Second-Party Opinion

Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework

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Second-Party Opinion

Evaluation Summary

Sustainalytics is of the opinion that the Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework aligns with the Sustainability-Linked Bond Principles 2020. This assessment is based on the following:

- **Selection of Key Performance Indicators** Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework includes two KPIs: Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change, and Native Forest area, % of maintenance with respect to baseline year (see Table 1). Sustainalytics considers the KPIs chosen to be strong.
- **Calibration of Sustainability Performance Targets** Sustainalytics considers the SPTs to be aligned with Uruguay's sustainability strategy. Sustainalytics further considers SPT 1.1 and 1.2 to be ambitious based on their implied improvement against historical performance. Sustainalytics considers SPT 2.1 to be ambitious given its performance against regional countries and SPT 2.2 to be highly ambitious given this target is above historical performance and the performance against regional countries.
- **Bond Characteristics** Uruguay has linked the bond's financial characteristics to the achievement of the SPTs, namely a coupon step-up for a failure to achieve SPTs 1.1 and 2.1, which are in line with its Nationally Determined Contribution (NDC), and a coupon step-down for achieving SPTs 1.2 and 2.2 (over-achievement of the NDC objectives). The achievement or failure to achieve of the respective SPTs will trigger the specified coupon rate changes, as detailed below.
- **Reporting** Uruguay commits to publish official, externally verified reports on an annual basis for KPI 1, and every four years for KPI 2. Interim updates will also be provided for KPI 2 on an annual basis. Reports and updates will be published on Uruguay's Sovereign Sustainability-Linked Bonds website. Uruguay commits to disclose relevant information that may affect the KPIs. The reporting commitments are aligned with the Sustainability-Linked Bond Principles 2020.
- **Verification** Uruguay commits to have external assurance conducted by the United Nations Development Program, against each SPT for each KPI at the reporting date, and throughout the lifetime of the bond. This is aligned with the Sustainability-Linked Bond Principles 2020.

Evaluation Date[1]	December 14, 2022
Issuer Location	Montevideo, Uruguay

The SPTs contribute to the following SDGs:

Overview of KPIs and SPTs

KPI	Baseline	SPT	Strength of KPI	Ambitiousness of SPT
Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change	1990	SPT 1.1 Achieve at least a 50% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year	Strong	SPT 1.1 Ambitious
		SPT 1.2 Achieve more than a 52% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year		SPT 1.2 Ambitious
Native forest area, % of maintenance with respect to baseline year	2012	SPT 2.1: Maintain at least 100% of the Native Forest area by 2025, compared to reference year 2012	Strong	SPT 2.1 Ambitious
		SPT 2.2: Achieve an increase higher than 3% in the Native Forest area by 2025, compared to reference year 2012		SPT 2.2 Highly Ambitious

[1] This document is an update of Sustainalytics' second-party opinion that was published in September 2022, to mainly clarify the KPI which was previously stated as: Percentage change in aggregate GHG emissions per real GDP unit from the baseline year

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Scope of Work and Limitations

The Government of Uruguay has engaged Sustainalytics to review the Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework dated September 2022 (the "Framework") and provide an opinion on its alignment with the Sustainability-Linked Bond Principles 2020 (SLBP).[2]

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent[3] opinion on the alignment of the Framework with the SLBP, as administered by ICMA.

As part of this engagement, Sustainalytics exchanged information with various members of the Government of Uruguay's Economy and Finance Ministry and Ministry of Environment to understand the country's climate goals, nature conservation efforts and associated SPTs, as well as the reporting and verification processes of aspects of the Framework. Government of Uruguay'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 of the Framework and should be read in conjunction with the Framework prepared by the Government of Uruguay. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Uruguay. 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 KPI performance.[4] 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 Uruguay 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 benchmarks[5] against which targets were set;

(2) A material action which has a bearing on the achievement of the SPTs or the materiality of the KPIs.

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[2] The Sustainability-Linked Bond Principles were launched by ICMA in June 2020. They are administered by ICMA and are available at: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-PrinciplesJune-2020-100620.pdf.

[3] When 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.

[4] Sustainalytics has provided an opinion based on the understanding that the financial characteristics of instruments issued under this Framework will be tied to the achievement of SPTs corresponding to each of the KPIs included in the Framework.

[5] Benchmarks refers to science based benchmarks

Introduction

The Oriental Republic of Uruguay is located on the east coast of South America, bordered by Argentina to its west and Brazil to its north and northeast. Uruguay has an estimated population of over 3.5 million as of 2019, with 95% of the population living in urban areas. Montevideo, the capital of Uruguay, has an estimated population of 2 million.

The Government of Uruguay ("Uruguay") intends to issue sustainability-linked bonds where the coupon rate is tied to the achievement of sustainability performance targets for two KPIs: (i) Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change, and (ii) Native Forest area, % of maintenance with respect to the baseline year.

Uruguay has engaged Sustainalytics to review the Framework and provide an opinion on the alignment of Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework with the Sustainability-Linked Bond Principles 2020. The Framework has been published in a separate document.[6]

Uruguay has defined the following KPIs and SPTs:

Table 1: KPI Definitions

KPI	Definition
Percentage change in aggregate gross GHG emissions ($GgCO_2e$) per real GDP unit (UYU 1 billion) from the baseline year	KPI 1 aggregates the three main sources of GHG emissions produced in Uruguay CO_2, CH_4, and N_2O, measured in gigagrams of CO_2 equivalent units[7] ($GgCO_2e$). This KPI considers all greenhouse gas inventory sectors and categories included in the NDC submitted in 2017. This includes emissions from the energy, agriculture and cattle raising, and waste and industrial processes and product use sectors; and excludes emissions from land use, land-use change, and forestry (LULUCF). This addresses all emitting sectors as acknowledged by IPCC inventory guidelines.[8] Aggregate emissions are then expressed on an intensity basis per real gross domestic product (GDP) unit, measured in billions of Uruguayan constant pesos (UYU)[9].
Native forest area, % of maintenance with respect to the baseline year	KPI 2 measures Native Forest area cover in Uruguay, in hectares. Forests are defined by the Government of Uruguay under Law N°15.939 Article 4, from 1987, as: "plant associations in which trees of any size predominate, whether exploited or not, and which are capable of producing wood or other forest products or of exerting an influence on soil conservation, on the hydrological regime or on the climate, or which provide shelter or other benefits of national interest". Further, forests are considered to be those plant associations which, in addition to the characteristics established in Article 4 of the aforementioned law, have a minimum surface area of 0.25 hectares and a tree crown cover (canopy cover) of at least 30% of the area. Native Forests are distinguished from "forests" in that they do not include "planted forests".

[6] Uruguay's Sovereign Sustainability-Linked Bonds website at: https://www.mef.gub.uy/30687/20/areas/uruguays-sovereign-sustainability-linked-bonds-sslb.html

[7] CO_2 equivalent units correspond to the 100-year Global Warming Potential of each respective GHG, based on the IPCC's Fifth Assessment Report: https://www.ipcc.ch/report/ar5/syr/

[8] IPCC, "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories", at: https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/

[9] To account for fluctuations in the currency's value over time, all UYU figures in the Framework are expressed in real GDP measured in billions of 2016 Uruguayan pesos.

Table 2: SPT 1 and Past Performance

KPI 1	1990 (baseline)[10]	2000	2010	2019	SPT 1.1 2025	SPT 1.2 2025
Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change	0.0% (36.85 $GgCO_2e$/UYU 1 billion)	-18.35% (30.09 $GgCO_2e$/UYU 1 billion)	-34.0% (24.32 $GgCO_2e$/UYU 1 billion)	-47.29% (19.45 $GgCO_2e$/UYU 1 billion)	-50.0% (18.42 $GgCO_2e$/UYU 1 billion)	-52.0% (17.69 $GgCO_2e$/UYU 1 billion)

Table 3: SPT 2 and Past Performance

KPI 2	1980	2004	2012 (baseline)	2016	SPT 2.1 2025	SPT 2.2 2025
Native forest area, % of maintenance with respect to baseline year	70.2% (596,831 ha)	88.5% (752,158 ha)	100.0% (849,960 ha)	98.3% (835,349 ha)	100.0% (849,960 ha)	103.0% (875,459 ha)

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Alignment of Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework with the Sustainability-Linked Bond Principles

Sustainalytics is of the opinion that Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework aligns with the five core components of the Sustainability-Linked Bond Principles 2020.

Selection of Key Performance Indicators

Relevance and Materiality of KPIs

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

Sustainalytics considers the KPI 1 – Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change, and KPI 2 – Native Forest area, % of maintenance with respect to baseline year – 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 GHG 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.[11] In alignment with SDG 13 and this target, Uruguay has committed to mitigating climate change through its national initiatives and policy actions. Climate change is a material issue for Uruguay due to the country's high vulnerability to physical climate risks such as drought, flooding, higher temperatures and heatwaves, strong winds, hail, frost and severe

[10] The baseline value in 1990 is 36.85 and is consistent with the 1990-2019 series of GHG emissions (NGHGI 2019) and real GDP at constant local currency with base year 2016, prices published by the Central Bank.
[11] UN Department of Economic and Social Affairs, Sustainable Development, "13 – Take urgent action to combat climate change and its impacts", at: https://sdgs.un.org/goals/goal13

storms.[12,13] In this context, Uruguay has deployed a series of policies and actions to address climate change, including its Nationally Determined Contribution (NDC) under the Paris Agreement submitted in 2017.[14]

- With impacts relevant to climate change mitigation and adaptation, and biodiversity and natural resource preservation, the protection and restoration of global forests has been established as a top environmental priority by international agreements and partnerships, including the UN Framework Convention on Climate Change, the Paris Agreement, the Convention on Biological Diversity, the UN Convention to Combat Desertification, the UN Global Forest Goals, the Sustainable Development Goals, and others. In alignment with these, Uruguay has demonstrated the relevance of forest preservation to its national goals by endorsing the Glasgow Leaders' Declaration on Forests and Land Use,[15] a commitment to end forest loss and land degradation by 2030; as well as its own NDC under the Paris Agreement which includes several commitments on forest and soil preservation.

In terms of applicability, Sustainalytics notes that KPI 1 – Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change covers 99.2% of all emissions originating within Uruguay as per all greenhouse gas inventory sectors and categories included in the NDC 2017. For KPI 2 – Native Forest area, % of maintenance with respect to baseline year covers 100.0% of the county's native forests. In this context, the KPIs are considered to be highly applicable to Uruguay's emissions reduction goals and forest conservation efforts, respectively.

Overall, Sustainalytics considers the KPIs to be material to Uruguay's climate targets and forest preservation targets and applicable to its own physical climate risk exposure.

KPI Characteristics

In its assessment of a KPI's characteristics, Sustainalytics considers: i) whether it uses a clear and consistent methodology, ii) whether it follows an externally recognized definition, iii) whether the KPI is a direct measure of the issuer's performance on the material environmental or social issue, and iv) if applicable, whether the methodology can be benchmarked against an external contextual benchmark.[16]

KPI 1 – Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change

Sustainalytics considers Uruguay's definition and methodology to calculate KPI 1 performance to be clear and consistent with international standards, given that it utilizes the IPCC 5th Assessment Report's criteria for calculating global warming potential. Further, GHG emission intensity of GDP is a KPI recognized by the World Bank Group for Sovereign Sustainability Linked Bonds,[17] and it is also used by the International Energy Agency.[18] Given that KPI 1 is an economic intensity metric, it is viewed as an indirect measure of Uruguay's performance on the material issue of GHG emissions.

KPI 2 – Native Forest area, % of maintenance with respect to the baseline year

Sustainalytics considers Uruguay's definition and methodology for calculating KPI 2 performance to be clear and consistent with international practices, given its alignment with the Food and Agriculture Organization of the United Nations' (FAO) Global Forest Resources Assessment (FRA) concepts and definitions, as well as the relevant provisions of the 2006 IPCC Guidelines, the IPCC 2003 Good Practice Guidance and the Global Forest

[12] World Bank Group, "Climate Change Knowledge Portal – Uruguay", (2021), at: https://climateknowledgeportal.worldbank.org/country/uruguay#:~:text=Uruguay%20is%20highly%20vulnerable%20to,Uruguay's%20vulnerability%20to%20climate%20change.
[13] Green Climate Fund, "Uruguay Country Programme to the Green Climate Fund" (2021), at: https://www.gub.uy/ministerio-ambiente/sites/ministerio-ambiente/files/2021-12/ONU_Programa-pais_ingles_final.pdf
[14] Oriental Republic of Uruguay, "First Nationally Determined Contribution to the Paris Agreement", (2017) at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[15] UN Climate Change Conference UK 2021, "Glasgow Leaders' Declaration on Forests and Land Use", at: https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/
[16] External contextual benchmarks provide guidance on alignment with ecological system boundaries. This criterion is not applied to social KPIs or impact areas for which such contextual benchmarks are not available.
[17] World Bank Group, "Striking the Right Note: Key Performance Indicators for Sovereign Sustainability-Linked Bonds" (2021), at: https://openknowledge.worldbank.org/handle/10986/36805
[18] IEA, "Global Energy Review: CO2 Emissions in 2021" (2022), at: https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2?msclkid=5a5ee9bcd10611ec9a786af18a5d7f5b

Observations Initiative (GFOI). Further, the definitions and practices used for calculating KPI 2 performance are outlined in Uruguayan law. Law N°15.939 Article 4, from 1987 defines Native Forest, and Decree N°452/988 regulates the application of the law, outlining the methodological and operational criteria for the quantification of forests.[19] KPI 2 is viewed to be a direct measure of Uruguay's performance on the material issue of native forest area preservation.

Overall Assessment

Sustainalytics considers KPI 1 – Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change to be strong, based on its clear and consistent externally benchmarkable methodology and its high relevance to a material issue.

Sustainalytics considers KPI 2 – Native Forest area, % of maintenance with respect to baseline year, to be strong based on its direct relationship to performance and high relevance to a material environmental issue.

KPIs	Strength of KPIs			
KPI 1: Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change	Not Aligned	Adequate	Strong	Very strong
KPI 2: Native Forest area, % of maintenance with respect to baseline year	Not Aligned	Adequate	Strong	Very strong

Calibration of Sustainability Performance Targets

Alignment with Uruguay's Sustainability Strategy

Uruguay has set the following SPTs for its KPIs:

- SPT 1.1: Achieve at least a 50% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year
- SPT 1.2: Achieve more than a 52% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year
- SPT 2.1: Maintain at least 100% of the Native Forest area estimated for 2012 by 2025
- SPT 2.2: Achieve an increase higher than 3% in the Native Forest area by 2025 compared to reference year 2012

Sustainalytics considers the SPTs to be aligned with Uruguay's sustainability mandate. Please refer to Section 2 for an analysis of the credibility of Uruguay's sustainability strategy.

SPT 1.1 is aligned with Uruguay's NDC targets[20] under the Paris Climate Agreement – Achieve at least a 50.0% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year.[21] In supporting of this, Uruguay has developed the National Climate Change Policy (PNCC) as its long-term strategic framework to guide Uruguay's transformations to address climate change and climate vulnerability associated challenges, including its commitments under the Paris Agreement. The PNCC establishes 20 strategic priorities, 72 lines of action and

[19] Oriental Republic of Uruguay, "First Nationally Determined Contribution to the Paris Agreement", (2017) at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf

[20] The target value presented in Uruguay's first NDC for this indicator was a reduction of 49% compared to 1990 (see page 26 of the NDC document). The value was set using the GWP100 AR2 metric, which was the one applied and accepted by the Intergovernmental Panel on Climate Change back in 2017 (where '2' stands for the "IPCC 2nd Assessment Report"). Since then, the international standard has evolved to the AR5 metric of the GWP100. Thus, the target value presented for the purpose of this KPI (a reduction of 50%) corresponds to the mathematical equivalent in AR5 of the one originally presented in AR2 terms. At: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf

[21] Oriental Republic of Uruguay, "First Nationally Determined Contribution to the Paris Agreement", (2017) at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf

five dimensions: governance, knowledge, social, environment, and production.[22] In addition, with Uruguay's economy primarily based on the agricultural sector,[23] it has also focused on curbing its agricultural activities' environmental impact and GHG emissions intensity. This includes the adoption of "sustainable intensification" concepts into the strategic mandate of Uruguay's Ministry of Livestock, Agriculture and Fisheries, which has led to the development of national policies for the conservation of native forest, sustainable use of grasslands and climate-smart agricultural policies that mitigate the environmental impacts of the agricultural sector. These demonstrated policies and activities are aligned with reducing the emissions intensity of Uruguay's economic growth.

SPT 1.2 goes beyond the NDC, representing an overachievement of Uruguay's NDC under the Paris Climate Agreement through an additional 2-percentage point reduction in total GHG emissions per unit of real GDP over the baseline 1990. The further reduction is equivalent to an estimated 1,475 $GgCO_2e$ fewer emissions per UYU 1 billion in GDP, compared to the projected 2025 $GgCO_2e$ levels consistent with achieving a 50% reduction. This further reduction represents approximately 4% of all CO_2e emissions in Uruguay projected for 2025 or an estimated 18.6% reduction of absolute CO_2 emissions, or a 6.7% of all CH_4 emissions, or a 21.5% absolute reduction of all N_2O emissions — in all cases with respect to their projected levels in 2025.

SPT 2.1 is aligned with Uruguay's NDC target to maintain 100% of the Native Forest by 2025 vs. reference year 2012.[24] In support of this, Uruguay has in place a National Strategy for Native Forest to guide the conservation of its forests, focusing on i) native forest management, ii) institutional capacity building, iii) the development of forest protection and control systems, iv) promotion of research into management techniques and production, and v) the promotion of Native Forest conservation management financing. This policy complements the National Strategy on Biodiversity and is further supported by Uruguay's national strategy under the framework for Reduction of Emissions from Deforestation and Forest Degradation (REDD+).[25]

SPT 2.2 goes beyond the NDC target representing an overachievement of Uruguay's NDC under the Paris Climate Agreement through a 3-percentage point increase in Uruguay's Native Forest area in comparison to the 2012 reference year, which represents a 4.8% increase with respect to the latest official estimate for 2016.

Strategy to Achieve the SPTs

Uruguay intends to achieve the SPTs through the following strategy:

- Renewable Energy Development – Under Uruguay's Long-Term Strategy for achieving its NDCs, it targets the expansion of its renewable energy generation.[26] While the country's energy mix consists of approximately 97% renewable energy as of 2017,[27] individual development targets continue to be pursued. This includes installing 1,450 MW of wind power by 2025, per its NDC commitment, which has been surpassed and achieved a 1,514 MW of installed capacity as of 2021.[28,29]
- Decarbonization of the Transport Sector – Uruguay is supporting the development of energy efficiency and renewable energy projects for its transportation system. These include green hydrogen pilot projects to decarbonize the heavy transport sector and develop electric vehicle infrastructure to facilitate electric

[22] Uruguay Ministry of Housing, Land-Use Planning and Environment, "Fifth National Communication to the Conference of the Parties to the United Nations Framework Convention on Climate Change – Uruguay, 2019", (2019), at: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/63801597_Uruguay-NC5-1-20191231%20URUGUAY%20NC5%20EX%20SUM%20ENG.pdf
[23] United States Department of Commerce – International Trade Administration, "Uruguay – Country Commercial Guide", at: https://www.trade.gov/country-commercial-guides/uruguay-market-overview
[24] Ministerio de Ganadería Agricultura y Pesca, "Estrategia Nacional De Bosque Nativo", at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/sites/ministerio-ganaderia-agricultura-pesca/files/documentos/publicaciones/estrategia_nacional_de_bosque_nativo.pdf
[25] United Nations Climate Change, "What is REDD+?", at: https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd#:~:text=REDD%2B%20is%20a%20framework%20created,carbon%20stocks%20in%20developing%20countries.
[26] Oriental Republic of Uruguay, "First Nationally Determined Contribution to the Paris Agreement", (2017) at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[27] Green Climate Fund, "Uruguay Country Programme to the Green Climate Fund" (2021), at: https://www.gub.uy/ministerio-ambiente/sites/ministerio-ambiente/files/2021-12/ONU_Programa-pais_ingles_final.pdf
[28] Uruguay Ministry of Housing, Land-Use Planning and Environment, "Fifth National Communication to the Conference of the Parties to the United Nations Framework Convention on Climate Change – Uruguay, 2019", (2019), at: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/63801597_Uruguay-NC5-1-20191231%20URUGUAY%20NC5%20EX%20SUM%20ENG.pdf
[29] Ministerio del Ambiente, "Generación Eléctrica Eólica", (2021), at: https://www.gub.uy/ministerio-ambiente/sites/ministerio-ambiente/files/2021-04/01-FT-Energ%C3%ADa%20E%C3%B3lica.pdf

vehicle travel on a corridor of over 550 km of major national roads linking the country's largest cities.[30] The development of this corridor is also specified under Uruguay's NDC commitment for 2025.

- Energy Use Efficiency – The implementation of strategies to improve the utilisation of energy produced from renewable sources, particularly in off-peak hours. This includes the development of energy storage infrastructure, smart-grid technologies for demand management and the production of green hydrogen.[31]
- Sustainable Agriculture and Cattle Raising – Under Uruguay's NDC, it is committed to achieving 1,000,000 ha of livestock production under improved land management practices by 2025. This goal is guided by the Strategic Plan for Livestock Farming on Natural Pastures and will account for approximately 10% of the country's total pasture area. Activities in support of such a target are expected to facilitate the reduction of GHG emissions from Uruguay's agricultural sector, which is the largest emitting sector of the economy, including through the management of soil organic carbon stocks.[32]
- Limiting Demand for Forested Land – Uruguay's strong agriculture and cattle raising sector presence has historically driven land-use change and led to economic pressures for deforestation.[33] While improved efficiency and production intensity have reduced this demand for expansion of pasture lands, higher commodity prices and increases in the value of land require heightened efforts to ensure that progress on afforestation is not lost while the Uruguayan economy continues to grow. Uruguay's primary afforestation policy is its Forestry Law (Law N°15939), which seeks to prevent illegal logging activities and grant tax exemptions to facilitate the conservation of Native Forests. The most recent Budget Law submitted to Congress in June 2022 contains additional tax incentives and budgetary resources to promote reforestation.

Ambitiousness, Baseline and Benchmarks

To determine the ambitiousness of the SPTs, Sustainalytics considers whether the SPTs are in line with international commitments made by the country, how the SPTs compare with credible climate trajectories or science-based targets and by looking at similar economies where feasible.[34]

For SPT 1, Uruguay has set the baseline at 1990 to align with its commitments under its NDC. SPT 2's baseline has also been set to align with Uruguay's NDC at 2012.

SPT 1.1 and 1.2: Sustainalytics was able to use past performance to assess ambitiousness.

Between the baseline year of 1990 and 2019 (latest official data), Uruguay's GDP emissions intensity decreased by an average rate of 2.18% per year, from 36.85 $GgCO_2e$/UYU billion to 19.45 $GgCO_2e$/UYU billion. However, the COVID-19 pandemic had a material adverse effect on the performance of Uruguay's GDP emissions intensity reduction, given the ensuing GDP contraction in 2020 (-6.1% in real terms).[35] Using the projected GHG emissions reported by the country for 2020 and the observed real GDP for 2020, Uruguay's GDP emissions intensity is projected to have decreased by a lower average rate of 1.9% between 1990 and 2020 (from 36.85 $GgCO_2e$/UYU billion to an estimated 20.78 $GgCO_2e$/UYU billion). By 2020, this represents an estimated 87.6% and 83.9% of the progress necessary for achieving SPT 1.1 and SPT 1.2, respectively, from the baseline year. Therefore, to achieve SPT 1.1 and 1.2, Uruguay will be required to reduce its average annual emissions rates to the observation date of 2025 by an estimated 2.4% and 3.2%, respectively. Sustainalytics notes that this implies a 25.9% and a 67.7% acceleration for SPT 1.1 and 1.2, respectively, versus Uruguay's average GDP emissions intensity reduction per year from 1990 to 2020. Notably, this acceleration must be accomplished over a 5-year period (2021-2025) compared to the previous 30-year historical annual emissions reduction average.[36]

As of 2019, Uruguay had among the lowest CO_2 emissions per capita of countries with comparable economic development. The high degree of increased penetration of renewable energy sources, with 94% of electricity

[30] Uruguay Ministry of Housing, Land-Use Planning and Environment, "Fifth National Communication to the Conference of the Parties to the United Nations Framework Convention on Climate Change – Uruguay, 2019", (2019), at: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/63801597_Uruguay-NC5-1-20191231%20URUGUAY%20NC5%20EX%20SUM%20ENG.pdf

[31] Ministerio de Industria, Energía y Minería, "Hoja de Ruta de Hidrógeno Verde en Uruguay", (2022), at: https://www.gub.uy/ministerio-industria-energia-mineria/comunicacion/noticias/hoja-ruta-hidrogeno-verde-uruguay

[32] Ibid

[33] Forest Carbon Partnership, "Uruguay", at: https://www.forestcarbonpartnership.org/country/uruguay

[34] We refer here to contextual benchmarks that indicate the alignment of targets with ecosystem boundaries.

[35] Ministry of Economy and Finance. "Economic and Commercial Profile", (20022), at: https://www.economia.gov.py/application/files/1216/5573/1126/PEC_Uruguay_2022.pdf

[36] Sustainalytics notes that the calculations between 1990 and 2018 are a result of averaging outlier years.

generation originated from renewable sources by 2020, has accounted for a significant portion of its emissions abatement in the last decade and a half.[37] In order to keep reducing GHG emissions intensity, Uruguay aims to further decarbonize harder-to-abate sectors such as agriculture and industry. [38] Overall, Sustainalytics considers the SPT 1.1 and SPT 1.2 to represent trajectories that exceed Uruguay's historical performance, given the effects of the COVID-19 pandemic.

SPT 2.1 and 2.2: Sustainalytics was able to use past performance and peer performance in forest preservation to assess the ambition levels of SPT 2.1 and 2.2.

Uruguay's target of maintaining 100.0% of its 2012 native forest area is viewed to be aligned with the country's historical performance, given that there is no targeted improvement upon the baseline. However, its target for increasing native forest area by 3.0% from 2012 levels is considered as being above historical performance. In relation to its performance compared to regional trends, Uruguay's targets are aligned with best practice. Sustainalytics notes that while other countries in the Latin American and Caribbean region have forest preservation and regeneration targets, that would see a significant increase in their forest cover, these targets exist primarily in the context of considerable deforestation taking place over the previous three decades. Conversely, over the same period beginning in 1990, Uruguay was able to increase its total native forest cover by approximately 42%.[39] Given this divergence from other regional countries, Uruguay's targets of maintaining and increasing its Native Forest cover area with respect to the baseline year is viewed as performing above other countries in the region.

Overall Assessment

Sustainalytics considers the SPTs to align with Uruguay's sustainability strategy and commitments and considers SPT 1.1 and SPT 1.2 to be ambitious, given the targeted emission intensity reduction being above historical performance.

Sustainalytics considers Uruguay's SPT 2.1 to be ambitious given that it is aligned with past performance. Sustainalytics considers SPT 2.2 to be highly ambitious, given that it goes above historical performance and given its performance against regional countries. Both targets are recognized to support the goal of forest preservation.

SPT(s)	Ambitiousness of SPT(s)			
SPT 1.1: Achieve at least 50% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 1.2: Achieve more than a 52% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 2.1: Maintain at least 100% of the Native Forest area estimated for 2012 by 2025	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 2.2: Achieve an increase higher than 3% in the Native Forest area by 2025 compared to reference year 2012	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious

Bond Characteristics

Uruguay has disclosed that the financial characteristics of the sustainability-linked instruments issued under this Framework will be individually linked to each of the KPIs.

The applicable financial characteristic for SPTs 1.1 and 2.1 will be a coupon step-up for each KPI individually, should the target(s) fail to be met on the observation date. The applicable financial characteristic for SPTs 1.2 and 2.2 will be a coupon step-down for each KPI individually, should these overperformance target(s) be achieved

[37] Ministerio de Industria, Energía y Minería. Balance Energético 2020", at: https://ben.miem.gub.uy/descargas/1balance/1-1-Libro-BEN2020.pdf
[38] Oriental Republic of Uruguay, "First Nationally Determined Contribution to the Paris Agreement", (2017) at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[39] FAO, "Global Forest Resources Assessment 2020", (2020), at: https://www.fao.org/3/ca9825en/ca9825en.pdf

on that date. Furthermore, no change in the instrument's financial structure will be triggered if the Issuer's performance for each KPI falls on, or in between, the two targets outlined by each respective SPT, or if a coupon step up is triggered for the one of the KPIs and a coupon stepdown is triggered for the other, such that they cancel out.

Sustainalytics notes that SPTs 1.1 and 2.1 are aligned with Uruguay's NDC targets and that surpassing these targets and achieving SPTs 1.2 and 2.2 represents a financial reward mechanism for its environmental performance. Uruguay has disclosed that if, for any reason, the performance of the KPIs or satisfaction of the SPTs cannot be calculated, reported or verified in a satisfactory and timely manner at the observation date pursuant to the terms described in the legal documentation for the SSLB, the coupon step-up payment will apply as if the relevant SPT had not been achieved. Additionally, Uruguay intends to calculate, report and verify the performance of each KPI through the remaining maturity of the bond, as per the same terms, after the observation date.

Reporting

Uruguay has in place a robust monitoring, reporting and verification mechanisms following best practices as determined by the UN Global Support Program,[40] and the methodologies to measure KPI 1 and KPI 2 follow the reporting guidelines set by the UNFCCC.

Information regarding KPI 1 will move from biennial to an annual frequency starting in 2023, considered more rigorous than UNFCCC's[41] current requirements for non-Annex I Parties which requires countries submit a biennial update report every two years.[42] Thus, Uruguay commits to report its performance on KPI 1 on an annual basis via a Sustainability Linked Bond Update Report published on Uruguay's Sovereign Sustainability-Linked Bonds website. Sustainalytics finds KPI 1 reporting to be in alignment with the requirements of the SLBP and positively notes Uruguay's commitment to go beyond international standards in data reporting frequency and transparency.

With regards to KPI2, Uruguay will carry out a satellite-imaging mapping of the native forest area for the years 2021, 2025 (to evaluate the fulfillment of the target), 2029 and 2033, with a one-year lag. Sustainalytics recognizes that the reporting of KPI 2 is in alignment with the periodicity of the elaboration of the official cartography of native forests in Uruguay and therefore finds it to be in alignment with the requirements of the SLBP. In addition, Uruguay commits to provide annual interim updates on regulations, policies and initiatives aimed at the preservation, restoration and regeneration efforts, by the General Forestry Directorate of the Ministry of Livestock, Agriculture and Fisheries of Uruguay during the lifetime of the bond.

Verification

Sustainalytics notes that Uruguay will work with the United Nations Development Program (UNDP), which will provide an external verification of the KPIs. Both Uruguay and the UNDP will work together to set up a timetable for the external review of estimated GHG emissions. This verification assurance report conducted by the UNDP will be provided annually on Uruguay's Sovereign Sustainability Linked Bonds website no later than May 31 of the subsequent year to the one following the relevant observation year for KPI1.For KPI2, it will be reported no later than May 31 of the subsequent year to the cartography implementation, following the relevant observation year for KPI2.

Progress on KPI 1 will be reviewed and verified annually according to the methodology contained in the UNFCCC's Guide for Peer Review of National Greenhouse Gas Emissions Inventory (NGHGI).[43] In addition, Uruguay commits to shorten data reporting 'lags' and the external verification period for GHG emissions to approximately 17 months,

[40] UN GSP, "Best practices on MRV: The case of Uruguay", at: https://www.un-gsp.org/sites/default/files/documentos/best_practices_on_mrv-_monitoring_ndc_in_uruguay_english.pdf

[41] Uruguay follows the UNFCCC's reporting guidelines for Non-Annex I Parties, which requires Biennial Update Reports (BUR) of national GHG inventories, and which will be substituted with Biennial Transparency Reports (BTR). "The final BURs for developing countries are those submitted no later than 31 December 2024 and will undergo the last international consultation and analysis (ICA) cycle between 2024-2026. Parties under the Paris Agreement are required to submit their first biennial transparency report (BTR) and national inventory report, if submitted as a stand-alone report, in accordance with the MPGs, at the latest by 31 December 2024." For more information please visit: https://unfccc.int/national-reports-from-non-annex-i-parties

[42] Non-Annex I Parties are mostly developing countries of which Uruguay is part of. At: https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states

[43] More information at: https://unfccc.int/files/national_reports/non-annex_i_natcom/application/pdf/final_guide_for_peer_review_report_final_webupload.pdf

compared to the standard 3.5 years under the UNFCCC framework, which Sustainalytics notes will enhance transparency, data availability and accountability to monitor the progress in achieving SPT 1.

KPI 2 data will be reviewed and verified every four years following the cartography implementation (corresponding to years 2021, 2025, 2029 and 2033) according to a set of criteria, including (i) for the estimation of forest area change over time, particularly on the application of remote-sensing techniques, as per the 2006 IPCC Guidelines and the IPCC 2003 Good Practice Guidance, (ii) the Global Forest Observations Initiative (GFOI) Methods and Guidance (MGD), (iii) the quality of the report on native forest area as per the framework of the TACCC principles established by the IPCC.

Section 2: Assessment of Uruguay's Sustainability Strategy

Credibility of Uruguay's Sustainability Strategy

Since 1990, Uruguay has experienced political stability and stable economic growth, with an average annual real GDP growth rate of 2.5% from 1990 to 2020.[44] This has resulted in Uruguay being classified by the World Bank as a high-income country as of 2022.[45] Uruguay's economy is characterized for its export-oriented agricultural sector, a well-educated workforce, and high levels of social spending, which makes the country stand out in Latin America for its low level of inequality, poverty and almost non-existent extreme poverty.[46,47]

In 2019, Uruguay adopted the National Development Strategy to 2050, which sets the grounds to develop policies and align existing regulations toward a long-term sustainable development of the country.[48] The strategy focuses on three areas: (i) sustainable productive transformation, which puts environmental protection as a key factor for economic development, (ii) social transformation, which addresses social protection and inequality, and (iii) transformation of gender relations, which aims to tackle demographic and cultural gender changes.[49]

Regarding environmental protection, Uruguay has ratified the Paris agreement and published its First Nationally Determined Contribution (NDC) in 2017.[50,51] Uruguay has the ambition to become carbon dioxide-neutral by 2050 and, under its first NDC, has committed to achieving a 24% reduction in CO_2, 57% reduction in CH_4 and 48% reduction in N_2O emissions intensity per GDP unit, and a 32% reduction in CH_4 and 34% reduction in N_2O emissions intensity per product unit (kilograms of beef cattle measured in live weight) by 2025 compared to 1990. The country aims to preserve 100% of (i) the native forest area present in 2012, (ii) the forest plantation area under management in 2015, and (iii) the shade and shelter forest plantation area available in 2012 by 2025. The country has further committed to avoiding CO_2 emissions from soil organic carbon in 10% of the grasslands area, in 50% of the peatlands area present in 2016, and in 75% of the cropland area under the plans of soil use and management of 2016 as well as CO_2 sequestration in the remaining 25% of the cropland area.[52] To support the achievement of these targets, the country published its Long-Term Climate Strategy 2020-2050 in 2021, which sets trajectories and scenarios for emissions reductions and carbon sequestration until 2050 and aims to be the basis for its future NDCs.[53]

At a national level, Uruguay has set a series of strategies and policies to address climate change and achieve the targets set. The Environment National Plan set targets for 2030 across three areas (i) environmental protection targets, which include a 30% reduction in particulate matter emissions in urban areas from 2014; (ii) sustainable productive activities, which include the

[44] The World Bank Group, "Uruguay", at: https://data.worldbank.org/country/uruguay
[45] The World Bank Group, "World Bank Country and Lending Groups", at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-worldbank-country-and-lending-groups
[46] The World Bank Group, "The World Bank in Uruguay", at: https://www.worldbank.org/en/country/uruguay/overview#1
[47] CIA, "The World Factbook", at: https://www.cia.gov/the-world-factbook/countries/uruguay/#economy
[48] UN CEPAL "Estrategia Nacional de Desarrollo Uruguay 2050", (2019), at: https://observatorioplanificacion.cepal.org/sites/default/files/plan/files/Estrategia_Desarrollo_2050.pdf
[49] Ibid.
[50] UNFCCC secretariat - NDC Registry, "Uruguay", (2017), at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[51] UN Treaty Collection, "Paris Agreement", (2016), at: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en
[52] UNFCCC secretariat - NDC Registry, "Uruguay", (2017), at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[53] Ministry of Environment Uruguay, "Estrategia Climática de Largo Plazo de Uruguay", (2021), at: https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/estrategia-climatica-largo-plazo-uruguay?msclkid=b83c27bfcf7a11ecb77292489471362e

expansion of renewable sources in the energy mix based on the Energy Policy for the 2005–2030 period;[54] and (iii) environmental management targets, which include the creation of an environmental complaints system that promotes citizens participation.[55] Furthermore, in 2018, Uruguay published its National Strategy for Native Forest for the 2018 -2030 period, which focuses on the sustainable management of native forests and their biodiversity, and within the UN Framework Convention on Climate Change, aims to reduce emissions from deforestation and forest degradation through the REDD+ Program.[56,57]

Sustainalytics is of the opinion that the Framework is aligned with Uruguay's climate change and renewable energy strategies, policies and commitments. In view of the above, Sustainalytics considers Uruguay to be well-positioned to issue the sustainability financing instruments that may assist the country in reaching its carbon reduction and forest preservation goals, and sustainability targets.

Uruguay's Environmental and Social Risk Management

Sustainalytics acknowledges that while the SPTs defined by Uruguay under the Framework are impactful, activities associated with achieving them may bear environmental and social risks related to land use and biodiversity issues associated with large-scale infrastructure development, emissions, effluents and waste generated in construction, community relations, human rights, occupational health and safety, and corruption.

Sustainalytics comments below on Uruguay's ability to mitigate such potential risks:

- The Uruguayan Constitution enshrines the right to access clean water and the duty of everyone to avoid any act that exploits, destroys or pollutes the environment.[58] Uruguay has been a signatory to the Convention on Biological Diversity since 1994, and to the United Nations Convention to Combat Desertification since 1999.[59,60] Uruguay has also established a series of policies and regulations to ensure the constitutional right to protection for the environment. The Environmental Act, passed in 2008, declared as a national interest, environmental protection, biodiversity preservation, appropriate management of hazardous waste, and the formulation and implementation of national environmental and sustainable development policies.[61] With the aim of reducing GHG emissions, the Efficient Use of Energy in the National Territory and the Solar Thermal Energy laws, also declared as a national interest, the pursuit of energy efficiency across the country as well as the promotion of solar energy development.[62,63] In 2017, Uruguay adopted the National Climate Change Policy that aims to promote the mitigation and adaptation to climate change, as well as the participation of all sectors, both public and private, to achieve a low carbon economy.[64] Further, the National Environment System, created in 2016, aims to articulate all public policies related to the environment, water and climate change.[65]
- Since 1994, Uruguay has mandated an Environmental Impact Assessment for all large-scale infrastructure developments. The aim of this requirement is to anticipate and prevent the environmental consequences of a project before its execution. The assessment requires primary environmental approval by the affected communities, which ensures community participation in such large and impactful developments.[66]
- Uruguay has ratified a number of international conventions on human rights, including the International Covenant on Civil and Political Rights, the Convention on the Elimination of All Forms of Discrimination against Women, the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the

[54] MIEM Uruguay, "Política Energética 2005-2030", (2008), at: http://www.eficienciaenergetica.gub.uy/documents/20182/22528/Pol%C3%ADtica+Energ%C3%A9tica+2005-2030/841defd5-0b57-43fc-be56-94342af619a0
[55] Ministry of Environment Uruguay, "Plan Nacional Ambiental para el Desarrollo Sostenible", (2019), at: https://www.gub.uy/ministerio-ambiente/comunicacion/publicaciones/plan-nacional-ambiental-para-desarrollo-sostenible
[56] Ministry of Livestock Agriculture and Fisheries, "Estrategia Nacional de Bosque Nativo", (2018), at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/sites/ministerio-ganaderia-agricultura-pesca/files/documentos/publicaciones/estrategia_nacional_de_bosque_nativo.pdf
[57] Ministry of Livestock Agriculture and Fisheries, "REDD+", (2020), at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/politicas-y-gestion/redd
[58] Parliament of Uruguay, "Constitución de la República", (2004), at: https://parlamento.gub.uy/documentosyleyes/constitucion
[59] Convention on Biological Diversity, "Country Profiles", at: https://www.cbd.int/countries/?country=uy
[60] United Nations Convention to Combat Desertification, "Knowledge Hub - Uruguay", at: https://www.unccd.int/our-work-impact/country-profiles/uruguay
[61] Parliament of Uruguay, "Ley Nº 17.283", (2008), at: https://legislativo.parlamento.gub.uy/temporales/leytemp7573741.htm
[62] Parliament of Uruguay, "Ley Nº 18.597", (2009), at: https://legislativo.parlamento.gub.uy/temporales/leytemp5465729.htm
[63] Parliament of Uruguay, "Ley Nº 18.585", (2009), at: https://legislativo.parlamento.gub.uy/temporales/leytemp8562162.htm
[64] UNDP Uruguay, "Política Nacional de Cambio Climático", (2017), at: https://www.uy.undp.org/content/uruguay/es/home/library/environment_energy/politica-nacional-de-cambio-climatico.html
[65] IMPO Official Information Center, "Normativa y Avisos Legales del Uruguay – Decreto N° 172/016", (2016), at: https://www.impo.com.uy/bases/decretos/172-2016
[66] Government of Uruguay, "Evaluación de Impacto Ambiental", (2022), at: https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/evaluacion-impacto-ambiental

Convention on the Rights of Persons with Disabilities.[67] The Uruguayan Constitution establishes that every citizen has the right to be protected in the enjoyment of their life, honour, liberty, security, work and property, and that all people are equal before the law.[68]

- Uruguay has been a member of the International Labour Organization (ILO) since 1919.[69] The country has signed all eight of the fundamental ILO conventions and 99 out of the 178 ILO technical conventions.[70] Uruguay has established a legal system to protect occupational health and safety, including the laws and decrees related to the prevention of accidents in all industries;[71] labour inspection in industrial workplaces and agriculture;[72] minimum compulsory provisions for management, prevention, and protection against risks derived from commercial, industrial, rural or service activities;[73] and the creation of the National Occupational Safety and Health Council.[74] Regulations have also been established that apply to various individual sectors, such as the decree for health and safety in the construction sector,[75] and the minimum compulsory provisions for the management, prevention and protection against risks derived from production activity in the chemical industry.[76]
- Uruguay has ratified the United Nations Convention against Corruption.[77] At the national level, the country has promulgated laws and regulations to combat corruption and increase citizen participation and government transparency. The Anti-Bribery Law is the main regulation for public officials' activities including government procurement and public funds management.[78] According to this law, officials must act in good faith in the exercise of power and put collective needs satisfaction over personal interests. Furthermore, all procurement activities must be appropriately divulged to ensure transparency. Uruguay is ranked 18th out of 180 countries in Transparency International's Corruption Perceptions Index in 2021 and ranks first in Latin America.[79]

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Uruguay 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.

Section 3: Impact of the SPTs

Importance of decarbonizing the Uruguayan economy

Uruguay has seen a reduction in the carbon intensity of GDP compared to 1990 by approximately 44% in 2020 (per official estimates as of April 2022). Looking at its GHG emissions inventory, Uruguay's agriculture and cattle raising sector has been the largest source of GHG emissions, with 73% of total emissions in 2019, followed by the energy sector (21%) and the waste sector (3.7%).[80]

Increasing its efforts to combat climate change, Uruguay launched a long-term climate strategy (LTCS) in December 2021 as part of its commitment to the Paris Agreement goals. The LTCS contemplates Uruguay's GHG emissions ambitions, targeting CO_2 neutrality and the stabilization of CH_4 and N_2O emissions by 2050.[81] The LTCS builds on the country's 2017 NDC, which sets

[67] United Nations Human Rights Treaty Bodies, "UN Treaty Body Database", at: https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?countryID=188&Lang=EN
[68] Parliament of Uruguay, "Constitución de la República", (2004), at: https://parlamento.gub.uy/documentosyleyes/constitucion
[69] International Labour Organization, "NORMLEX – Uruguay", at: https://www.ilo.org/dyn/normlex/en/f?p=1000:11110:0::NO:11110:P11110_COUNTRY_ID:102876
[70] International Labour Organization, "NORMLEX – Ratifications for Uruguay", at: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102876
[71] IMPO Official Information Center, "Ley N°5032", (1914), at: https://www.impo.com.uy/bases/leyes/5032-1914
[72] IMPO Official Information Center, "Decreto N° 680/977", (1977), at: https://www.impo.com.uy/bases/decretos/680-1977
[73] IMPO Official Information Center, "Decreto N° 291/007", (2007), at: https://www.impo.com.uy/bases/decretos/291-2007
[74] IMPO Official Information Center, "Decreto N° 83/996", (1996), at: https://www.impo.com.uy/bases/decretos/83-1996
[75] IMPO Official Information Center, "Decreto N° 53/996", (1996), at: https://www.impo.com.uy/bases/decretos-originales/53-1996
[76] IMPO Official Information Center, "Decreto N° 306/005", (2005), at: https://www.impo.com.uy/bases/decretos/306-2005
[77] UN Office on Drugs and Crime, "Country Profiles – Uruguay", at: https://www.unodc.org/unodc/en/corruption/country-profile/countryprofile.html#?CountryProfileDetails=%2Funodc%2Fcorruption%2Fcountry-profile%2Fprofiles%2Fury.html
[78] IMPO Official Information Center, "Ley N° 17.060", (1999), at: https://www.impo.com.uy/bases/leyes/17060-1998
[79] Transparency International, "Corruption Perceptions Index: Uruguay", at: https://www.transparency.org/en/cpi/2021/index/ury
[80] Ministry of Environment, "National Green House Gas Emissions Inventory 1990-2019: To the Conference of the Parties to the Framework Convention of the United Nations on Climate Change", (2021), at: https://www.gub.uy/ministerio-ambiente/sites/ministerio-ambiente/files/2022-01/NIR%201990%20-%202019.pdf
[81] Uruguay LTCS at: https://unfccc.int/sites/default/files/resource/URY_LTS_Dec2021.pdf

intensity reductions of 24% for CO_2, 57% for CH_4, and 48% for N_2O emissions per GDP unit from the base year (1990).[82] SPT 1.2 therefore builds on the LTCS, further contributing to the reduction of CO_2, CH_4 and N_2O emissions.

Evidence on this progress can be seen in the Uruguayan energy sector. Uruguay is the leading Latin American country in the Energy Transition Index,[83] having managed to generate 94% of its electricity from renewable sources in 2020 – a significant increase from 39% in 2012.[84]

Uruguay's intensity of CH_4 emissions per unit of beef produced were also reduced by 29.2% in 2019 (based on 2020 CH_4 emissions estimates as of April 2022) in comparison to 1990, despite beef cattle production overall having increased in the period.[85] This progress was achieved in the context of the National Adaptation Plan to Climate Change and Climate Variability for the Agricultural and Livestock Sector,[86] under which using natural grassland feeding and other forage management technologies resulted in a virtual stabilization of total emissions in the sector.

Based on the above context, Sustainalytics is of the opinion that Uruguay's issuance of sustainability-linked bonds will provide financing for projects that are expected to help to reduce national GHG emissions, achieving Uruguay's emissions reduction targets and further facilitate the transition to a decarbonized economy.

Importance of preserving Uruguay's native forests

In 2021, Uruguay and 140 other nations endorsed the Glasgow Leaders' Declaration on Forests and Land Use,[87] making commitments (including, a "zero-deforestation" commitment by 2030) that included strengthening efforts to conserve forests and other terrestrial ecosystems and accelerating their restoration, as well as facilitating the alignment of financial flows with international climate goals to reverse forest loss and degradation. These plans delineate the importance of forest conservation for biodiversity preservation and climate change mitigation.

Uruguay is one of the few Latin American countries whose native forest area has increased in recent decades, expanding by approximately 42% between 1990 and 2020,[88] partly owing to the country's forestry law (Ley Forestal 15939)[89] and its national strategy for native forests,[90] among other regulations, policies and initiatives aimed at the preservation, restoration and regeneration efforts. An example of such initiatives is the "Plantatón Uruguay" campaign, which aims to plant 1,000 native trees in collaboration with civic societies and various stakeholders. The initiative builds an enriching experience by raising awareness and sharing knowledge about biodiversity and native species.[91]

Uruguay's native forests cover 4.6% of the country's land area[92] and provide several ecological and economic benefits. Ecologically, the forests are home to approximately 700 native plants and animal species, including trees, shrubs, birds, mammals and reptiles.[93] Additionally, native forests are instrumental in combating climate change, serving as carbon sinks[94]

[82] Uruguay 2017 NDC at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uruguay%20First/Uruguay_First%20Nationally%20Determined%20Contribution.pdf
[83] World Economic Forum, Energy Transition Index 2021 at: https://www.weforum.org/reports/fostering-effective-energy-transition-2021/in-full/rankings
[84] National Energetic Balance 2020 - BEN 2020, Ministry of Industry, Energy and Mining. Available at: https://ben.miem.gub.uy/descargas/1balance/1-1-Libro-BEN2020.pdf
[85] As per the preliminary information from 2020 shared by the Economy and Finance Ministry of Uruguay.
[86] Uruguay Fifth National Communication, at: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/63801597_Uruguay-NC5-1-20191231%20URUGUAY%20NC5%20EX%20SUM%20ENG.pdf
[87] UN Climate Change Conference UK 2021, "Glasgow Leaders' Declaration on Forests and Land Use", at: https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/
[88] FAO, "Global Forest Resources Assessment 2020", (2020), at: https://www.fao.org/3/ca9825en/ca9825en.pdf
[89] Ley N° 15939. Ley Forestal - Fondo Forestal - Recursos Naturales, at: https://uy.vlex.com/vid/ley-n-15939-ley-644725781#:~:text=Ley%20Forestal%20%2D%20Fondo%20Forestal%20%2D%20Recursos%20Naturales,-Texto%20Refundido%20Texto&text=Decl%C3%A1ranse%20de%20inter%C3%A9s%20nacional%20la,general%2C%20de%20la%20econom%C3%ADa%20forestal.
[90] Uruguay Estrategia Nacional de Bosque Nativo at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/sites/ministerio-ganaderia-agricultura-pesca/files/documentos/publicaciones/estrategia_nacional_de_bosque_nativo.pdf
[91] Plantatón Uruguay, at: https://plantatonuruguay.org/
[92] Ministerio Ganaderia Agricultura Pesca statistics, at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/sites/ministerio-ganaderia-agricultura-pesca/files/2020-01/Datos%20de%20superficie%20forestal%20al%202018.pdf
[93] Uruguay Estrategia Nacional de Bosque Nativo at: https://www.gub.uy/ministerio-ganaderia-agricultura-pesca/sites/ministerio-ganaderia-agricultura-pesca/files/documentos/publicaciones/estrategia_nacional_de_bosque_nativo.pdf
[94] UNECE, Carbon sinks and sequestration, at: https://unece.org/forests/carbon-sinks-and-sequestration

while providing enhanced climate resiliency (native trees are less flammable in comparison to exotic ones).[95,96] Economically, the total forestry sector of Uruguay accounted for 3.5% of the country's GDP in 2019,[97] employing more than 25,000 individuals, mainly in rural areas.[98] Significant investments in projects such as sawmills and pulp mills are expected to boost the sector's contribution to grow the country's GDP by an additional 2% and create around 10,000 jobs.[99]

Sustainalytics is of the opinion that the Framework is expected to contribute to the country's preservation, regeneration and reforestation efforts for its native forests.

Alignment with/contribution to SDGs

The Sustainable Development Goals were adopted by the United Nations General Assembly in September 2015 and form part of an agenda for achieving sustainable development by the year 2030. The sustainability-linked bonds issued under the Framework are expected to help advance the following SDG goals and targets:

KPI	SDG	SDG Target
Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change	SDG 13 Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning 13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
	SDG 8 Decent work and economic growth	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
Native Forest area, % of maintenance with respect to baseline year	SDG 13 Climate Action	13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
	SDG 15 Life on land	15.2 Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

[95] Profor, How Forests Enhance Resilience to Climate Change at: https://www.profor.info/knowledge/how-forests-enhance-resilience-climate-change
[96] UNDP, Planting footprints of hope in Uruguay, at: https://undp.medium.com/planting-footprints-of-hope-in-uruguay-4915a19dc364
[97] The World Bank Data, at: https://data.worldbank.org/country/UY
[98] UPMPulp, The Uruguayan forestry miracle, at: https://www.upmpulp.com/articles/pulp/20/forests-in-uruguay/
[99] Ibid

Conclusion

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

- For KPI 1: Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change

  SPT 1.1: Achieve at least a 50% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year
  SPT 1.2: Achieve more than 52% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year

- For KPI 2: Native Forest area, % of maintenance with respect to baseline year

  SPT 2.1: Maintain at least 100% of the Native Forest area by 2025, compared to the 2012 baseline
  SPT 2.2: Achieve an increase higher than 3% in the Native Forest area by 2025, compared to the 2012 baseline

Sustainalytics considers KPI 1 to be strong based on its clear and consistent externally benchmarkable methodology, and its high relevance to GHG emissions, a material issue for Uruguay. KPI 2 is considered to be strong based on its direct relationship to performance and high relevance to of native forest area preservation, a material environmental issue for the country. Sustainalytics believes that the SPTs align with Uruguay's sustainability strategy and commitments and considers SPT 1.1 and SPT 1.2 to be ambitious given they are above historical performance; SPT 2.1 to be ambitious given that it is aligned with past performance; and SPT 2.2 to be highly ambitious, given that it goes above historical performance and given its performance against regional countries. Both targets related to KPI 2 are recognized to support the goal of forest preservation.

Based on the above, Sustainalytics considers Uruguay's Sovereign 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.

Appendix 1: Sustainability-Linked Bonds - External Review Form

Section 1. Basic Information

Issuer name: Government of Uruguay

Sustainability-Linked Bond ISIN: Not known at time of publication

Independent External Review provider's name for second party opinion pre-issuance (sections 2 & 3): Sustainalytics

Completion date of second party opinion pre-issuance: September 16, 2022

Independent External Review provider's name for post-issuance verification (section 4): Not known at time of publication

Completion date of post issuance verification: December 14, 2022

At the launch of the bond, the structure is:

☐ a step-up structure

☒ a variable redemption structure

Section 2. Pre-Issuance Review

2-1 SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review:

☒ assessed all the following elements (complete review)

☐ only some of them (partial review):

- ☐ Selection of Key Performance Indicators (KPIs)
- ☐ Calibration of Sustainability Performance Targets (SPTs)
- ☐ Verification
- ☐ Bond characteristics (acknowledgment of)
- ☐ Reporting

☐ and confirmed their alignment with the SLBP.

2-2 ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- ☒ Second Party Opinion
- ☐ Verification
- ☐ Certification
- ☐ Scoring/Rating

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

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

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

• For KPI 1:

SPT 1.1: Achieve at least a 50% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year

SPT 1.2: Achieve more than 52% reduction in GHG emissions per unit of real GDP by 2025, from a 1990 reference year

• For KPI 2:

SPT 2.1: Maintain at least 100% of the Native Forest area by 2025, compared to the 2012 baseline

SPT 2.2: Achieve an increase higher than 3% in the Native Forest area by 2025, compared to the 2012 baseline

Sustainalytics considers KPI 1 to be strong based on its clear and consistent externally benchmarkable methodology, and its high relevance to a material issue. KPI 2 is considered to be strong based on its direct relationship to performance and high relevance to a material environmental issue. SPTs align with Uruguay's sustainability strategy and commitments and considers SPT 1.1 and SPT 1.2 to be ambitious given they are above historical performance.

Sustainalytics considers Uruguay's SPT 2.1 to be ambitious given that it is aligned with past performance. Sustainalytics considers SPT 2.2 to be highly ambitious, given that it goes above historical performance and given its performance against regional countries. Both targets are recognized to support the goal of forest preservation.

Based on the above, Sustainalytics considers Uruguay's Sovereign 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.

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)*:
Uruguay's Sovereign Sustainability-Linked Bond (SSLB) Framework includes two KPIs: Reduction of aggregate gross GHG emissions per real GDP unit with respect to reference year in percentage change, and Native Forest area, % of maintenance with respect to baseline year (see Table 1). Sustainalytics considers the KPIs chosen to be strong.

List of selected KPIs:

- Aggregate gross GHG emissions as a share of GDP
- Area of native forest

Definition, Scope, and parameters

☒ Clear definition of each selected KPIs

☒ Clear calculation methodology

☐ Other (please specify):

Relevance, robustness, and reliability of the selected KPIs

☒ Credentials that the selected KPIs are relevant, core and material to the issuer's sustainability and business strategy.

☒ Credentials that the KPIs are measurable or quantifiable on a consistent methodological basis

☒ Evidence that the KPIs are externally verifiable

☐ 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 Uruguay's sustainability strategy. Sustainalytics further considers SPT 1.1 and 1.2 to be ambitious based on their implied improvement against historical performance. Sustainalytics considers SPT 2.1 to be ambitious given its performance against regional countries and SPT 2.2 to be highly ambitious given this target is above historical performance and the performance against regional countries.

Rationale and level of ambition

- ☒ Evidence that the SPTs represent a material improvement
- ☒ Evidence that SPTs are consistent with the issuer's sustainability and business strategy
- ☒ Credentials on the relevance and reliability of selected benchmarks and baselines
- ☒ Credentials that the SPTs are determined on a predefined timeline
- ☐ Other (please specify):

Benchmarking approach

- ☒ Issuer own performance
- ☐ reference to the science
- ☒ Issuer's peers
- ☐ Other *(please specify):*

Additional disclosure

- ☒ potential recalculations or adjustments description
- ☒ identification of key factors that may affect the achievement of the SPTs
- ☒ issuer's strategy to achieve description
- ☐ Other (please specify):

3-3 BOND CHARACTERISTICS

Overall comment on the section (*if applicable*):
Sustainalytics considers the SPTs to be aligned with Uruguay's sustainability strategy. Sustainalytics further considers SPT 1.1 and 1.2 to be ambitious based on their implied improvement against historical performance. Sustainalytics considers SPT 2.1 to be ambitious given its performance against regional countries and SPT 2.2 to be highly ambitious given this target is above historical performance and the performance against regional countries.

Financial impact:

- ☒ variation of the coupon
- ☐ Other (*please specify*):

Structural characteristic:

- ☒ Other (*please specify*): Step ups will be applied to the issued instruments should either SPT 1.1 or 2.1 not be achieved, while step downs will be applied should either SPT 1.2 or 2.2 be achieved. Should only SPTs 1.1 and 2.1 be achieved, no changes to the instruments' coupon rates will be applied.

3-4 REPORTING

Overall comment on the section (*if applicable*):
Uruguay commits to publish official, externally verified reports on an annual basis for KPI 1, and every four years for KPI 2. Interim updates will also be provided for KPI 2 on an annual basis. Reports and updates will be published on Uruguay's

Sovereign Sustainability Linked Bonds website. Uruguay commits to disclose relevant information that may affect the KPIs. The reporting commitments are aligned with the Sustainability-Linked Bond Principles 2020.

Information reported:

- ☒ performance of the selected KPIs
- ☒ level of ambition of the SPTs
- ☒ verification assurance report
- ☐ Other (*please specify*):

Frequency:

- ☒ Annual
- ☒ Other (please specify): Annual reports will be published on performance related to SPT 1, and performance related to SPT 2 will be reported every four years. Interim reports related to KPI 2 will be published annually.
- ☐ Semi-annual

Means of Disclosure

- ☐ Information published in financial report
- ☐ Information published in ad hoc documents
- ☒ Information published in sustainability report
- ☐ Other (please specify):
- ☐ 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
- ☒ 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*):
Government of Uruguay commits to have external reasonable assurance conducted against each SPT for each KPI at the reporting date, which is aligned with the SLBP.

Information reported:

☐ limited assurance

☐ reasonable assurance

☒ Other (please specify): Uruguay commits to have external assurance conducted by the United Nations Development Program, against each SPT for each KPI at the reporting date, and throughout the lifetime of the bond.

Frequency:

☒ Annual

☐ Semi-annual

☒ Other (please specify): Every four years for SPT 2.

Material change:

☒ Perimeter

☒ KPI methodology

☒ SPTs calibration

Disclaimer

About Sustainalytics, a Morningstar Company

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.

For more information, visit www.sustainalytics.com

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