there is an independent body known as the Panel of Experts, which resolves any conflicts that may arise between actors in the sector. The Panel of Experts of the General Electricity Services Law is an autonomous collegiate body created in 2004 by Law No. 19,940, with strict and regulated jurisdiction. Its function is to resolve, through opinions with binding effect, discrepancies and conflicts that, pursuant to law, arise due to the application of the electricity and gas services legislation and that the electricity, gas services and other authorized companies submit to the panel. To assure transparency, the Panel of Experts is made up of seven professionals, five of whom must be engineers or economists, and two must be lawyers, in each case, with extensive professional experience. These professionals are appointed by the Court for the Defense of Free Competition, through a public competition process. Finally, their appointment is made by resolution of the Ministry of Energy.¹³



13. For more information, visit the web page of Panel de Expertos. <https://www.panelexpertos.cl/>

II. Calibration of Sustainability Performance Targets (SPTs)

The selected SPTs are coherent with the KPIs and Chile’s sustainability goals, established under the LTCS. The SPTs are verifiable according to comparable, ambitious and realistic methodologies.

SPT 1: Achieve GHG emissions of 95 MtCO_{2e} by 2030; achieve a maximum of 1,100 MtCO_{2e} between 2020 and 2030

The mitigation target is formulated in accordance with scientific recommendations, the mitigation requirement established in the Paris Agreement’s objectives, and Chile’s updated NDC.

Chile’s SPT 1 includes the following two events (SPT 1 Events), which Chile must achieve by the relevant observation date:



FIGURE 3 - SPT 1

SPT 1 Event	SPT 1 Event Observation Date
a) Achieve GHG emissions of 95 MtCO _{2e} by 2030	December 31, 2030
b) Achieve a maximum of 1,100 MtCO _{2e} between 2020 and 2030	December 31, 2030

Pathway to achieve the GHG emissions target

In its updated NDC, Chile presents its 2030 target as a medium-term goal towards achieving its long-term goal to GHG-neutrality by 2050. Additionally, the updated NDC also discusses the planning processes and its strategies including the “Long-term Climate Strategy 2050” to achieve its goals. Chile’s long-term vision is based on its work in two equally relevant lines of action:

- i) Reaching a sustained decrease in GHG emissions; and
- ii) Increasing and maintaining natural carbon sinks.

The pathway to the 2050 scenarios was based on modeling of the NGHGI’s five sectors (Energy, IPPU, Agriculture, LULUCF and Waste), which in turn has been prepared according to the 2006 IPCC Guidelines.

The main contributor, the Energy sector, was forecasted using the tools at the Ministry of Energy to evaluate energy demand and supply scenarios, which are the main tools used by the Ministry of Energy to elaborate the PELP scenarios¹⁴. In general, the modeling involves two key steps:

14. Process established in the General Law of Electric Services, as stipulated in the respective Regulation (SD 134 from January 5, 2017).



- i) Projecting the national GHG emissions with current policies and actions (until May 2019); and
- ii) A neutrality scenario that includes measures and considerations that might potentially lead Chile to reach GHG neutrality by 2050.

Specific initiatives that will support Chile’s achievement of the updated NDC targets are:

- i. Implementation of Chile’s coal phase-out plan;
- ii. Implementation of hydrogen and electromobility strategy;
- iii. Fiscal policies such as taxes on sale of vehicles based on emissions data; and
- iv. The Energy Efficiency Law to promote energy efficiency across sectors

SPT 2: Achieve 50% of electric generation derived from NCRE sources by 2028; achieve 60% of electric generation derived from NCRE sources by 2032

In an analysis included in the Long-Term Energy Plan 2018-2022¹⁵, the Ministry of Energy considered different investment and demand scenarios to assess compatibility with the more ambitious 30% carbon reduction goals. This exercise deter-

mined that the national carbon targets, as well as the investment pipeline, were achievable with a participation of 40% (or higher) of NCRE in the total generation. Since conducting the analysis, Chile has advanced faster than anticipated – for example, Chile achieved its 2025 target of 20% NCRE (Law No. 20,698) five years ahead of schedule.

Given how rapidly Chile’s energy policies have evolved in recent years, and in light of NCRE forecasts included in the [Preliminary Report – Long-Term Energy Plan 2023-2027¹⁶](#), 2028 and 2032 targets of 50% and 60% NCRE, respectively, have been determined to be appropriately ambitious targets for this SLB Framework. These targets are also aligned with the [IEA’s Roadmap to Net Zero 2050](#), which outlines a 2030 target of 61% of the global electricity mix being from renewable sources. Chile’s targets and associated action plan surpass the IEA’s projections, given that Chile’s targets exclude large-scale hydropower and imply a 20% fossil fuel share (substantially exceeding the IEA’s projections of 39% by 2030).

Chile’s SPT 2 includes the following two events (SPT 2 Events), which Chile must achieve by the related observation date:

FIGURE 4 - SPT 2

SPT 2 Event	SPT 2 Event Observation Date
a) Achieve 50% electric generation derived from NCRE sources by 2028	a) December 31, 2028
b) Achieve 60% electric generation derived from NCRE sources by 2032	b) December 31, 2032

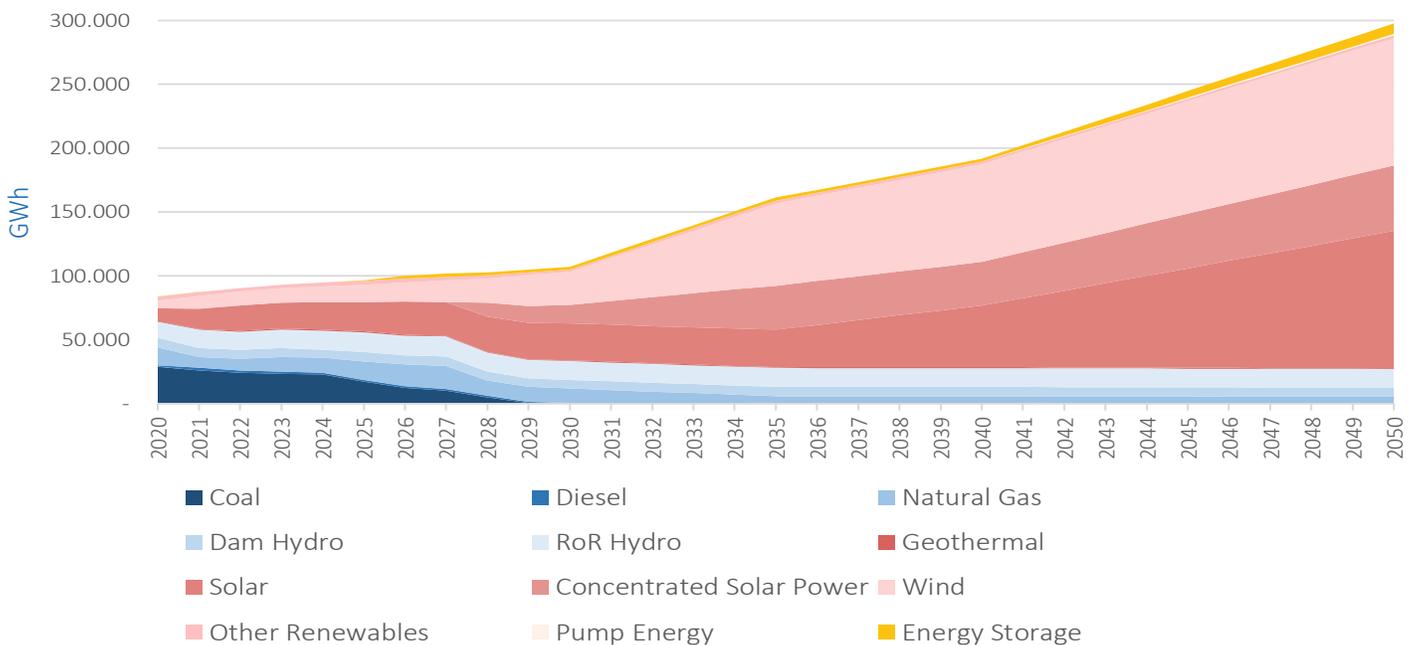
15. PELP, Section 5.3.4.
 16. PELP, Section 5.10.6.

Pathway to achieve electric generation target

In recent years, Chile has achieved substantial growth in NCRE, which has opened a new chapter in Chile's energy history. Generation technologies from NCRE, such as solar photovoltaic and wind power, have become more competitive than conventional generation technologies, such as coal, natural gas and hydroelectric plants. This is primarily due to significant decreases in investment costs, modularity of projects and shorter development times.

For this reason, in Chile and elsewhere in the world, generation projects from solar and wind energy have proliferated, without needing state subsidies¹⁷. As of 2005, there were 286 MW of installed NCRE capacity, while by September 2015, this figure had grown significantly, totaling 2,135¹⁸ MW. This growth has continued in the last five years. The proportion of renewable energy derived from non-conventional sources grew from 8% in 2015 to 20% in 2020, achieving Chile's 2025 NCRE goal five years ahead of schedule.¹⁹

FIGURE 5: Expected electricity generation by type of energy, 2020-2050



Source: Ministry of Energy

17. In 2021, for example, the amount of solar and wind power plants inaugurated in Chile is estimated to be by the same magnitude as what has been built throughout our history, since the first wind power plant was built, in 2007, until 2020. That is, we doubled our NCRE capacity in just one year. [Renewable Energy Bill](#) presented to Congress in December 2021.

18. [Chile National Energy Policy 2050](#) (2015 version), p.72.

19. [Chile National Energy Policy 2050](#) (2021 version), p.22.

The SEN is an electricity market based on competition among private actors. To promote the growth of NCRE generation and in line with its 2050 commitment to generate all energy without emissions, Chile has employed a number of policies, regulations and fiscal policy levers. Examples of these efforts include the acceleration of electrical transmission projects, modification of energy auctions, and long-term policy and planning.²⁰

Factors that support the achievement of SPT 2:

- Strong commitment through Chile's government and public policy and initiatives to increase the proportion of electric generation derived from NCRE.
- Support from the technical teams at multinational institutions.
- Increased availability of renewable energy sources.
- Investments in increasing renewable energy infrastructure.
- Investments to increase renewable energy supply and generation, such as green hydrogen, electromobility, and solar/wind power plants.
- The phase-out of conventional fuel sources, such as coal.

III. Characteristics of the Sustainability-Linked Bonds (SLBs)

The SLBs will provide for financial implications, such as, but not limited to a coupon step-up or premium payment, depending on whether Chile meets or fails to meet the applicable SPT Event or SPT Events or if it fails to comply with certain reporting and verification obligations. Any such financial implications will be commensurate and meaningful relative to the original SLB's financial characteristics.

As set forth in the relevant documentation of the specific transaction:

- Each SLB may have one or more SPT Events, each with an associated event observation date and financial implication; and
- If any KPI has two or more different event observation dates, the financial implications may be cumulative.

The amount, timing, and mechanism for payment of the financial implications will be set forth in the relevant legal documentation for each specific SLB issuance. In addition, the documentation of the specific SLB may will set forth the applicable KPI definition, calculation methodologies, applicable SPT Events and trigger events, any fallback mechanisms if such SPT Events cannot be calculated or observed satisfactorily, if applicable, and language to take into consideration potential exceptional events or extreme events, including changes in the regulatory environment that could materially impact the calculation of the KPI or the determination of the applicable SPT Events.

Chile intends to update this SLB Framework to reflect any relevant future Chilean laws or decrees that adopt more ambitious SPT Events for specific KPIs at relevant event observation dates. In addition, the relevant documentation for a specific SLB issuance may provide, subject to certain conditions, for an automatic adjustment to any more ambitious SPT Event included in a future SLB issuance that is based on the same KPI and same event observation date. Such adjustments are intended to:

- Update this SLB Framework according to Chile's increasing ambition over time, and allow Chile to adapt to new circumstances;
- Avoid the coexistence of SLBs with different SPT Events at the same event observation date for the same KPI; and
- Facilitate the reporting exercise, by avoiding the need to validate the KPI against multiple SPT Events.

²⁰. More information on the [Ministry of Energy webpage](#).

IV. Reporting

Chile will publish a report (SLB Report) annually containing a qualitative or quantitative explanation of the main factors behind the evolution of the KPIs, as well as (when available) the progress of the KPIs established in this SLB Framework. The SLB Report will be published no later than June 30 of each year, according to the following considerations:

- Information regarding KPI 1 will be produced biennially, because the current NDC protocol limits Chile's ability to publish results annually due to the complexity of the data collection and verification. This is similar to other countries reporting NDC progress and not unique to Chile. Consequently, the SLB Report will contain the most updated official data.
- Information regarding KPI 2 will be produced annually. Thus, each SLB Report will contain information for the closing of the prior year.
- Additionally, the SLB Report may include other information, such as any relevant information enabling investors to monitor the progress of the KPI or illustration of the positive sustainability impacts of the performance improvement.

V. Review and Verification

Chile's SLB Framework has been reviewed by Sustainalytics, which has provided a second-party opinion on the alignment of the SLB Framework and the associated documentation with the ICMA Sustainability-Linked Bond Principles, including an assessment of the relevance, robustness and reliability of selected KPIs, the rationale and level of ambition of the proposed SPTs, the relevance and reliability of selected benchmarks and baselines, and the credibility of the strategy outlined to achieve them, based on scenario analysis, where relevant.

Performance of KPI 1 will be reviewed and verified as part of the NDC process performed by the team of technical experts of the United Nations Framework Convention on Climate Change

(UNFCCC), in the International Consultation and Analysis process. A summary report will be available on the UNFCCC website and made available in the SLB section of Chile's Public Debt Office's website.

For KPI2, the data will be reviewed and approved by Chile's National Electrical Coordinator, a technical and independent body, which reports on Chile's electricity generation sources. Such data will be then collected and reported by Chile in the SLB section of Chile's Public Debt Office's website.



Definitions:

- **BUR:** Biennial Update Report – the report submitted by Chile every two years as part of the UNFCCC process with an updated inventory of GHG emissions
- **CO₂e:** carbon dioxide equivalent, which is a way of expressing different greenhouse gases (in this case carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆)) as a common unit according to their global warming potential
- **GHG Emissions:** total carbon dioxide equivalent emissions measured in MtCO₂e
- **ICMA:** International Capital Market Association
- **IPCC:** Intergovernmental Panel on Climate Change
- **IPPU:** Industrial Processes and Product Use
- **LTCS:** Long-Term Climate Strategy (LTCS)
- **LULUCF:** The Land Use, Land Use Change and Forestry
- **MoE:** Ministry of Environment
- **MoF:** Ministry of Finance
- **Mt:** Metric tons
- **NCRE:** Non-conventional renewable energy. In this SLB Framework, NCRE is defined as that coming from the following sources: wind, small run-of-river hydro (plants up to 20 MW of installed capacity), biomass, biogas, geothermal, solar and ocean energy, and green hydrogen
- **NDC:** Nationally Determined Contribution
- **NGHGI:** National Greenhouse Gas Inventory
- **PEN:** National Energy Policy (Política Energética Nacional)
- **PV:** Photovoltaic
- **RE:** Renewable energy
- **SEN:** Chile's National Electric System (Sistema Eléctrico Nacional de Chile)
- **SIC:** Chile's Central Interconnected System (Sistema Interconectado Central de Chile)
- **SING:** Interconnected System of Northern Chile (Sistema Interconectado del Norte Grande de Chile)
- **UNFCCC:** United Nations Framework Convention on Climate Change
- **TTE:** Team of Technical Experts from the UNFCCC

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- UNFCCC - [What is transparency and reporting?](#)



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