Second-Party Opinion Government of Chile Sustainability-Linked Bond Framework



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Issuer Location	Santiago, Chile

Evaluation Summary

Sustainalytics is of the opinion that the Government of Chile Sustainability-Linked Bond Framework aligns with the Sustainability-Linked Bond Principles 2020. This assessment is based on the following:

- Selection of Key Performance Indicators (KPIs) Chile's Sustainability-Linked Bond Framework includes two KPIs: Absolute GHG Emissions (KPI 1) and Share of Non-Conventional Renewable Energy Generation in the National Electric System (KPI2) (see Table 1). Sustainalytics considers KPI 1 to be very strong and KPI 2 to be strong.
- Calibration of Sustainability Performance Targets (SPTs) Sustainalytics considers the SPTs to be aligned with Chile's sustainability strategy. Sustainalytics considers SPT 1 to be ambitious based on its improvement over past performance and its alignment with a slightly below 2°C scenario, and SPT 2 to be highly ambitious based on it being consistent with efforts to limit global temperature increases to below 1.5°C.
- Bond Characteristics Chile will link the bond's financial characteristics to the achievement of the SPTs, namely a premium paid in case an SPT, including an intermediate SPT, is not met at the target observation date. In the event that more than one SPT is not met, the premium paid will be cumulative.
- Reporting Chile commits to report its performance on the KPIs on an annual basis via an SLB Report. Information regarding KPI 1 will be produced biennially,¹ consistent with the UNFCCC's requirements. While the Sustainability-Linked Bond Principles state that up-to-date information of the KPIs should be reported on an annual basis, Sustainalytics recognizes that Chile follows the guidance set by the UNFCCC for developing economies, and therefore finds it to be in alignment with the requirements of the SLBP.
- **Verification** Chile commits to have external reasonable assurance conducted on its KPI performance at the communicated SPT deadline, which is aligned with market expectations.

Overview of KPIs and SPTs

КРІ	Baseline	SPT	Strength of the KPI	Ambitiousness of SPT
Absolute GHG Emissions (MtCO2e)	112.33 (2018)	SPT 1a: Achieve annual GHG emissions of 95 MtCO ₂ e by 2030 SPT 1b: A maximum GHG budget of 1,100 MtCO ₂ e between 2020 and 2030	Very Strong	Ambitious
Share of Non-Conventional Renewable Energy Generation in the National Electric System	27% (2021)	SPT 2a: Achieve 50% electricity generation derived from non-conventional renewable sources by 2028 SPT 2b: Achieve 60% electricity generation derived from non-conventional renewable sources by 2032	Strong	Highly Ambitious

¹ Chile follows the UNFCCC's Biennial Update Report guidelines for Non-Annex I Parties, which requires biennal update reports of national GHG inventories. For more information, please visit <u>https://unfccc.int/national-reports-from-non-annex-i-parties</u>.

The SPTs contribute to the following SDGs:





Table of Contents

Scope of Work and Limitations	3
Introduction	4
Sustainalytics' Opinion	5
Section 1: Sustainalytics' Opinion on the Alignment of the Governement of Chile Sustainability-Linked Bond Framework with the Sustainability-Linked Bond Principles. Selection of Key Performance Indicators (KPIs)	5
Calibration of Sustainability Performance Targets (SPTs)	7
Bond Characteristics	.10
Reporting	.10
Verification	.10
Section 2: Assessment of the Chile Government's Sustainability Strategy	11
Section 3: Impact of the SPTs chosen	14
Conclusion	15
Appendix 1	16



Scope of Work and Limitations

The Government of Chile has engaged Sustainalytics to review the Government of Chile Sustainability-Linked Bond Framework and provide an opinion on the alignment of the linked instruments with the Sustainability-Linked Bond Principles (SLBP).²

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent³ opinion on the alignment of the reviewed Framework with the Sustainability-Linked Bond Principles 2020, as administered by ICMA.

As part of this engagement, Sustainalytics exchanges information with various members of the Government of Chile's Public Debt Office of the Ministry of Finance to understand the country's climate goals and SPTs, as well as reporting and verification processes of aspects of the Framework. The Government of Chile's representatives have confirmed that:

- (1) They understand it is the sole responsibility of issuer to ensure that the information provided is complete, accurate or up to date;
- (2) They have provided Sustainalytics with all relevant information; and
- (3) Any provided material information has been duly disclosed in a timely manner.

Sustainalytics also reviewed relevant public documents and non-public information. This document contains Sustainalytics' opinion on the linked instruments and should be read in conjunction with the Framework. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Chile. Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated SPTs of KPIs but does not measure the KPIs' performance. The measurement and reporting of the KPIs is the responsibility of the issuer. No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Chile has made available to Sustainalytics for the purpose of this Second-Party Opinion.

The Second-Party Opinion is valid for issuances aligned with the respective Framework for which the Second-Party Opinion was written and aligned with the methodology to calculate the KPI performance outlined in the Second-Party Opinion up to 24 months or until one of the following occurs:

- (1) A material change to the external benchmarks⁴ against which targets were set;
- (2) A material action by the Government of Chile which has a bearing on the achievement of the SPTs or the materiality of the KPI.

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² The Sustainability Linked Bond Principles (SLBP) were launched by ICMA in June 2020. They are administered by the ICMA and are available at: <u>https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-PrinciplesJune-2020-100620.pdf</u>.

³When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency. ⁴Benchmarks refers to science based benchmarks.



Introduction

The Republic of Chile is located on the west coast of South America, bordered by Argentina and Bolivia to the east and Peru to the north. Chile has an estimated population of over 18.3 million as of 2020, with over 87.8% of the population living in urban areas. The greater metropolitan area of Santiago, the capital of Chile and its largest city, has an estimated population of 6.8 million people.⁵

The Government of Chile intends to issue sustainability-linked bonds whose coupon rate is tied to the achievement of SPTs for two KPIs: (i) Absolute Greenhouse Gas Emissions (MtCO₂e), and (ii) Share of Non-Conventional Renewable Energy Generation in the National Electric System.

The Government of Chile has engaged Sustainalytics to review the sustainability-linked instruments and provide an opinion on the alignment of the Government of Chile Sustainability-Linked Bond Framework with the Sustainability-Linked Bond Principles 2020 (SLBP).

The KPIs and SPTs used by Chile are defined in Tables 1 and 2 below.

Table 1: KPI Definitions

КРІ	Definition
Absolute GHG Emissions (MtCO ₂ e)	The KPI measures the absolute GHG emissions emitted in Chile, quantified using IPCC Guidelines for national greenhouse gas inventories. ⁶ Emission sources include those from Chile's energy, industrial processes and product use, agriculture, and waste sectors. Quantified emissions consist of CO ₂ , methane, NO _x , hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. The KPI excludes emissions from land use, land use change and forestry.
Share of Non-Conventional Renewable Energy Generation in the National Electric System	The KPI measures electricity generated from non-conventional renewable energy as a percentage of the total electricity generated in Chile's National Electric System. Non-conventional renewable energy is defined by the Government of Chile under Law 20.257 (2008) as coming from sources that include geothermal, wind, solar, tidal and small hydroelectric plants (<20 MW). ⁷

Table 2: SPTs and Past Performance

KPI	2016	2017	2018	2019	2020	2021	2028	2030	2032
Absolute GHG Emissions (MtCO ₂ e) ⁸	110.2	111.2	(baseline) 112.31	-	-	-	n.a.	95.00	n.a.
Share of Non-Conventional Renewable Energy Generation in the National Electric System	-	-	17%	19%	22%	(baseline) 27%	50%	n.a.	60%

⁵ US Central Intelligence Agency, The World Factbook, "Chile", at: <u>https://www.cia.gov/the-world-factbook/countries/chile/#people-and-society</u> ⁶ IPCC, "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories", at: <u>https://www.ipcc.ch/report/2019-</u>

refinement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/

⁷ IEA, "Non-conventional renewable energy law (Law 20.257)", at: <u>https://www.iea.org/policies/4853-non-conventional-renewable-energy-law-law-20257</u>

⁸ Chile submitted to the UNFCCC its fourth Biennial Update Report in January 2021. The report cotains the lastest available data on Chile's GHG emissions covering the perdio 2014 – 2018.



Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Alignment of Government of Chile Sustainability-Linked Bond Framework with the Sustainability-Linked Bond Principles

Sustainalytics is of the opinion that the Government of Chile Sustainability-Linked Bond Framework aligns with the five core components of the Sustainability-Linked Bond Principles 2020.



Selection of Key Performance Indicators (KPIs)

In its assessment of materiality and relevance, Sustainalytics considers: i) whether an indicator speaks to a material impact of the country on environmental or social issues, and ii) to what portion of the impact the KPI is applicable.

Sustainalytics considers KPI 1 – Absolute GHG Emissions (MtCO₂e), and KPI 2 – Share of Non-Conventional Renewable Energy Generation in the National Electric System, to be material and relevant given the following:

- To limit global warming to 1.5°C above pre-industrial levels in accordance with the commitments of the Paris Climate Agreement, global CO₂ emissions need to reach net zero by approximately 2050. Accordingly, the UN Sustainable Development Goals identify the integration of climate change measures into national policies, strategies and planning as a target for achieving SDG 13: Take urgent action to combat climate change and its impacts.⁹ In alignment with SDG 13 and this target, Chile has committed to mitigating climate change through both national and international initiatives.¹⁰ Climate change is a material issue for Chile due to the country's high vulnerability to physical climate risks such as higher temperatures and heat waves, decreased precipitation and droughts, forest fires, storms and flooding, decreased flows and receding glaciers, rising sea levels and loss of biodiversity.^{11,12} In this context, Chile has deployed a series of actions to address climate change, including its Nationally Determined Contribution (NDC) and the promotion of non-conventional renewable energy (NCRE) sources.^{13,14}
- The role that renewable energy development plays in a country's national GHG emissions reduction goals is
 well established. As of 2016, electricity and heat production accounted for 42% of all global emissions, which
 was nearly double that of the next largest emitting sector.¹⁵ The IEA's Net Zero Emissions by 2050 Scenario
 (NZE) identifies the electricity sector's decarbonization targets as the fastest and largest of any sector,
 indicating significant opportunity for renewable energy expansion in advanced and emerging economies.¹⁶

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf

¹² World Bank Group, "Climate Risk Profile – Chile", (2021), at: <u>https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15916-WB_Chile%20country%20Profile-WEB%20%281%29.pdf</u>

¹⁵ Our World in Data, "Emissions by Sector", at: <u>https://ourworldindata.org/emissions-by-sector</u>

⁹ UN Department of Economic and Social Affairs, Sustainable Development, "13 – Take urgent action to combat climate change and its impacts", at: <u>https://sdgs.un.org/goals/goal13</u>

¹⁰ The Government of Chile Sustainability-Linked Bond Framework is available at: <u>https://www.hacienda.cl/english/work-areas/international-finance/public-debt-office/sustainable-bonds</u>.

¹¹ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

¹³ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf ¹⁴ Government of Chile, "Chile's Nationally Determined Contribution – Update 2020", at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile%27s_NDC_2020_english.pdf

¹⁶ IEA, "Net Zero by 2050 A Roadmap for the Global Energy Sector", p. 54, at: <u>https://iea.blob.core.windows.net/assets/4719e321-</u> 6d3d-41a2bd6b-461ad2f850a8/NetZeroby2050-ARoadmapfortheGlobalEnergySector.pdf



In Chile specifically, making the energy sector more reliant on renewable energy is an essential part of the country's climate adaptation. The focus of KPI 2 on NCRE is particularly relevant as close to 50% of the country's energy comes from hydroelectric sources, which are uniquely vulnerable to climate impacts in Chile.¹⁷ Increased demand for Chile's water resources as well as changing water availability and hydrological changes due to climate change are expected to reduce the country's hydroelectric generation capacity by 11% by 2050.¹⁸ Reduced hydroelectric generation capacity during times of drought has historically been addressed through increased fossil fuel use, which is likely to increase as the above described factors accelerate.¹⁹ Comprehensive national action to support Chile's energy sector transition towards stronger climate resilience and reduced emissions intensity is expected to contribute significantly to addressing Chile's climate-related challenges and helping the country achieve its national commitments.

In terms of applicability, Sustainalytics notes that KPI 1 – Absolute GHG Emissions (MtCO₂e), addresses the full scope of emissions originating in Chile. For KPI 2 – Share of Non-Conventional Renewable Energy Generation in the National Electric System, Sustainalytics notes that electricity generation accounts for over 39% of Chile's total GHG emissions.²⁰ Further, the expansion of non-conventional renewable energy is also expected to at least partially displace fossil fuels as an energy source. In this context, the KPIs are considered to be highly applicable to Chile's emissions reduction goals.

Overall, Sustainalytics considers the KPIs to be material to Chile's climate and energy targets, as well as being directly applicable to its own physical climate risk exposure.

KPI Characteristics

Sustainalytics in its assessment of the KPI characteristics considers: i) whether a clear and consistent methodology is used, ii) whether the issuer follows an externally recognized definition, iii) whether the KPIs are a direct measure of the performance of the issuer on the material environmental or social issue, and iv) if applicable, whether the methodology can be benchmarked to an external contextual benchmark.²¹

KPI 1 – Absolute GHG Emissions (MtCO2e)

Sustainalytics considers Chile's definition and methodology to calculate KPI 1 performance to be clear and consistent with market practice given that it follows IPCC guidelines for national GHG inventories, which supports its ability to be benchmarked against external carbon trajectories. The KPI is also viewed as a direct measure of performance in that it addresses all of Chile's GHG emissions.

KPI 2 - Share of Non-Conventional Renewable Energy Generation in the National Electric System (%)

Sustainalytics considers Chile's definition and methodology²² for calculating KPI 2 performance to be clear and consistent based on its replicability. The methodology uses data from Chile's unified National Electric System (SEN) which allows for distinctions between conventional and NCRE sources. Electricity generation calculations are made by each generating company and consistency is ensured via monthly data reviews by Chile's National Electrical Coordinator (CEN). Sustainalytics considers KPI 2 to be indirectly linked to Chile's performance on GHG emissions reduction and views its calculation methodology to support benchmarking against science-based targets, such as the IEA's NZE.

¹⁷ World Bank Group, "Climate Risk Profile – Chile" (2021), at: <u>https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15916-WB_Chile%20country%20Profile-WEB%20%281%29.pdf</u>

¹⁸ Government of Chile, Ministry of Energy, "Energía 2050 Política Energética de Chile", at:

https://www.energia.gob.cl/sites/default/files/energia_2050_-_politica_energetica_de_chile.pdf

¹⁹ World Bank Group, "Climate Risk Profile – Chile" (2021), at: <u>https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15916-WB_Chile%20country%20Profile-WEB%20%281%29.pdf</u>

²⁰ Government of Chile, Ministry of the Environment, "Informe del Inventario Nacional de Chile 2020", at:

https://unfccc.int/sites/default/files/resource/7305681_Chile-BUR4-1-2020_IIN_CL.pdf

²¹ External contextual benchmarks provide guidance on the alignment with ecological system boundaries. This criterion is not applied to social KPIs or impact areas for which such contextual benchmarks are not available.

²² Calculation methodology: KPI 2=(Σ NCRE gross generation)/(Σ gross generation)×100



Overall Assessment

Sustainalytics overall considers KPI 1 – Absolute GHG Emissions (MtCO₂e) to be very strong given its direct relationship to performance and high relevance to the material issue of GHG emissions reduction.

Sustainalytics considers KPI 2 – Share of Non-Conventional Renewable Energy Generation in the National Electric System to be strong based on its material impact on GHG emission reductions in Chile, it being an indirect measure of performance on a highly material issue, and having a clear and consistent methodology.

Absolute Greenhouse Gas Emissions per year (MtCO2e)	Not Aligned	Adequate	Strong	Very strong
Contribution of Non-Conventional Renewable Energy generation in the National Electric System (%)	Not Aligned	Adequate	Strong	Very strong



Calibration of Sustainability Performance Targets (SPTs)

Alignment with Issuer's Sustainability Strategy

Chile has set the following SPTs for its KPIs:

- SPT 1a: Achieve annual GHG emissions of 95 MtCO₂e by 2030, from a 2018 baseline
- SPT 1b: Achieve a maximum of 1,100 MtCO₂e between 2020 and 2030
- SPT 2a: Achieve 50% electric generation derived from non-conventional renewable sources by 2028, from a 2021 baseline
- SPT 2b: Achieve 60% electric generation derived from non-conventional renewable sources by 2032, from a 2021 baseline

Sustainalytics considers the SPTs to be aligned with Chile's sustainability mandate (please refer to Section 2 for an analysis of the credibility of Chile's sustainability strategy).

Chile's NDC under the Paris Climate Agreement enshrines both components of SPT 1: (i) achieve an absolute GHG emissions level of 95 MtCO₂e by 2030, and (ii) do so without exceeding a maximum total of 1,100 MtCO₂e between 2020 and 2030; as international commitments.²³ Supporting this, Chile has developed a Long-Term Climate Strategy (LTCS) which establishes over 400 goals in key sectors leading the country to carbon neutrality by 2050.²⁴ In this context, there is full alignment between the KPI and Chile's climate goals.

Related to SPT 2, Chile's power sector produced 39.6% of all its GHG emissions in 2020, more than any other sector. To address this sector's contribution to climate change the Government of Chile has developed national policies to both reduce emissions and improve the emissions profile of the country's energy mix. In 2021, Chile's National Energy Policy 2050 (PEN) outlined a goal of 100% zero-emission energy by 2050, including achieving 80% renewable energy by 2030.²⁵ NCRE is highlighted as comprising a specific subset of Chile's overall renewable energy goals, as it distinguishes it from energy generated by large hydroelectric projects, which have been a point of controversy in the country in the past.²⁶ Further, reliance on hydroelectric power generation poses an additional risk of unreliable capacity, given the increased prevalence of drought and other hydrological changes in the country as a result of climate change.²⁷

²³ Government of Chile, "Chile's Nationally Determined Contribution – Update 2020", at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile%27s_NDC_2020_english.pdf

²⁴ UNDP, "Chile's Plan of Action for Climate Change", (2017), at: <u>https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impact-and-learning/library/chile-s-plan-of-action-for-climate-change.html</u>

²⁵ Chile National Energy Policy 2050; https://energia.gob.cl/consultas-publicas/anteproyecto-politica-energetica-nacional-actualizada-y-su-eae

²⁶ Natural Resource Defense Council, "The Rise of Chile's River Protectors", at: <u>https://www.nrdc.org/stories/rise-chiles-river-protectors</u>

²⁷ World Bank Group, "Climate Risk Profile – Chile" (2021), at: <u>https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15916-WB_Chile%20country%20Profile-WEB%20%281%29.pdf</u>



To achieve its goals related to the country's energy mix, the Government of Chile aims to increase electricity output from NCRE and has also committed to phasing out coal-generated electricity through the decommissioning of all its coal-power plants by 2040. This policy plan will further increase the share of the country's electricity that comes from renewable sources by reducing the power currently coming from more carbon-intensive sources.²⁸

Strategy to Achieve the SPTs

Chile intends to achieve the SPTs through the following strategy:

- <u>Green Taxes</u> Three GHG emissions taxes have been implemented under Chile's Financial Strategy on Climate Change: (i) on the sale of light vehicles according to their urban emissions performance, specifically NO_x, (ii) on fixed sources of NO_x, particulate matter²⁹ and SO₂ emissions, and (iii) a direct carbon tax on fixed emission sources of USD 5 per ton CO₂.³⁰
- <u>Favourable Conditions for Public-Private NCRE Projects</u> By accelerating electric transmission projects across the country, the Government of Chile has facilitated an increase in the number of private actors participating in energy generation, which has created pathways for more NCRE projects to be developed. Chile's Development Zone program also promotes regional networking of electricity grids, making new NCRE projects more easily connectable with consumer bases.
- <u>Financial Tools</u> The Government of Chile's only commercial bank, BancoEstado, has a series of unique lending instruments designed to promote green financing. Some of these instruments include specialized financing for renewable energy projects, and loans for small and medium sized companies to improve their energy efficiency. Additionally, as a member of the UN Framework Convention on Climate Change (UNFCCC), Chile participates in the Green Climate Fund (GCF).³¹ The GFC is the main operating entity under the financial mechanism of the UNFCCC and serves as the stand-alone multilateral financing entity for the convention, aiming to provide funding for climate change mitigation and adaptation projects.
- <u>National Policy for Decommissioning Coal</u> The Government of Chile has established a plan for decommissioning its coal-power plants that will see 11 of its 28 plants offline by 2024, followed by an additional seven in 2025, representing 65% of its current coal-power generation capacity. Chile aims to have all 28 of its coal plants decommissioned by 2040.³²
- <u>Green Hydrogen National Strategy</u> The Government of Chile has identified green hydrogen as a key player in its decarbonization goals. In 2020, Chile published its Green Hydrogen National Strategy which outlines its ambitions to develop a competitive green hydrogen industry by 2025 and become a global market leader by 2030.³³

Ambitiousness, Baseline and Benchmarks

To determine the ambitiousness of the SPTs, Sustainalytics considers whether the SPTs are in line or go beyond national and international commitments made by the country, and how the SPTs compare with credible climate trajectories or science-based targets.

For SPT 1, Chile has set the baseline at 2018 to align with its commitments under its NDC. For SPT 2, a baseline of 2021 has been set.

SPT 1: Sustainalytics was able to use past performance and credible international climate trajectories as benchmarks to assess the ambitiousness of the SPT.

- ³¹ Green Climate Fund, "Governance", at: <u>https://www.greenclimate.fund/about/governance</u>
- ³² Government of Chile Ministry of Energy, "Estrategia de Transición Justa en el sector Energía", at:

³³ Gobierno de Chile, "Estrategia Nacional de Hidrógeno Verde", (2020), at:

²⁸ Energy Partnership Chile-Germany, "Coal Phase-out in Chile", at: <u>https://www.energypartnership.cl/newsroom/coal-phase-out-in-chile/</u>

²⁹ EPA, "Particulate Matter (PM) Basics", at: <u>https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#:~:text=PM%20stands%20for%20particulate%20matter,seen%20with%20the%20naked%20eye</u>.

³⁰ Government of Chile – Ministry of Finance, "Chile: Financial Strategy on Climate Change" (2019), at: <u>https://cambioclimatico.mma.gob.cl/wp-content/uploads/2020/12/Financial-Strategy-on-Climate-Change-Chile-EN.pdf</u>

https://energia.gob.cl/sites/default/files/documentos/estrategia_transicion_justa_2021.pdf

https://energia.gob.cl/sites/default/files/estrategia_nacional_de_hidrogeno_verde_-_chile.pdf



Sustainalytics considers the SPT to go beyond historical performance on emissions reductions. As part of Chile's GHG emissions reduction plan, emissions will follow an upward trajectory before peaking in 2025, and then decrease to 95 MtCO₂e by 2030. According to Climate Action Tracker (CAT), this trajectory would place Chile in a scenario that is slightly below a 2 degree C warming target.³⁴ Chile's GHG emissions target by 2030 received a "very high" rating from the Climate Change Performance Index 2022 when compared to a well-below 2 degree C benchmark,³⁵ placing Chile as the seventh best performing country assessed. Additionally, Chile's SPT commits the country to limiting its cumulative GHG emissions between 2020 and 2030 to 1,100 MtCO₂eq, which will be a significant contribution towards limiting global warming, as the extent to which global temperature will rise over the coming decades is greatly dependent on cumulative GHG emissions.³⁶ Many emissions reduction scenarios focus primarily on targets for emissions to be met in 2050, while total emissions may grow significantly leading up to that point. Chile's cumulative emissions goal for the decade of 2020-2030 exemplifies a commitment to more immediate progress on the issue and supports its alignment with science-based GHG emission targets.

Based on this context, Sustainalytics considers SPT 1 to be ambitious. Nonetheless, Sustainalytics notes that per CAT's "Fair Share Target" approach³⁷ Chile's climate targets are rated as "insufficient" given that if "all countries were to follow Chile's approach, warming would reach over 2°C and up to 3°C".³⁸

SPT 2: Sustainalytics was able to use the Government of Chile's past performance and alignment with energy sector decarbonization trajectories.

Between 2018 and 2021 Chile improved the contribution of NCRE towards the national electricity mix from 17% to 27%, representing an annual average growth rate of 16.6%. Chile will now look to move the country's electricity mix to 50% NCRE by 2028, and then 60% by 2032. These targets represent an average annual growth of NCRE's share of Chile's electricity mix of 9.2% (from 2022 to 2028) and 4.7% (from 2029 to 2032). While achieving the SPT requires an annual growth below past performance, Sustainalytics considers that the percentage growth achieved in earlier stages can be substantially higher given the low baseline. Thus, Sustainalytics views SPT 2 to be aligned with Chile's past performance.

The IEA's Roadmap to Net Zero 2050 outlines a target of 61% of global electricity sourced from renewable power by 2030. The roadmap's intermediate target for 2030 is consistent with the pathway of limiting the global temperature rise to 1.5 degree C.³⁹ When broken down by projected energy source, the roadmap estimates that 45% of this total will come from non-hydroelectric renewable electricity sources, which, in the absence of a direct comparison, can be used as an approximate equivalent to Chile's NCRE. Chile's targets of 50% NCRE by 2028 and 60% NCRE by 2032 are well above this IEA global target of 45% non-hydroelectric renewable electricity goal of 80% by 2030, show a clear overall trajectory that is significantly above the IEA roadmap 2030 target. In this context, Sustainalytics considers SPT 2 to be highly ambitious based on it being well beyond a threshold that is consistent with a 1.5 degree C scenario.

Overall Assessment

Sustainalytics considers the SPTs to align with Chile's sustainability strategy and commitments, and considers Chile's SPT 1 to be ambitious given its improvement against past performance and its trajectory consistent with science-based targets for GHG emissions for limiting global warming to 2 degrees C.

³⁴ Climate Action Tracker, "Chile", at: <u>https://climateactiontracker.org/countries/chile/</u>

³⁵ CCPI, "Climate Change Performance Index 2022", (2021), at: <u>https://ccpi.org/download/climate-change-performance-index-2022-2/</u>

³⁶ WRI, "Chile's Enhanced Climate Plan Sets an Example for Other Countries", (2020), at: <u>https://www.wri.org/insights/chiles-enhanced-climate-plan-sets-example-other-countries</u>

³⁷ CAT's "Fair Share Target" approach evaluates the level of effort of a government's target or policies against what could be considered a "fair share" contribution to the global effort in reducing greenhouse gas emissions based on (1) historical responsibility for past emissions, (2) the capacity to pay for emissions reductions, (3) potential for reducing emissions, (4) sharing emissions on an equal per capita basis, and (5) the need for sustainable development. For more information please visit: <u>https://climateactiontracker.org/documents/874/CAT_2021-09_RatingMethodology_FullDescriptionNewSystem.pdf</u>

³⁸ Climate Action Tracker, "Chile", at: <u>https://climateactiontracker.org/countries/chile/</u>

³⁹ IEA, "Net Zero by 2050 A Roadmap for the Global Energy Sector", at: <u>https://iea.blob.core.windows.net/assets/4719e321-6d3d-41a2-bd6b-461ad2f850a8/NetZeroby2050-ARoadmapfortheGlobalEnergySector.pdf</u>



Sustainalytics considers Chile's SPT 2 to be highly ambitious given that it is aligned with past performance and is above science-based targets that would lead to a net-zero energy sector by 2050 consistent with a patch way to limiting global temperature rise to 1.5 degree C.

SPT 1a: Achieve Greenhouse Gas emissions of 95 MtCO ₂ e by 2030. SPT 1b: Achieve a maximum of 1,100 MtCO ₂ e between 2020 and 2030.	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 2a: Achieve 50% electricity generation derived from non-conventional renewable sources by 2028. SPT 2b: Achieve 60% electricity generation derived from non-conventional renewable sources by 2032.	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious



Bond and/or Loan Characteristics

Chile has disclosed that failure to achieve the SPTs at the SPT Event dates will result in a premium to be paid to bond tenors applicable to interest periods following the notification date after the SPT Event dates.

Chile has confirmed that if more than one SPT is not met, including any intermediate SPT, the premiums paid will be cumulative. Sustainalytics notes positively the cumulative nature of the financial premium based on failure to achieve more than one SPTs.



Reporting

Chile commits to report its performance on the KPIs on an annual basis via an SLB Report. Information regarding KPI 1 will be produced biennially, consistent with the UNFCCC's requirements.⁴⁰ Information regarding KPI 2 will be produced annually, thus, the SLB report will contain information for the closing of the prior year. Additionally, the SLB Report may include other relevant information enabling investors to monitor the progress of the KPI or the positive sustainability impacts of the performance improvement.

While the Sustainability-Linked Bond Principles state that up-to-date information of the KPIs should be reported on an annual basis, Sustainalytics recognizes that Chile follows the guidance set by the UNFCCC for developing economies, and therefore finds it to be in alignment with the requirements of the SLBP.



Verification

Chile commits to have external reasonable assurance conducted on its KPIs performance at the communicated SPT deadline, which is aligned with market expectations. Progress on KPI 1 will be reviewed and verified as part of the NDC process and a summary verification report will be available on the UNFCC website, and made available on Chile's Public Office website. KPI 2 data is reviewed and approved by the National Electrical Coordinator, a technical and independent body; this data will be then collected and reported by Chile on its Public Office website.

⁴⁰ Chile follows the UNFCCC's reporting guidelines for Non-Annex I Parties, which requires Biennal Update Reports of national GHG inventories. For more information please visit <u>https://unfccc.int/national-reports-from-non-annex-i-parties</u>



Section 2: Assessment of Chile's Sustainability Strategy

Chile's Sustainability Mandate

Since its return to democracy in 1990, Chile has achieved political stability and rapid economic growth, with an average annual GDP growth rate of 13.6% from 2000 to 2019.⁴¹ This has resulted in Chile being classified by the World Bank as a high-income country as of 2022.⁴² Chile's economic growth has significantly reduced poverty from 36% in 2000 to 10.8% in 2020.⁴³

In 2015 Chile adopted the 2030 Agenda for Sustainable Development⁴⁴ and implementation of the 2030 Agenda is a state policy.⁴⁵ Further, Chile has created the National Council for the Implementation of Agenda 2030 as the main body of Chilean governance for the implementation of policies to achieve the SDGs.⁴⁶ In alignment with SDG 13 – Climate Action, Chile has committed to mitigate climate change through both national and international initiatives.⁴⁷ Climate change is a material issue for Chile due to the country's high vulnerability to physical climate risks such as higher temperature, storms, floods, droughts, forest fires, tidal waves, decreased flows and glaciers, and loss of biodiversity.⁴⁸ In this context Chile has deployed a series of actions to address climate change and promote NCRE generation.⁴⁹

In 2017 Chile ratified the Paris Agreement, and in 2020 updated its NDC which set an unconditional goal of reducing absolute GHG emissions (excluding emissions from land use, land-use change and forestry) to 95 MtCO₂e by 2030.⁵⁰ In addition, Chile commits to peak its GHG emissions in 2025 and to limit cumulative GHG emissions to 1,100 MtCO₂e over the period 2020-2030. Also, in its updated NDC, Chile commits to a more ambitious goal of reducing up to 45% of its net GHG emissions from 2016 levels by 2030, conditional on international support. At a national level, Chile has developed the National Action Plan for Climate Change 2017-2022, focused on mitigation, adaptation, means of implementation, and climate change management at regional and community levels.⁵¹ In 2021, Chile issued the LTCS which contains transition and transformation goals in key sectors for the country to achieve carbon neutrality, such as a reduction of emissions from industry and mining by 70% by 2050 and taking 65% of its coal-powered generation offline by 2025.⁵² Chile is also in the process of drafting a Framework Law on Climate Change that would make its 2050 GHG neutrality target legally binding and incorporate the goals articulated in the LTCS.⁵³

In regard to renewable energy, Chile has set forth a goal of achieving 80% of power generation from renewable sources by 2030 and committed to having the country's energy matrix be 100% zero emission by 2050.⁵⁴

Sustainalytics is of the opinion that the Framework is aligned with Chile's climate change and renewable energy policies, commitments and laws. The Framework may assist the country in meeting its carbon neutrality goal by leveraging financing towards low-carbon projects. In view of the above, Sustainalytics considers Chile to be well-positioned to issue the green financing instruments.

areas/international-finance/public-debt-office/sustainable-bonds

⁵³ Climate Action Tracker, "Chile", (2021), at: <u>https://climateactiontracker.org/countries/chile/</u>

⁴¹ The World Bank Group, "Chile", <u>https://data.worldbank.org/country/chile</u>

⁴² The World Bank, "World Bank country and Lending Groups", at: <u>https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups</u>

⁴³ The World Bank, "Poverty headcount ratio at national poverty lines (% of population) – Chile", at: https://data.worldbank.org/indicator/SI.POV.NAHC?locations=CL

⁴⁴ Sustainable Development Goals Knowledge Platform, "Chile", at: <u>https://sustainabledevelopment.un.org/memberstates/chile</u> ⁴⁵ Ibid.

⁴⁶ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf ⁴⁷ Government of Chile Sustainability-Linked Bond Framework is available at the following website: <u>https://www.hacienda.cl/english/work-</u>

⁴⁸ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf ⁴⁹ lbid.

⁵⁰ Government of Chile, "Chile's Nationally Determined Contribution (NDC) Update 2020", (2020), at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile%27s_NDC_2020_english.pdf

⁵¹ UNDP, "Chile's Plan of Action for Climate Change", (2017), at: https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impactand-learning/library/chile-s-plan-of-action-for-climate-change.html

⁵² COP25 Chile, "Chile delivers long-term climate strategy to the UN Executive Secretary of Climate Change", (2021), at:

https://cop25.mma.gob.cl/en/chile-delivers-long-term-climate-strategy-to-the-executive-secretary-of-un-climate-change/

⁵⁴ COP25 Chile, "Chile delivers long-term climate strategy to the UN Executive Secretary of Climate Change", (2021), at:

https://cop25.mma.gob.cl/en/chile-delivers-long-term-climate-strategy-to-the-executive-secretary-of-un-climate-change/



Chile's Environmental and Social Risk Management

- Sustainalytics recognizes that while the Republic of Chile's defined targets are impactful, it is acknowledged that . achieving the SPTs bears environmental and social risks. Sustainalytics highlights the following regulations and policies adopted by Chile to mitigate relevant risks: Chile has been a signatory to the 1992 Convention on Biological Diversity (CBD) since 2003⁵⁵ and the United Nations Convention to Combat Desertification (UNCCD) since 1997⁵⁶. The Chilean Constitution enshrines the right to live in a pollution-free environment and the duty of the State to ensure the preservation of nature.⁵⁷ Chile has established legislations that provide mechanisms to ensure the constitutional right, including environmental licensing and an environmental impact assessment system (SEIA).⁵⁸ According to the law and regulations on SEIA, a project causing significant environmental impact, such as real estate of a certain scale or in certain regions, infrastructure or projects in protected areas, must be assessed through an environmental impact declaration or by an environmental impact study.⁵⁹ Once approved, the project holder must strictly comply with the conditions or requirements stated on the environmental license issued by the Environmental Assessment Commission.⁶⁰ In addition, Chile has adopted the Law on Protection of Urban Wetlands for regulating works or activities that may impact biotic components of wetlands located entirely or partially in the urban areas.61
- Chile has ratified a number of international conventions on human rights, including the International Covenant of Civil • and Political Rights, the International Covenant on Economic, Social and Cultural Rights, and the Convention 169 of the International Labor Organization (ILO) on Indigenous and Tribal Peoples.^{62,63} Chile has adopted a series of laws and regulations that address different aspects of human rights, such as a law that creates an intersectoral protection system for children,⁶⁴ a law on protection of vulnerable individuals and families,⁶⁵ and a law establishing measures against discrimination⁶⁶. In addition, Chile has developed the National Human Rights Plan containing specific commitments⁶⁷ and launched the National Action Plan for Human Rights and Businesses in 2017 for the protection of human rights in relation to the actions of companies.⁶⁸ The Government created the Undersecretariat for Human Rights that is in charge of promoting and protecting human rights in public policy design and development.⁶⁹ However, the Office of the UN High Commissioner for Human Rights reported that Chile's national police and army failed to adhere to international human rights norms and standards during the mass protests and state of emergency in 2019.⁷⁰ Sustainalytics notes that public accountability and institutions can be further strengthened to uphold Chile's human rights commitments and address non-fulfillment of economic and social rights which is a core area of concern of several UN human rights mechanisms⁷¹.
- . Chile has been a member of the ILO since 1919.⁷² The country has signed all the eight fundamental ILO conventions and 53 out of the 178 ILO technical conventions.⁷³ Chile has established a legal system to protect occupational health and

⁶⁹ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

⁷⁰ United Nations Human Rights Office of the High Commissioner, "UN Human Rights Office report on Chile crisis describes multiple police violations and calls for reforms", (2019), at: https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=25423&LangID=E

⁷¹ United Nations Human Rights Office of the High Commissioner, "Report of the Mission to Chile 30 October – 22 November 2019", at: https://www.ohchr.org/Documents/Countries/CL/Report_Chile_2019_EN.pdf

⁵⁵ Convention on Biological Diversity, "country Profiles", at: https://www.cbd.int/countries/?country=cl

⁵⁶ United Nations Convention to Combat Desertification, "Knowledge Hub - Chile", at: https://knowledge.unccd.int/countries/chile

⁵⁷ Chambers and Partners, "Environmental Law 2021 Chile", (2021), at: <u>https://practiceguides.chambers.com/practice-guides/environmental-</u> law-2021/chile

⁵⁸ Carrasco, E. et al., "The Environment and Climate Change Law Review: Chile", LawReviews, (2021), at: https://thelawreviews.co.uk/title/theenvironment-and-climate-change-law-review/chile

⁵⁹ Ibid.

⁶⁰ Ibid. 61 Ibid.

⁶² United Nations Human Rights Treaty Bodies, "UN Treaty Body Database", at:

https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?countryID=35&Lang=EN

⁶³ Government of Chile, "2° Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf

⁶⁴ Ministry of Planning, Law 20.379, (2009), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1006044</u>

⁶⁵ Ministry of Social Development, Law 20.595, (2012), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1040157</u>

⁶⁶ Ministry General Secretariat of Government, Law 20.609, (2012), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1042092</u>

⁶⁷ Government of Chile, "2º Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf

⁶⁸ National Action Plans on Business and Human Rights, "Chile", at: <u>https://globalnaps.org/country/chile/</u>

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf

⁷² International Labour Organization, "NORMLEX – Chile", at:

https://www.ilo.org/dyn/normlex/en/f?p=1000:11110:0::NO:11110:P11110_COUNTRY_ID:102588

⁷³ International Labour Organization, "NORMLEX – Ratifications for Chile", at:

https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102588



safety,⁷⁴ including the law on work accidents and occupational diseases,⁷⁵ qualification and evaluation of work accidents and diseases,⁷⁶ basic sanitary and environmental conditions in workplaces,⁷⁷ and safety of workers in situations of risk and emergency⁷⁸. Chile has adopted regulations on work accidents and professional illnesses that eliminate the distinction between employees and workers.⁷⁹ With respect to labour rights, Chile has introduced regulations on equal pay for men and women,⁸⁰ working hours and remuneration of domestic workers,⁸¹ workplace harassment and sanctions,^{82,83} maternity protection,⁸⁴ inclusion of disabilities,⁸⁵ and rights of commercial workers^{86,87}.

Chile has ratified the United Nations Convention against Corruption. At the national level, the country has promulgated several laws and regulations to combat corruption and increase citizen participation and government transparency. Chile has in place, among others laws that govern, probity in public function and prevention of conflicts of interest,⁸⁸ lobbying,⁸⁹ access to public information,⁹⁰ association and citizen participation in public management,⁹¹ and transparency of democracy⁹². The Ministry General Secretariat of the Presidency is the main body for overseeing the integrity and transparency issues.⁹³ Chile is ranked 25th out of 180 countries in Transparency International's Corruption Perceptions Index (CPI) in 2020.⁹⁴

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Chile has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with expenditures related to the achievement of the SPTs.

⁷⁴ ILO, "Chile Occupational safety and health", at:

https://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=CHL&p_classification=14

⁷⁵ Ministry of Labour and Social Security, Law 16.744, (1968), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=28650</u>

⁷⁶ Ministry of Labour and Social Security, Law 21.012, (2017), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1103798</u>

⁷⁷ Ministry of Health, Decree No. 594, (1999), at:

https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=59815&p_country=CHL&p_classification=14

⁷⁸ Decree No. 63, (1978), https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=12973&p_country=CHL&p_classification=14

⁷⁹ Ministry of Labour and Social Security, Law 21054, (2017), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1112814</u>

⁸⁰ Ministry of Labour and Social Security, Law 20348, (2009), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1003601</u>

⁸¹ Ministry of Labour and Social Security, Law 20786, (2014), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1068531</u>

⁸² Ministry of Labour and Social Security, Law 20005, (2005), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=236425</u>

⁸³ Ministry of Labour and Social Security, Law 20607, (2012), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1042709</u>

⁸⁴ Ministry of Labour and Social Security, Law 20545, (2011), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1030936</u>

 ⁸⁵ Ministry of Social Development, Law 21015, (2017), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1103997</u>
 ⁸⁶ Ministry of Labour and Social Security, Law 20823, (2015), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1076001</u>

⁸⁷ Ministry of Labour and Social Security, Law 20828, (2015), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1076449</u>

⁸⁸ Ministry General Secretariat of the Presidency, Law 20.880, (2016), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1086062</u>

⁸⁹ Ministry General Secretariat of the Presidency, Law 20.730, (2014), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1060115</u>

⁹⁰ Ministry General Secretariat of the Presidency, Law 20.285, (2008), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=276363</u>

⁹¹ Ministry General Secretariat of Government, Law 20.500, (2011), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1023143</u>

 ⁹² Ministry General Secretariat of the Presidency, Law 20.900, (2016), at: <u>https://www.bcn.cl/leychile/navegar?idNorma=1089342</u>
 ⁹³ Government of Chile, "2º Informe Nacional Voluntario Chile 2019, Agenda 2030", at:

https://sustainabledevelopment.un.org/content/documents/23507Informe_Nacional_Voluntario_CHILE_Junio_2019_final_1.pdf 94 Transparency International, "Corruption Perceptions Index: Chile", at: https://www.transparency.org/en/cpi/2020/index/chl



Section 3: Impact of the SPTs Chosen

Importance of reducing GHG emissions to accelerate the transition towards a low-carbon economy

As of 2018, the country's total CO_2 emissions were reported at 90.5 MtCO₂e, representing an increase of 207.4% since 1990.⁹⁵ Due to the utilization of fossil fuels as its largest source for primary energy generation, Chile's energy sector is currently its largest source of GHG emissions, accounting for 77% of total emissions as of 2018.^{96,97} This is followed by the agriculture sector (11%), industrial processes and product use sector (6%) and the waste sector (6%).^{96,97}

As a signatory of the Paris Agreement, Chile has committed to achieve absolute GHG emissions of 95 MtCO₂e by 2030, and to achieve carbon neutrality by 2050 under its most recent NDC.⁹⁸ According to the World Resources Institute, if all countries strengthen their decarbonization commitments at the same percentage as Chile, the world would be on a path to limiting global warming to 2 degrees C.⁹⁹

Based on the above context, Sustainalytics is of the opinion that Chile's issuance of sustainability-linked bonds will provide financing for projects that will help to reduce its overall GHG emissions, achieving its carbon reduction targets and further facilitating a transition to a low-carbon economy.

Importance of increasing share of Non-Conventional Renewable energy

In 2019, the Chilean government announced its intent to close eight coal-power plants by 2024, and all coal-power plants by 2040.¹⁰⁰ This commitment is accompanied by efforts to expand renewable energy output to contribute to its decarbonization plan and achieving the target of attaining carbon neutrality by 2050.^{101,102} In 2021, Chile's renewable energy capacity (including hydropower) reached over 47% of its total energy supply.¹⁰³ Despite the fact that Chile still relies on fossil fuels to meet most of its energy needs, the country's geography, including the Atacama Desert with perfect conditions for solar energy, and the favourable wind conditions along its coastline, make it an excellent destination for renewable energy generation. Thus, the country has identified solar and wind power as having the greatest potential impact for reaching the country's climate change goals.¹⁰⁴ In 2020, Chile hit its 2025 target of producing a fifth of its energy from renewables. In 2021, at least 25% of Chile's energy is generated from solar and wind plants.¹⁰⁵

Although Chile's geography provides opportunities for renewable energy generation, the country has faced significant integration challenges with its fragmented electricity grids.¹⁰⁶ Projects such as the Cardones Polpaico (CP) Line, completed in 2019, have integrated the Chilean electricity grid and created opportunities for greater investment in Chile's renewable energy market.¹⁰⁷ Prior

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile%27s_NDC_2020_english.pdf

- https://www.ft.com/content/97e6b15d-4b7d-4578-8d1a-f43df77ff116
- ¹⁰³ IEA, "Chile", (2019), at: <u>https://www.iea.org/countries/chile</u>

https://www.ft.com/content/97e6b15d-4b7d-4578-8d1a-f43df77ff116

⁹⁵ IEA, "Chile – Countries & Regions", (2019), at: <u>https://www.iea.org/countries/chile</u>

⁹⁶ IEA, "Energy Policies Beyond IEA Countries – Chie Review 2018", (2018), at: <u>https://energia.gob.cl/sites/default/files/documentos/energy-policies-beyond-iea-countries-chile-2018-review.pdf</u>

⁹⁷ Ministerio del Medio Ambiente, <u>"Informe del Inventario Nacional de Chile 2020</u>: Inventario nacional de gases de efecto invernadero y otros contaminantes climáticos 1990-2018<u>"</u>, (2020), at: <u>https://unfccc.int/sites/default/files/resource/7305681_Chile-BUR4-1-2020_IIN_CL.pdf</u> ⁹⁸ UNFCCC, "Chile's Nationally Determined Contribution – Update 2020", at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/Chile%27s_NDC_2020_english.pdf

⁹⁹ WRI, "Chile's Enhanced Climate Plan Sets an Example for Other Countries", (2020), at: <u>https://www.wri.org/insights/chiles-enhanced-climate-plan-sets-example-other-countries</u>

¹⁰⁰ Gobierno de Chile, "President Piñera presented plan to close all coal-fired power plants to make Chile carbon neutral", (2019), at: <u>https://www.gob.cl/noticias/presidente-pinera-presento-plan-para-cerrar-todas-las-centrales-energeticas-carbon-para-que-chile-sea-carbono-neutral</u>

¹⁰¹ Gobierno de Chile, "Chile's Nationally Determined Contribution Update", (2020), at:

¹⁰² Mander, Benedict. (2021), "Renewables inspire Chile's dream of exporting green energy," Financial Times, at:

¹⁰⁴ IEA, "Energy Policies Beyond IEA Countries: Chile 2018 Review," (2018), at: <u>https://iea.blob.core.windows.net/assets/8c16efa0-41b1-47be-b12a-a29483a0c635/EnergyPoliciesBeyondIEACountriesChile2018Review.pdf</u>

¹⁰⁵ Mander, Benedict. (2021), "Renewables inspire Chile's dream of exporting green energy," Financial Times, at:

¹⁰⁶ MaRS Market Insights, "Market Information Report: Chiles", (2016), at: <u>https://www.marsdd.com/wp-</u>

content/uploads/2019/03/AEC_GG_CHILE_REPORT_FINAL_Dec2016.pdf

¹⁰⁷ Invest Chile, "President Piñera inaugurates Cardones-Polpaico power transmission line: project represented foreign investment of US\$1,000 million," (2019), at: <u>https://investchile.gob.cl/president-pinera-inaugurates-cardones-polpaico-power-transmission-line-project-represented-foreign-investment-of-us1000-million/</u>



to the construction of the CP Line, Chile's solar and wind power potential was often curtailed,¹⁰⁸ because there is no capacity to transport the energy through the transmission system.¹⁰⁹ The CP Line meaningfully resolved this problem. Whereas in October 2017, the overall curtailment of solar and wind energy reached 22%; two years later, in 2019, that percentage fell to 1%.¹¹⁰ Sustainalytics is of the opinion that the Framework will contribute to the country's electricity decarbonization efforts.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. The sustainability-link instruments advance the following SDG goals and targets:

KPI	SDG	SDG Target
Absolute GHG Emissions per year (MtCO ₂ e)	SDG 13 Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning
Share of Non-Conventional Renewable Electric generation in the National Electric System (%)	SDG 7 Affordable and Clean Energy	Target 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Conclusion

Chile intends to issue Sustainability-Linked Bonds which will tie the coupon rate to the achievements of the following SPTs:

- (1) SPT 1a: Achieve Greenhouse Gas emissions of 95 MtCO2e by 2030, from a 2018 baseline
 - SPT 1b: Achieve a maximum of 1,100 MtCO₂e between 2020 and 2030
- (2) SPT 2a: Achieve 50% electricity generation derived from non-conventional renewable sources by 2028, from a 2021 baseline

SPT 2b: Achieve 60% electricity generation derived from non-conventional renewable sources by 2032, from a 2021 baseline

Sustainalytics considers KPI 1 to be very strong as a direct measure of performance on a material sustainability issue with a clear and consistent methodology, and a high scope of applicability. KPI 2 is considered strong based on an indirect measure of performance on a highly material issue and a high scope of impact on GHG emission reductions in Chile. Sustainalytics considers SPT 1 to be ambitious as it represents an improvement on previous performance and being slightly below 2 degrees C warming scenario. SPT 2 is considered highly ambitious given it exceeds past performance and is above science-based targets that would lead to a net-zero trajectory by 2050.

Furthermore, Sustainalytics considers reporting and verification commitments to be aligned with market expectations.

Based on the above, Sustainalytics considers the Government of Chile Sustainability-Linked Bond Framework to be in alignment with the five core components of the Sustainability-Linked Bond Principles 2020 and the prospective of achievement of the SPTs to be impactful.

¹⁰⁸ PV-Tech, "Curtailment of solar power in northern Chile 'no surprise to developers", (2016), at: <u>https://www.pv-tech.org/curtailment-of-solar-power-in-northern-chile-no-surprise-to-developers/</u>

¹⁰⁹ BNA Americas, "Chile Renewables Watch: Installed Capacity Surpasses 25%", (2020), at: <u>https://www.bnamericas.com/en/news/chile-renewables-watch-installed-capacity-surpasses-25</u>

¹¹⁰ Renewable Energy Institute, "Innovative Decarbonization Policies: Chile", (2020), at: <u>https://www.renewable-</u>

ei.org/en/activities/column/REupdate/20201224.php



Appendix 1: Sustainability-Linked Bonds - External Review Form

Section 1. Basic Information

lssuer n	ame: Chile					
Sustainability-Linked Bond ISIN:						
Indepen	dent External Review provider's name for second party opi	inion pr	e-issuance (sections 2 & 3): Sustainalytics			
Comple	tion date of second party opinion pre-issuance: February 9	th , 2022				
Indepen	dent External Review provider's name for post-issuance ve	erificati	on (section 4):			
Complet	tion date of post issuance verification:					
At the ⊠	a step-up structure] a	variable redemption structure			
Sectio	on 2. Pre-Issuance Review					
2-1	SCOPE OF REVIEW					
The fo	ollowing may be used or adapted, where appropriate, to sur	nmarise	the scope of the review.			
The re	eview:					
\times	assessed all the following elements (complete review)		only some of them (partial review):			
	Selection of Key Performance Indicators (KPIs)		Bond characteristics (acknowledgment of)			
	Calibration of Sustainability Performance Targets (SPTs)		Reporting			
	Verification					
\boxtimes	and confirmed their alignment with the SLBP.					
2-2	ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER					
\boxtimes	Second Party Opinion		Certification			
	Verification		Scoring/Rating			
Note:	In case of multiple reviews / different providers, please provid	de sepa	rate forms for each review.			

2-3 EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)



Section 3. Detailed pre-issuance review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

3-1 SELECTION OF KEY PERFORMANCE INDICATORS (KPIS)

Overall comment on the section (*if applicable*):

Chile's Sustainability-Linked Bond Framework includes two KPIs: Absolute GHG Emissions (KPI 1) and the share of Non-Conventional Renewable Energy generation in the National Electric System (KPI2) (see Table 1). Sustainalytics considers KPI 1 to be very strong and KPI 2 as strong.

List of selected KPIs:

- Absolute GHG Emissions per year (MtCO₂e)
- Share of Non-Conventional Renewable Energy generation in the National Electric System (%)

Definition, Scope, and parameters

- ☑ Clear definition of each selected KPIs
 ☑ Clear calculation methodology
- □ Other (please specify):

Relevance, robustness, and reliability of the selected KPIs

\boxtimes	Credentials that the selected KPIs are relevant, core and material to the issuer's sustainability and business strategy.	\boxtimes	Evidence that the KPIs are externally verifiable
\boxtimes	Credentials that the KPIs are measurable or quantifiable on a consistent methodological basis	\boxtimes	Evidence that the KPIs can be benchmarked
			Other (please specify):

3-2 CALIBRATION OF SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

Overall comment on the section (*if applicable***):**

Sustainalytics considers the SPTs to be aligned with Chile's sustainability strategy. Sustainalytics considers SPT 1 to be ambitious based on an improvement over past performance and being slightly below a 2 degree C scenario, and SPT 2 as highly ambitious based on its alignment with a pathway towards a 1.5 degree C.

Rationale and level of ambition

\boxtimes	Evidence that the SPTs represent a material improvement	\boxtimes	Credentials on the relevance and reliability of selected benchmarks and baselines
\boxtimes	Evidence that SPTs are consistent with the issuer's sustainability and business strategy	\boxtimes	Credentials that the SPTs are determined on a predefined timeline

Other (please specify):

Second-Party Opinion: Government of Chile Sustainability-Linked Bond Framework



Benchn	narking approach		
\boxtimes	Issuer own performance		Issuer's peers
\boxtimes	reference to the science		Other (please specify):
Additio	nal disclosure		
	potential recalculations or adjustments description	\boxtimes	issuer's strategy to achieve description
\boxtimes	identification of key factors that may affect the achievement of the SPTs		Other (please specify):

3-3 BOND CHARACTERISTICS

Overall comment on the section (if applicable):

Chile will link the bond's financial characteristics to the achievement of the SPTs, namely a premium paid in the case a SPT is not met at target observation date. In the event more than one SPT is not met, the premium paid will be cumulative.

Financial impact:

- variation of the coupon
- Premium paid
- \Box Other (please specify):

Structural characteristic:

□ Other (*please specify*):

3-4 REPORTING

Overall comment on the section (if applicable):

Chile commits to report its performance on the KPIs on an annual basis via a SLB Report. Information regarding KPI 1 will be produced biennially, consistent with the UNFCCC's requirements. While the Sustainability-Linked Bond Principles state that up-to-date information of the KPIs should be reported on an annual basis, Sustainalytics recognizes that Chile follows the guidance set by the UNFCCC fro developing economies, and therefore finds it to be in alignment with the requirements of the SLBP.

Information reported:

\times	performance of the selected KPIs	\boxtimes	verification assurance report
\boxtimes	level of ambition of the SPTs		Other (please specify):
Frequ	ency:		
\times	Annual		Semi-annual
	Other (please specify):		



Means of Disclosure

	Information published in financial report		Information published in sustainability report				
	Information published in ad hoc documents	\boxtimes	Other (please specify): SLB report				
	Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):						
Where appropriate, please specify name and date of publication in the "useful links" section.							
Level of Assurance on Reporting							
	limited assurance	\times	reasonable assurance				

Other (please specify):

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

Section 4. Post-issuance verification

Overall comment on the section (if applicable):

Chile commits to have external reasonable assurance conducted on its KPI performance at the communicated SPT deadline, which is aligned with market expectations.

Information reported:

	limited assurance	reasonable assurance
		Other (please specify):
_		
Freque	ency:	
	Annual	Semi-annual
	Other (please specify):	
Materi	al change:	
	Perimeter	KPI methodology
	SPTs calibration	



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The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

Second-Party Opinion: Government of Chile Sustainability-Linked Bond Framework



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Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 25 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 800 staff members, including more than 300 analysts with varied multidisciplinary expertise across more than 40 industry groups.

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