



Uruguay's Sovereign Sustainability-Linked Bond (SSLB) 2026 Annual Report



May 2026



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Executive Summary

*This **fourth Annual Report** on Uruguay's Sovereign Sustainability-Linked Bond (SSLB) provides an update **through 2024** on the evolution of **Key Performance Indicator 1 (KPI-1)**, the intensity of greenhouse gas emissions per unit of real Gross Domestic Product, which is reported and verified every year. It also presents quantitative and qualitative information on **Key Performance Indicator 2 (KPI-2)**, which relates to the maintenance of the native forest area and is reported and verified every four years. The report also outlines the policy agenda and measures implemented by successive Uruguayan administrations, along with private-sector-oriented incentives, designed to advance the country's environmental and sustainability objectives.*

By 2024, KPI-1 had recorded a 48% reduction in the intensity of aggregate greenhouse gas (GHG) emissions per unit of real GDP, relative to the 1990 baseline. Compared to 2023, the indicator improved by 2 percentage points. This progress resulted from a combination of a 0.9% reduction in absolute gross GHG emissions and 3.3% growth in real GDP. The decline in gross GHG emissions in 2024 was driven primarily by lower carbon dioxide (CO₂) emissions within the electricity generation category due to a higher share of renewables in the electricity mix, together with a decrease in estimated nitrous oxide (N₂O) emissions linked to the use of synthetic nitrogen fertilizers in agricultural production. These reductions more than offset the increase in emissions from higher fossil fuel consumption in the manufacturing and construction sectors and ground transportation. The expansion of real GDP further contributed to the year-over-year improvement in emission intensity. As a result, as of 2024, KPI-1 remained 2 percentage points below the 2025 target (a 50 percent reduction compared to baseline).

The reported values for KPI-1 adhere to the methodology and good practices set out in the 2006 IPCC Guidelines. The United Nations Development Programme (UNDP), in its external verification report published alongside this Annual Report, verified that the underlying data and information comply with the IPCC's TACCC quality principles (Transparency, Accuracy, Consistency, Comparability, and Completeness).

With regards to **KPI-2**, it had **achieved full maintenance of native forest area by 2021 relative to the established baseline**, as reported in the First SSLB Annual Report. During the period 2024-2025, the Directorate General of Forestry (DGF) has implemented various measures to preserve and protect native forests, including strengthened communication strategies through awareness-raising and information campaigns. The KPI-2— which is based on official national cartography of native forests—is reported every four years (the next value to be published in May 2027).

Uruguay remains firmly committed to advancing its transition toward a low-carbon and environmentally sustainable economy. As a major food supplier to a growing global population, the country seeks to reconcile increased agricultural and livestock production with continued reductions in the intensity of methane and nitrous oxide emissions, while safeguarding its unique grassland ecosystems. In addition, leveraging its well-established



leadership in large-scale wind power and clean energy generation, Uruguay continues to expand its renewable energy capacity. The country is also focused on reducing carbon dioxide emissions in hard-to-abate sectors—such as freight transportation—through the promotion of electric mobility, the development of green hydrogen production, and the sustainable use of its abundant renewable resources, including water, wind, and biomass.

The protection and sustainable management of native forests remain a cornerstone of the national environmental strategy. Thanks to strong legal safeguards, tax incentives, and ongoing investment, agricultural growth has not translated into deforestation, setting Uruguay apart from regional and global trends. The government has reinforced these efforts through enhanced monitoring and targeted awareness-raising campaigns to promote forest conservation.



Chapter 1

Introduction





Key Features of the Sovereign Sustainability Linked Bond (SSLB) Framework

This Sovereign Sustainability-Linked Bond (SSLB) Framework, published in 2022, is the cornerstone of Uruguay's entry into the world of sovereign sustainable finance. The SSLB ties the country's financing strategy and cost of capital to the achievement of its climate and nature-based goals under the Paris Agreement.¹

To this end, the SSLB incorporates two KPIs: (i) reducing the intensity of gross GHG emissions in the economy (**KPI-1**), and (ii) preserving the area of native forests (**KPI-2**). Each KPI has two associated **Sustainability Performance Targets (SPTs)**, based on quantitative goals for 2025 that align with Uruguay's first Nationally Determined Contribution (NDC) under the Paris Agreement. According to the Second Party Opinion (SPO) prepared by Sustainalytics at the time, the selected KPIs are material and relevant to Uruguay's sustainability strategy, and the SPTs are ambitious. The bond also features an innovative step-up/step-down interest rate mechanism: the coupon decreases if Uruguay exceeds its NDC targets and increases if it falls short.

This fourth SSLB Annual Report updates the performance of **KPI-1 through 2024**.² The data sources and calculation methodologies for KPI-1 are consistent with those Uruguay uses to report progress on its NDC to the United Nations Framework Convention on Climate Change (UNFCCC). The United Nations Development Programme (UNDP), in its external verification report for KPI-1 through 2024, confirmed that the reported values adhere to the methodology and good practices set out in the 2006 IPCC Guidelines. The UNDP also verified that the underlying data and information comply with the IPCC's TACCC quality principles (Transparency, Accuracy, Consistency, Comparability, and Completeness).

Regarding **KPI-2**, the SSLB Framework establishes that this indicator—based on official national cartography of native forests—will be reported every four years. While the next update (with data for 2025) is scheduled for May 2027, this Report provides an overview of the main actions undertaken over the last few years to monitor, conserve and promote the regeneration of Uruguay's native forests.

The preparation of this Annual Report was guided by the International Capital Market Association's (ICMA) voluntary Guidelines on Post-Issuance Disclosure, Reporting, and Verification for Sustainability-Linked Bonds (SLBP, 2023), as well as the Enhanced Labelled Bond Principles developed by the Emerging Markets Investors Alliance (EMIA).³

¹ Information on Uruguay's first Nationally Determined Contribution to the Paris Agreement available [here](#).

² For an overview of the evolution of KPI-1 and KPI-2 through 2021 check the First Annual Report, and for the evolution of KPI-1 in 2022 and 2023, see the Second and Third SSLB Annual Reports, respectively, [here](#).

³ See ICMA's guideline [here](#) and EMIA Guidelines [here](#).



Consistent with the three previous SSLB Annual Reports, this fourth edition reflects a “whole-of-government” approach. It draws on the contributions of technical teams from the Ministry of Economy and Finance (MEF), the Ministry of Environment (MA), the Ministry of Industry, Energy and Mining (MIEM), and the Ministry of Livestock, Agriculture and Fisheries (MGAP), with additional support from the Ministry of Foreign Affairs (MRREE). Effective inter-ministerial coordination is essential to ensuring data availability, transparency, and clear communication to the market on Uruguay’s progress toward its sustainability goals.

As in previous years, the Ministry of Economy and Finance (MEF) engaged with stakeholders to refine the content of the report, incorporating feedback from earlier publications. This process included active dialogue with global asset managers, the Emerging Markets Investors Alliance (EMIA), the Natural Capital Project at Stanford University, and the Assessing Sovereign Climate-related Opportunities and Risks (ASCOR) project group. The report also benefited from the ongoing technical and financial support provided by the Inter-American Development Bank (IDB) and the United Nations Development Programme (UNDP).

As established in the SSLB Framework, Uruguay will continue to publish, on or before May 31st of each year, an Annual Report containing updated information on the KPIs (at the frequency defined for each) together with an annual External Verification Report. These documents will remain available on the dedicated SSLB website, enabling investors to assess not only performance against the 2025 targets but also the long-term trajectory of both KPIs over the life of the bond.



Main characteristics and transaction details of the outstanding SSLB

Uruguay issued its inaugural Sovereign Sustainability-Linked Bond in October 2022 and reopened it in 2023. The table below summarizes its key features.

Issuer:	República Oriental del Uruguay			
ESG label:	Sovereign Sustainability-Linked Bond			
Currency:	US dollar-denominated			
Format:	SEC-Registered			
Bond Issuances:	First issuance: USD 1.5 billion (October 2022)			
	Reopening: USD 700 million (November 2023)			
Bond's Amount Outstanding:	USD 2.2 billion dollars			
Annual Coupon:	5.75%			
Maturity:	October 2034			
Amortization:	3 equal principal payments for the last 3 years			
Key Performance Indicator ("KPI"):	KPI-1		KPI-2	
	<i>Reduction in aggregate gross GHG emissions (in CO₂e) per real GDP unit, with respect to reference year 1990 (in %)</i>		<i>Maintenance of native forest area (in hectares), with respect to reference year 2012 (in %)</i>	
KPI Reporting and Verification Frequency:	Every year		Every four years	
Sustainability Performance Target ("SPT"):	SPT 1.1 Based on Uruguay's NDC1 commitment	SPT 1.2 Outperform Uruguay's NDC1 commitment	SPT 2.1 Uruguay's NDC1 commitment	SPT 2.2 Outperform Uruguay's NDC1 commitment
	Achieve at least a 50% reduction in aggregate gross GHG emissions intensity by 2025, compared to reference year 1990	Achieve a reduction of more than 52% in aggregate gross GHG emissions intensity by 2025, compared to reference year	Maintain at least 100% of the native forest area by 2025, compared to reference year 2012	Achieve an increase of more than 3% of the native forest area by 2025, compared to reference year 2012
SPO's Assessment on Degree of Ambition of SPTs:	Ambitious	Ambitious	Ambitious	Highly Ambitious
Two-way interest rate mechanism:	Observation Date:	Year 2025		
	Interest rate step-up trigger:	The annual coupon rate payable on the Bond shall be increased by 15 basis points if SPT 1.1 is not achieved		The annual coupon rate payable on the Bond shall be increased by 15 basis points if SPT 2.1 is not achieved
	Interest rate step-down trigger:		The annual coupon rate payable on the Bond shall be decreased by 15 basis points if SPT 1.2 is achieved	The annual coupon rate payable on the Bond shall be decreased by 15 basis points if SPT 2.2 is achieved
Listing:	Luxembourg Stock Exchange and London Stock Exchange			
Governing Law:	State of New York, United States			
Second Party Opinion ("SPO"):	Sustainalytics			



Chapter 2


Summary of Results




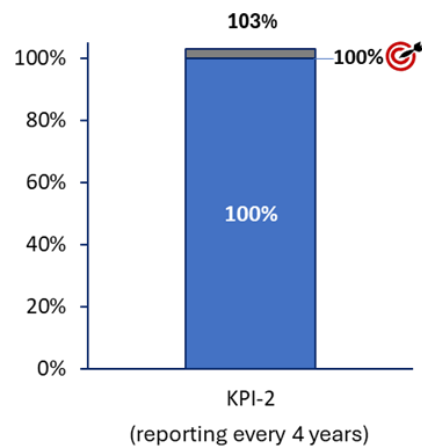
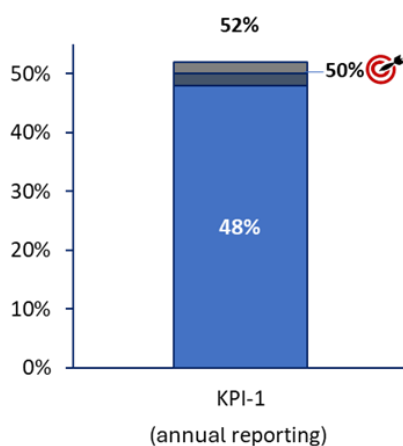


By 2024, **KPI-1** recorded a 48% reduction in the intensity of aggregate gross greenhouse gas (GHG) emissions per unit of real GDP relative to the 1990 baseline. Compared to 2023, the indicator (rounded to the nearest integer) improved by 2 percentage points. This progress resulted from a combination of a 0.9% reduction in absolute gross GHG emissions and 3.3% growth in real GDP. The decline in gross GHG emissions in 2024 was driven primarily by lower carbon dioxide (CO₂) emissions tied to electricity generation due to a high share of renewables in the electricity matrix and a decrease in nitrous oxide (N₂O) emissions linked to the use of synthetic nitrogen fertilizers in agricultural production. These reductions more than offset the increase in emissions from higher fossil fuel consumption in the manufacturing and construction sectors in 2024. The expansion of real GDP further contributed to the year-over-year improvement in emission intensity. As a result, as of 2024, KPI-1 remained 2 percentage points below the 2025 target established under SPT 1.1.

KPI values as of year 2024, compared to SPTs

 KPI-1: Reduction of GHG emissions intensity (compared to reference year 1990, in percent)	
SPT 1.1	-50%
SPT 1.2	-52%
Latest value	-48% (Year 2024)

 KPI-2: Maintenance of Native Forest area (compared to reference year 2012, in percent)	
SPT 2.1	100%
SPT 2.2	103%
Latest value	100% (Year 2021)



Methodology and calculation for each KPI, and corresponding SPT values, are documented in Uruguay's SSLB Framework. The left blue bar indicating the latest KPI-1 value expresses the percent reduction in absolute terms. Source: SSLB Public Database as of April 2026.



As reported in the First SSLB Annual Report in May 2023, **KPI-2** recorded full maintenance of native forest area by 2021 relative to the established baseline. Measured native forest area expanded by 11,832 hectares (approximately 1.4%) compared to 2016, primarily due to natural regeneration, increased vegetation coverage, and a strong conservation strategy supported by a solid regulatory framework.

The complete time series and underlying data for both KPIs from 1990 to 2024 are available in the Public Database section of Uruguay's dedicated SSLB website.⁴

Uruguay is firmly committed to its transition toward a low-carbon, climate-resilient economy. As one of the world's leading food producers, the country is working to increase agricultural and livestock production efficiency and output while continuing to lower the emission intensity of methane and nitrous oxide and preserving its distinctive grassland ecosystems. Building on its recognized success in transforming its electricity matrix into a highly renewable one, Uruguay is fostering the electrification of several end-uses among which electromobility in public transport and light-duty vehicles stands out. Furthermore, the country is advancing in the search for technical solutions for the decarbonization of hard-to-abate sectors, such as the case of a pilot project of hydrogen production to fuel heavy-duty trucks.

The protection of native forests and the prevention of deforestation remain central pillars of Uruguay's environmental strategy. The country has made substantial investments in the sustainable management of its native forests, which enjoy legal protection and tax exemptions. Measures implemented by the Directorate General of Forestry (DGF) have also ensured that agricultural expansion has not become a driver of deforestation.

⁴ See SSLB website [here](#).



Chapter 3

Update on KPI-1 (Annual Frequency)





This section reports on the estimated KPI-1 values through 2024, in accordance with the provisions set forth in Uruguay's SSLB Framework. The methodological reports underpinning the calculation of the KPI-1 series are published on Uruguay's SSLB website, accompanying this Annual Report. Annex 1 contains supplementary information.

Evolution of the KPI-1 through 2024

The KPI-1 tracks the trajectory of the economy-wide GHG emissions intensity in Uruguay. This metric is defined as the percent change in the ratio of aggregate gross GHG emissions (expressed in CO₂ equivalent units (CO₂eq)) to real GDP, relative to this ratio in the baseline year of 1990. The indicator aggregates the three main GHGs (CO₂, CH₄, and N₂O) and the main sectors contributing to the emissions of each GHG, as delineated in the first NDC (NDC1), presented in 2017. The aggregate gross GHG emissions are then normalized by real GDP to calculate the intensity measure.⁵

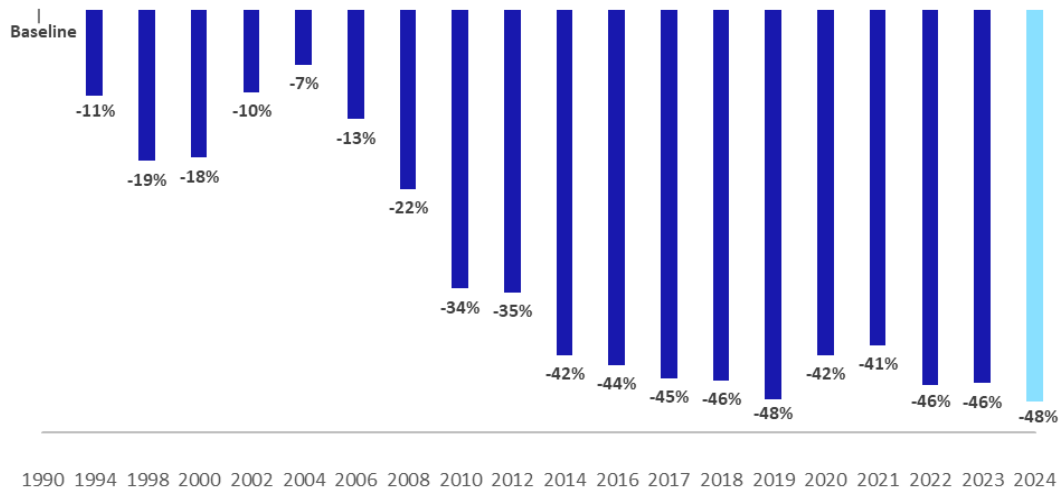
In 2024, the KPI-1 recorded a reduction of 48%, advancing 2 percentage points compared with 2023 (when the reduction stood at 46%). The intensity of GHG emissions declined relative to the prior year, reflecting both a reduction in gross GHG emissions and the recovery of real GDP during 2024 compared to 2023.

Aggregate gross GHG emissions decreased 336 Gg in 2024 with respect to 2023 (a 0.9% decrease, from 36,854 Gg in 2023 to 36,493 Gg in 2024). The decrease in aggregate GHG emissions was related to the AFOLU sector (Agriculture, Forestry and Other Land Uses) and, to a lesser extent, the IPPU (Industrial Processes and Product Use) sector, while the Energy and Waste sectors showed a slight increase, on aggregate, in emissions between 2023 and 2024. Specifically, within the AFOLU sector, the emissions that experienced a downturn are those originating from managed soils (N₂O), explained by the use of synthetic nitrogen fertilizers, whose imports decreased significantly between 2023 and 2024 (22.5% lower than in 2023). On the other hand, real GDP growth was 3.3% in 2024 compared to 2023.

⁵ "Gross Emissions" refers to the fact that it does not account for CO₂ removals by carbon sinks. "Aggregate GHG" refers to the three main economy wide GHGs and all sectors contributing emissions of each GHG, except for Land Use and Land Use Change and Forestry (LULUCF). GHG emissions are aggregated in CO₂-equivalent units using 100-year GWP values, following the IPCC AR5 guidelines. Further methodological information is provided in Annex 2.

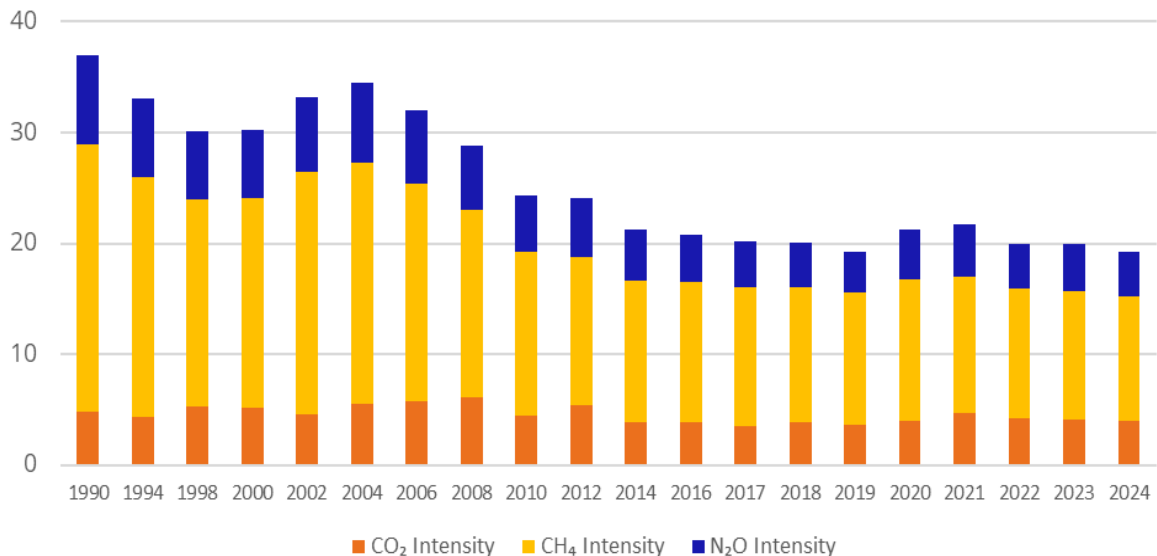


KPI-1: Reduction of the Intensity of Aggregate Gross GHG Emissions per real GDP unit change compared to 1990, in percent



Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC1. Expressed in Gg CO₂eq, metric GWP100 AR5. Real GDP measured in billions of pesos in 2016 constant prices, based on latest official series published by the National Accounts System of the Central Bank in March 2026, and retroplated using the variation rate method as a statistical splicing technique. For the period 1990-2022, data is for years with official NGHGI publication and data for 2023 and 2024 was estimated for the SSLB Annual Report. Source: SSLB Public Database as of April 2026.

Evolution of Uruguay's Intensity of Gross Greenhouse Gas (GHG) Emissions
GHG Emissions as a share of real GDP, by type of gas



Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC1. Expressed in Gg CO₂eq, metric GWP100 AR5. Real GDP measured in billions of pesos in 2016 constant prices, based on latest official series published by the National Accounts System of the Central Bank in March 2026, and retroplated using the variation rate method as a statistical splicing technique. For the period 1990-2022, data is for years with official NGHGI publication and data for 2023 and 2024 was estimated for the SSLB Annual Report. Source: SSLB Public Database as of April 2026.



The table that follows details the evolution of the value of KPI-1 for the period 1990 to 2024 and its fundamental determinants: (i) GHG emissions categorized by gas type, (ii) aggregate gross emissions expressed in CO₂ equivalent, (iii) real GDP, and (iv) GHG intensity within the economy.

KPI-1: Disaggregated Historical Data
1990-2024 series

Year	CO ₂ (Gg)	CH ₄ (Gg, expressed in CO ₂ eq)	N ₂ O (Gg, expressed in CO ₂ eq)	Aggregate gross GHG emissions (CO ₂ eq)	Real GDP (billions of pesos at 2016 constant prices)	Intensity of aggregate gross GHG emissions per real GDP unit	KPI-1: Reduction of aggregate gross GHG emissions per real GDP unit, with respect to 1990 (in percent)
1990	3,851	19,124	6,315	29,291	792	37	
1994	4,222	21,172	6,815	32,209	975	33	-11
1998	5,876	20,768	6,874	33,518	1,114	30	-19
2000	5,544	20,315	6,531	32,390	1,071	30	-18
2002	4,345	20,747	6,466	31,558	950	33	-10
2004	5,506	21,985	7,190	34,681	1,006	34	-7
2006	6,448	22,188	7,361	35,996	1,125	32	-13
2008	7,928	21,737	7,354	37,020	1,285	29	-22
2010	6,366	21,452	7,244	35,062	1,444	24	-34
2012	8,597	20,982	8,353	37,933	1,572	24	-35
2014	6,616	21,619	7,876	36,111	1,699	21	-42
2016	6,709	22,021	7,363	36,092	1,734	21	-44
2017	6,284	22,017	7,336	35,638	1,764	20	-45
2018	6,737	21,537	7,252	35,526	1,767	20	-46
2019	6,538	21,143	6,603	34,284	1,783	19	-48
2020	6,496	21,264	7,371	35,130	1,652	21	-42
2021	8,143	21,635	8,172	37,950	1,749	22	-41
2022	7,695	21,438	7,235	36,367	1,829	20	-46
2023	7,555	21,358	7,914	36,828	1,843	20	-46
2024	7,543	21,398	7,551	36,493	1,904	19	-48

Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC1. Expressed in Gg CO₂eq, metric GWP100 AR5. Real GDP measured in billions of pesos in 2016 constant prices, based on latest official series published by the National Accounts System of the Central Bank in March 2026, and retroplated using the variation rate method as a statistical splicing technique. For some years the GHG aggregated gross emissions column does not perfectly match the sum of the CO₂, CH₄ and N₂O columns due to rounding. For 2020 the value of CO₂ shows correction due to hydraulic conditions. For purposes of the calculation of the KPI-1 value, the result of the formula is rounded to the nearest integer, as established in the SSLB Framework and consistent with the way the numerical goals were set under Uruguay's 2017 NDC (NDC1). For the period 1990-2022, data is for years with official NGHGI publication and data for 2023 and 2024 was estimated for the SSLB Annual Report. Source: SSLB Public Database as of April 2026.



In 2024, the country's gross emissions profile continued to be strongly influenced by non-CO₂ gas emissions. Estimated methane emissions accounted for 58.6% of aggregate emissions, while nitrous oxide emissions comprised 20.7%, with both values remaining close to 2023's shares. These non-CO₂ emissions predominantly arise from biological processes, which are connected to food production. On the other hand, carbon dioxide emissions accounted for 20.7% of the total in 2024 (20.5% in 2023), mainly stemming from the Energy sector, with emissions largely resulting from fossil-fuel combustion.

As previously indicated, during the period 2023-2024, total estimated GHG emissions contracted by 0.9%, with an absolute decrease of 336 Gg CO₂ equivalent, broken down as follows:

- total CO₂ emissions decreased 12 Gg (-0.16%);
- total CH₄ emissions increased 40 Gg in CO₂eq (0.19%);
- total N₂O emissions decreased 363 Gg in CO₂eq (-4.59%).

Accordingly, the decrease in CO₂ and N₂O emissions, combined with a virtually marginal rise in CH₄, leads to a reduction in aggregate absolute emissions over the 2023-2024 period.

Key Drivers on Green House Gas (GHG) emissions by Sector

The table below outlines the key categories that accounted for the change in gross GHG emissions, in absolute terms, between 2022 and 2024. The data are structured by emission source, predominant GHG, and sector, and include reported values for the most recent years, 2022, 2023, and 2024, together with the absolute and percentage changes between 2023 and 2024.



Gross GHG emissions: Contributing Categories
expressed in Gg CO₂eq

Source of emissions	Main GHG type	Sector	2022 emissions	2023 emissions	2024 emissions	Absolute variation 2023-2024	Percentage variation 2023-2024
Electricity generation	CO ₂	Energy	792	605	91	-514	-85
Use of synthetic nitrogen fertilizers	N ₂ O	AFOLU	905	1,574	1,220	-354	-22
Sheep farming	CH ₄	AFOLU	1,334	1,301	1,221	-80	-6
Dairy cattle	CH ₄	AFOLU	1,194	1,157	1,150	-7	-0.6
Cement production	CO ₂	IPPU	427	388	384	-4	-1
Disposal of urban solid waste	CH ₄	Waste	1,305	1,364	1,391	27	2
Non-dairy cattle	CH ₄	AFOLU	22,213	22,211	22,249	38	0.2
Disposal of agricultural waste in soils	N ₂ O	AFOLU	321	305	348	43	14
Fossil fuel consumption by manufacturing and construction industries	CO ₂	Energy	1,027	1,286	1,542	256	20
Consumption of fossil fuels in ground transportation	CO ₂	Energy	4,158	4,122	4,387	265	6
Other sources	CO ₂	Various sectors	2,691	2,515	2,510	-5	-0.2
Aggregate emissions	CO₂ CH₄ N₂O	All sectors	36,367	36,828	36,493	-335	-1

Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC1. Expressed in Gg CO₂eq, metric GWP100 AR5. Main contributing categories are identified based on their percentage change in gross emissions between 2024 and the base year. Data for 2022 corresponds to official NGHGI publication, data for 2023 and 2024 was estimated for this SSLB Annual Report. Source: SSLB Public Database as of April 2026.



Energy

In Uruguay, the Energy sector continues to be the primary source of CO₂ emissions, largely driven by fossil fuel combustion. In 2024, emissions from the Energy Sector were 7,483 Gg CO₂eq (21% of the total aggregate emissions). Related to 2023, it increased slightly (27 Gg CO₂eq, or 0.4%). Within the Energy sector, ground transportation remained the leading emitter of CO₂ in 2024, consistent with previous years.

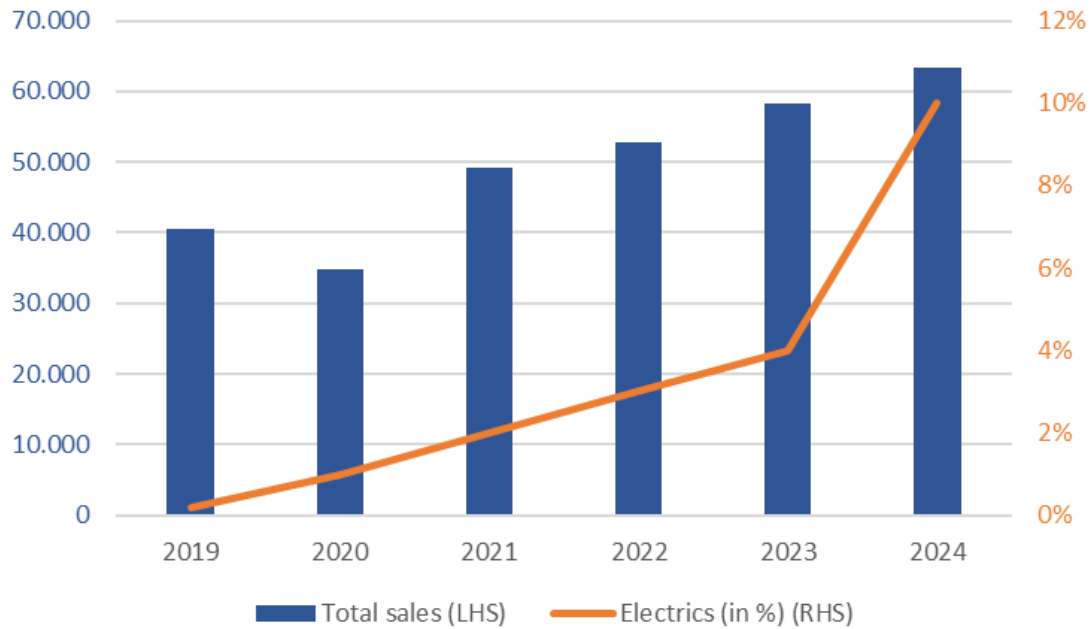
From a broader perspective, two significant events shaped the performance of Uruguay's energy sector in 2024. First, the share of fossil fuels in the electricity generation matrix decreased from 8% in 2023 to just 1% in 2024. Second, the third pulp mill installed in the country in 2023 completed a full year of operation, which uses fuel oil for the generation of direct heat.

Consumption of fossil fuels in ground transportation. The consumption of fossil fuels in ground transportation has historically been the main contributor to emissions within the sector, largely driven by the growth of vehicle fleet during the period considered (1990-2024). Emissions from fuel combustion in ground transportation had been on an upward trend since 1990 (increasing from 1,392 Gg in 1990 to 4,387 Gg in 2024). Relative to 2023, emissions in this category rose by 6%.

Road freight transport has emerged as one of the fastest-growing carbon-intensive components of the energy transport system, a trend largely attributable to the expansion of logistics linked to forestry and agricultural production, together with the continued growth of the national vehicle fleet.

Regarding the expansion of the vehicle fleet, the implementation of public policies has led to an expansion of electric mobility in the country. In turn, because of very high share of renewable sources in electricity generation, this has represented a fundamental policy instrument for the decarbonization of the national economy. By 2024, electric vehicles accounted for nearly 10% of total annual new vehicle sales, rising to 6,330 units from just 69 in 2019.

Total new vehicles sales and share of electric vehicles sold
 number of vehicles and share of Electric Vehicles in total, period 2019-2024



Source: Ministry of Industry, Energy and Mining.

Electricity generation.⁶ Uruguay has overhauled its electricity generation matrix, integrating a substantial share of domestically sourced renewable energy. Uruguay's *installed electricity-generation capacity* is predominantly based on renewable sources. When assessed by type of source, in 2024, 78% corresponds to domestically generated renewable energy (hydropower, biomass, wind, and solar), while the remaining 22% of installed capacity is derived from non-renewable sources (gas oil, fuel oil, and natural gas). By the end of 2024, the total installed capacity was composed of 1,538 MW from hydropower (29%), 1,517 MW from wind (29%), 1,177 MW from fossil-fuel-based thermal generation (22%), 731 MW from biomass-based thermal generation (14%), and 336 MW from photovoltaic solar generators (6%). The significant increase and diversification in the share of renewable sources in the electricity generation matrix has markedly lowered both the variability of electricity generation and the reliance on imported fossil fuels, strengthening the resilience of the national energy system to changes in hydrological conditions and international oil prices.

⁶ In this report, energy metrics are presented using internationally recognized units that support comparability and methodological transparency. Installed capacity is expressed in megawatts (MW), a unit of power that reflects the instantaneous generation potential of energy assets and is commonly used to describe the scale of renewable and conventional infrastructure. Actual electricity generation and consumption are reported in gigawatt-hours (GWh), a unit of energy that captures the volume of electricity produced or used over a defined period and serves as a basis for assessing operational performance and associated emissions. Primary energy supply is expressed in kilotons of oil equivalent (ktep), a standardized measure that aggregates diverse energy sources into a single comparable metric, enabling the analysis of energy balances and long-term trends. Together, these units provide a coherent framework for evaluating energy capacity, production, and primary supply. Note: a *megawatt (MW)* is a unit of power equivalent to one million watts; a *gigawatt-hour (GWh)* is a unit of energy equal to one billion watt-hours; and a *kiloton of oil equivalent (ktep)* is a standardized measure of primary energy corresponding to one thousand tons of oil equivalent.

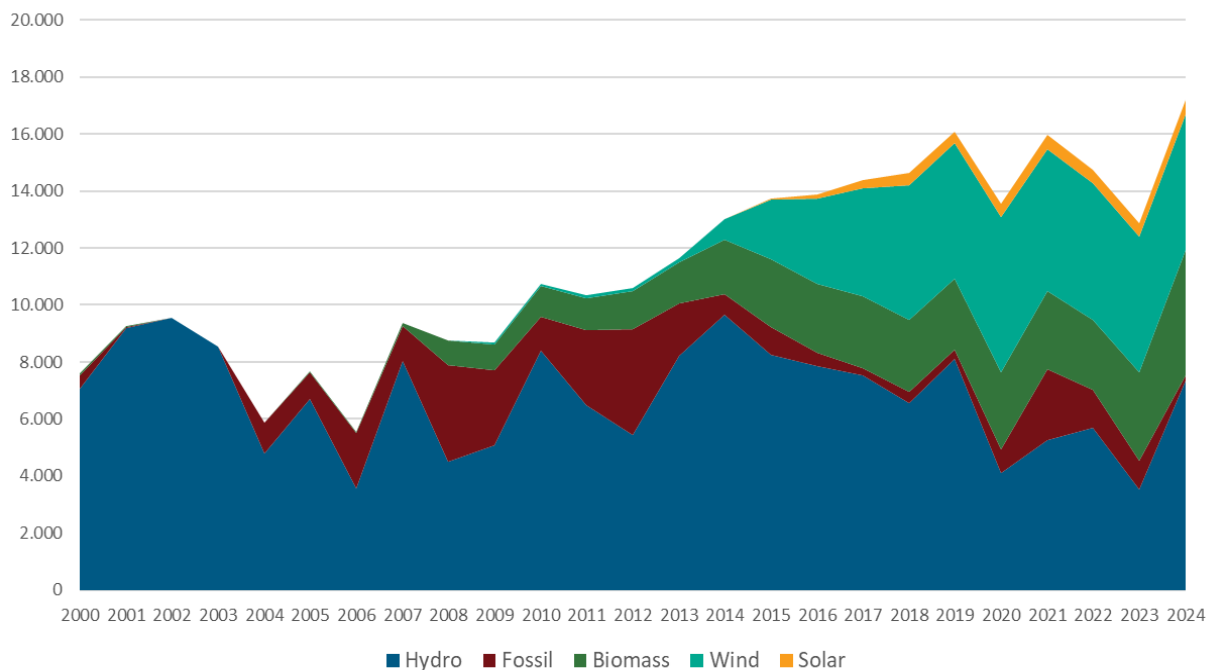


In 2024, *actual electricity generation* reached a record level, marking a 34% increase compared with 2023. Domestic production consisted of electricity generated by public-service power plants (84%), with the remaining share produced by self-generation facilities (16%).

The evolution of the country's electricity generation by source from 2000 to 2024 is shown in the following graph:

Electricity generation by accumulated source

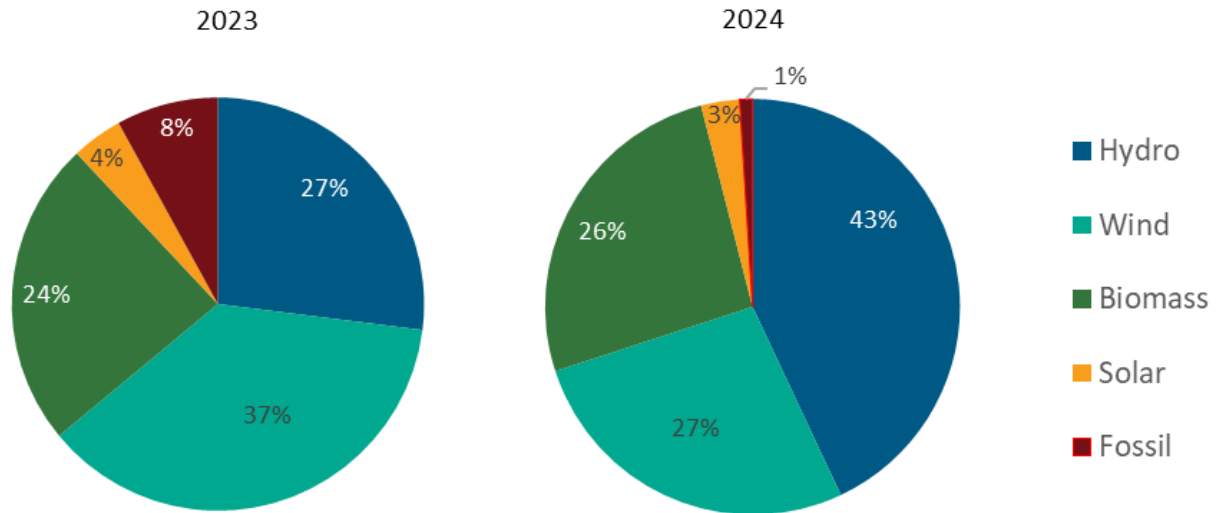
In gigawatt-hour (GWh), 2000-2024 period



Source: National Energy Balance, 2024, Ministry of Industry, Energy and Mining and Energy Hub.

Of the total electricity generated in 2024, renewable sources accounted for 99% of total, whereas in 2023 this figure was 92%. This increase in the share of renewables led to an 85% reduction in CO₂ emissions associated with electricity generation despite the record-setting level of electricity generation.

Uruguay's Domestic Electricity Generation, by Source
Percentage of total



Source: National Energy Balance, 2024, Ministry of Industry, Energy and Mining.

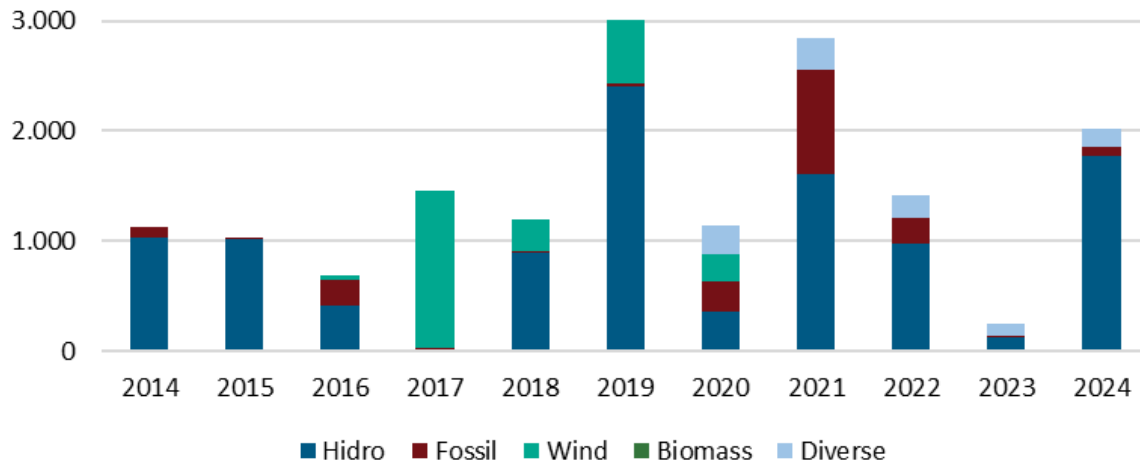
From the standpoint of energy sources, hydropower-based electricity generation doubled in 2024, following its lowest level since 1990 recorded in 2023, a year marked by a severe drought. Electricity generation from biomass reached 4,419.296 GWh in 2024, marking the highest level on record. This outcome reflects a year-on-year increase of 43%, following the 26% expansion observed in 2023 (3,083 GWh), both largely driven by the commissioning of the country's third pulp mill. Solar-based electricity grew by 5%, while wind-based generation remained broadly unchanged in absolute terms (the ten-percentage-point decline in relative share of total generation in 2024 resulted from the substantial increase in overall electricity production). Fossil-fuel-based electricity generation fell by 82%, reaching its lowest level in the past 20 years (185 ktep), and its share in the generation matrix declined from 8% in 2023 to 1% in 2024. The main fuel used was gas oil, whose consumption for electricity generation (23 ktep) decreased by 86%, followed by fuel oil, with 10 ktep consumed for generation, one third of the level recorded in 2023.

Driven by the substantial rise in domestic electricity generation in 2024, underpinned by the markedly improved hydropower availability, the system relied less on electricity imports, which fell 3% compared to 2023. At the same time, in 2024 Uruguay exported 2,026 GWh (174 ktep) of electricity, eight times more than in 2023. Most of it was supplied to Argentina. In 2024, the increase in electricity exports was driven primarily by hydropower (88% of exported electricity) and other renewable sources, with only marginal contributions from fossil-fuel-based generation (4% of exported electricity).



Uruguay's Electricity Exports, by Source of Generation

Total thousands of MWH



Diverse refers to surplus/overflows from renewable sources of wind, biomass, photovoltaic (under surplus conditions) and hydro (under overflow conditions) units. Source: National Administration of Electric Power Plants and Transmissions, and Ministry of Industry, Energy and Mining.

Following the transformation of its electricity generation system, which now places Uruguay among the global leaders in having a clean generation mix, the country has also strengthened its commitment to regional energy integration. This strategy entails the development of complementary cross-border systems within the region. The benefits of such integration materialize primarily at the global level rather than domestically. Consequently, electricity exports may result in higher local emissions, while electricity imports can conversely lead to a reduction in domestic emissions.

Fossil fuel consumption by manufacturing and construction industries. Since 2007, industrial sector consumption has experienced a significant increase, in line with higher economic activity. Over the last 17 years, final energy consumption in the industrial sector grew from 626 ktep (2007) to 3,141 ktep (2024), with three clear periods of expansion (2008–2010, 2014–2015, and 2023–2024). Most of this increase, however, is explained by biomass-residue consumption in domestic pulp mill operations, which also use fuel oil for direct heat generation.

Within the country's energy consumption matrix, the industrial sector has been the main consumer of final energy since 2008. The expansion of the pulp industry has led to a substantial increase in the use of biomass residues.⁷ Approximately 80% of these residues—

⁷ Biomass waste refers to forestry and sawmill residues, black liquor, bagasse, rice husks, sunflower husks, barley husks and others.

primarily black liquor—are consumed by this sector.⁸ A key point to consider is that pulp mills are highly energy-intensive facilities: although they generate more than 90% of their own energy needs through the combustion of black liquor and even supply surplus electricity to the National Interconnected System (SIN), they still require significant amounts of fuel oil to produce direct heat. This reliance on fuel oil explains the remaining CO₂ emissions associated with their operations despite their high degree of energy self-sufficiency.



Agriculture, Forestry and Other Land Uses (AFOLU) Sector

AFOLU (Agriculture, Forestry and Other Land Uses) is one of the two sectors (alongside the IPPU sector, to a lesser extent) that recorded, on aggregate, a decrease in GHG emissions in 2024, contributing to the reduction in aggregate emissions.

Non-dairy and dairy cattle production, and sheep farming. Estimates of GHG from cattle farming consider the level and age composition of livestock inventory, as well as its geographical distribution within the country, which links to land use and has a bearing on animal nutrition. Specifically, the estimation of GHG emissions of enteric fermentation and manure management from cattle farming is determined by a set of variables which include animal inventory, as well as characteristics in terms of age, weight, energy requirements, diet, and its digestibility, for each of the country's agroecological zones. In turn, the emission factors for non-dairy cattle were estimated as the weighted average of the emission factors calculated for each of the country's agroecological zones, based on the livestock population in each zone. Consequently, shifts in the quality of animal-based food sources, attributable to enhanced forage resources, together with changes in the relative proportions of various categories (e.g., owing to variations in age at slaughter, augmented breeding performance, weaning rate, among other factors), will exert an influence on herd composition and energy requirements. This, in turn, will affect the corresponding estimated GHG emissions of methane and nitrous oxide.⁹

⁸ Regarding CO₂ emissions from the burning of biomass fuels, it is important to highlight that they are not included in the totals estimated for the energy sector in the NGHGI, as established in the guidelines of the IPCC. This is because the emission of this GHG (when biomass is burned) is accompanied by a process of absorption of this gas (through photosynthesis) by plant species during their growth. These two processes should be considered together. Therefore, the calculation of CO₂ emissions and removals from biomass has been included in the AFOLU sector of the NGHGI. However, CO₂ emissions from biomass combustion are estimated and presented as "Information items" in the energy sector of the Inventory, without being added to the totals.

⁹ For non-dairy cattle production, GHG emissions estimates use livestock distribution, animal categories, and land-use patterns across agro-ecological zones to determine diet composition and derive nationally weighted parameters. For instance, methane emissions for 2024 are calculated using the activity data for that year, defined as the average cattle stock reported in the 2023 and 2024 DICOSE affidavits. The emission factor follows a Tier 2 (IPCC), country-specific approach,



Regarding non-dairy cattle farming, in 2024, methane emissions, including enteric fermentation and manure management, exhibited a marginal variation of 0.4% (from 17,235 in 2023 to 17,319 CO₂eq in 2024). During the 2023-2024 period, the number of livestock heads remained essentially unchanged compared to 2023, maintaining a growing proportion of young animals within the cattle stock. Moreover, over the past 20 years, the herd has undergone a process of rejuvenation, driven by a higher proportion of young animals within the cattle stock. This shift in stock composition reflects enhanced breeding efficiency.

Meanwhile, emissions from dairy cattle farming experienced another decrease during the 2023-2024 period (0.6%), primarily due to a reduction in the total number of dairy cows. In the longer-term perspective, emissions from dairy cattle farming increased by 44% between 1990 and 2024, mirroring a similar rise in the number of livestock heads. During this period, commercial milk production expanded significantly, driven by sustained improvements in productivity.

In relation to sheep farming, emissions from this category decreased 6% between 2023 and 2024. A decline in the livestock inventory was also observed in the same period.

Overall, non-dairy cattle farming in Uruguay is becoming increasingly efficient. The increase in GHG emissions over the 1990–2024 period was significantly smaller than the growth in meat production, a trend attributed, among other factors, to sustained improvements in productivity. This is due, on the one hand, to rising slaughter rates, with younger animals achieving appropriate slaughter weights at a younger age. Additionally, the area of pasture improvements has expanded, particularly annual forage crops, contributing to increased productivity.

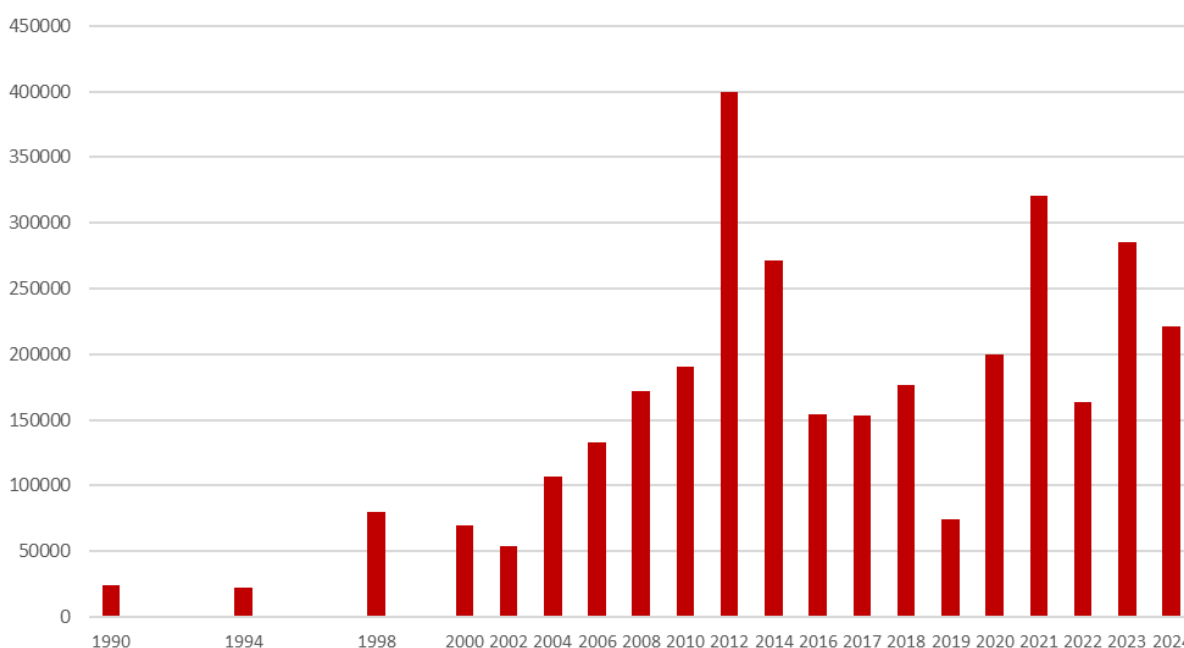
Use of synthetic nitrogen fertilizers. Direct and indirect N₂O emissions from managed soils are estimated based on the nitrogen content of the volume of imported synthetic fertilizer within the calendar year. In 2024, the estimated content of N₂O in imported synthetic nitrogen fertilizers recorded a 22.5% reduction compared to 2023 (from 1,574 to 1,220 in CO₂eq Gg).¹⁰

combining livestock numbers by category with forage-resource data from DICOSE to establish category-specific diets and zone-level emission factors, which are then aggregated into a national weighted value. In line with the guidelines established in the methodology proposed by the IPCC, the calculation of this emission factor occurs on an annual basis, with data derived from the DICOSE Affidavits. The factor is calculated each year, reflecting the temporal variations inherent to the livestock sector. DICOSE is a unique and mandatory registration number assigned by the MGAP to farmers and entities related to the livestock sector. It serves as an identifier for individuals and legal entities that own livestock or engage in commercial activities related to livestock farming. This registration code enables: i. the identification of farmers and livestock entities, as the number is unique and non-replicable; ii. livestock monitoring and data management, as the information associated with DICOSE is utilized by the MGAP for tracking and controlling livestock production, as well as ensuring regulatory compliance; iii. DICOSE holders are required to submit an annual Affidavits, which includes information on livestock ownership, land use, and other related activities.

¹⁰ The data, measured in tonnes of nitrogen per year, is derived from information supplied by the National Directorate of Agricultural Services (DGSA, for its Spanish acronym) of the MGAP. By applying this parameter alongside the emission factors outlined in the 2006 IPCC Guidelines, both direct and indirect N₂O emissions are calculated.

The nitrogen content displays significant interannual variability, as shown in the graph below. Its dynamics generally tracks shifts in agricultural activity. The use of nitrogen fertilizers is associated with winter and summer crops, which rely on nitrogen-based fertilizers for their growth. The amount of nitrogen fertilizer required is basically determined by crop type, soil conditions, and climate factors.¹¹

Estimated Nitrogen Content of Imported Fertilizers in tons of nitrogen by year, 1990-2024 period



Source: Agricultural Programming and Policy Office (OPYPA) based on National Directorate of Agricultural Services (DGSA) of the MGAP. Data is available for years with official NGHGI publication.

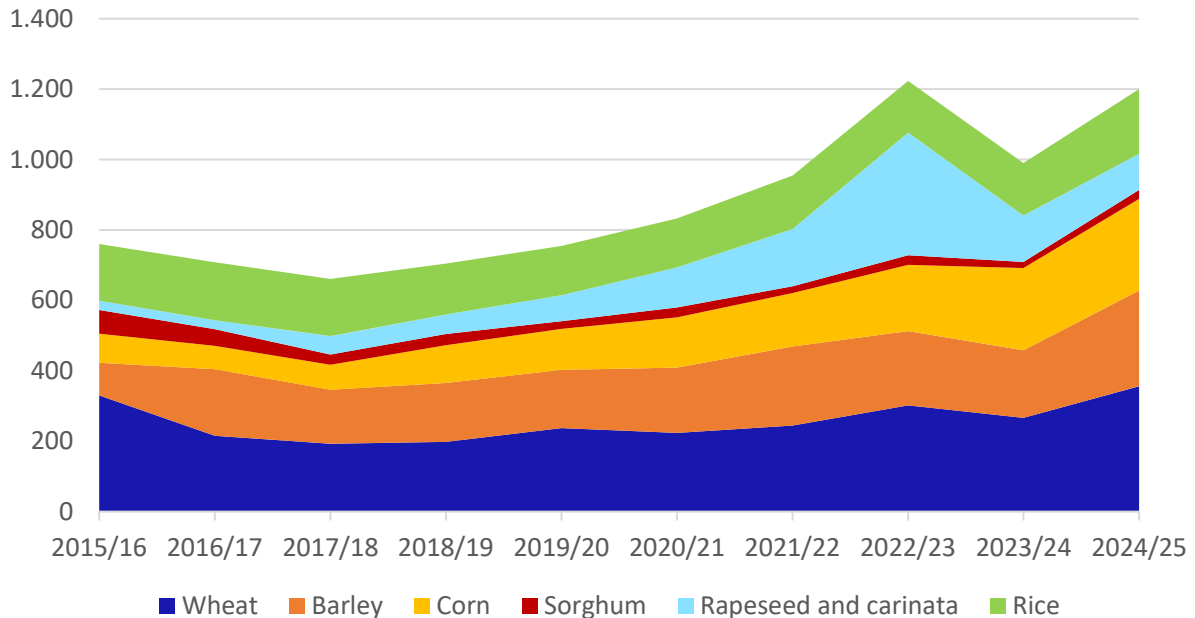
The 2024-2025 agricultural cycle was characterized by favourable climatic conditions, which facilitated record-breaking harvests for various crops, including both summer and winter varieties. The winter crop season was particularly notable for record yields in wheat and barley, primarily driven by a significant expansion of cultivated areas (from 458,000 to 628,000 hectares). Conversely, the production of rapeseed and carinata continued its downward trend, with a 22% reduction in planted area. During the 2024-2025 period, summer crops flourished under highly advantageous weather conditions. Maize planted area expanded by 42%, reflecting a significant year-on-year increase. Furthermore, rice production experienced a growth of approximately 30%, resulting from exceptional yields (9,400 kg/ha)

¹¹ During 2025, the Office of Agricultural Programming and Policy of the Ministry of Livestock, Agriculture and Fisheries (OPYPA-MGAP) worked jointly with the Directorate-General of Agricultural Services (DGSA-MGAP) on methodological improvements for estimating N₂O emissions, specifically those arising from the use of synthetic nitrogen fertilizers. Additional assessments are still required to determine the technical robustness of the information and its alignment with the IPCC's TACCC principles, as well as to complete further quality-control procedures. If the results of this process are positive, this methodological improvement could be incorporated into next year's report.

and a substantial expansion of the sown area, which totalled 183,000 hectares (from 149,000 in the previous period).

Area planted with selected crops, by agricultural year

In thousands of hectares



Source: Agricultural Programming and Policy Office (OPYPA) and Agricultural Statistics Office (DIEA) of the Ministry of Livestock, Agriculture and Fisheries (MGAP). Selected crops are: Wheat, Barley, Corn, Sorghum, Rapeseed and carinata, and Rice.

It is important to note that the estimated volume of nitrogen contained in imported fertilizers does not always correspond directly to the amount applied in the field during the same calendar year. Estimated imports may differ from actual fertilizer use due to factors such as changes in fertilizer prices (often linked to international oil prices), stock management by importers and farmers, inventory build-ups or drawdowns, and timing differences between imports and application. Despite the significant increase in cultivated area during the 2024/25 agricultural cycle, estimated greenhouse gas emissions tied to nitrogen contained in imported fertilizer products still decreased over calendar year 2024.

Lastly, the expansion in both planted area and production, driven particularly by soybeans and maize, resulted in a 14% increase in N₂O emissions from the disposal of agricultural residues in soils. However, this category continues to represent a very small share of the national total, accounting for only 0.9% of the country's emissions.¹²

¹² The dynamics of this category are assessed by comparing the 2022/2023 and 2023/2024 agricultural seasons. During this period, soybean and maize recorded an expansion in planted area and higher production. Soybean stands out due to a marked recovery in yields, while in maize the increase in output reflects both higher yields and an expansion of cultivated area. Wheat, malting barley, and sunflower achieved yield improvements that partially offset the reduction in planted area and production, suggesting greater production efficiency. In contrast, rapeseed and carinata and sorghum experienced a sharp contraction in both area and output, with stable or declining yields. Finally, rice and sugarcane showed a more stable performance.



IPPU (Industrial Processes and Product Use) Sector

The Industrial Processes and Product Use (IPPU) sector constitutes a comparatively small proportion of total CO₂ emissions, mainly stemming from cement and lime production.¹³ Over 99% of GHG emissions in this sector derive from the production of clinker, the primary component of cement (approximately 87%), and the lime production (approximately 13%).

Cement-sector emissions are closely tied to fluctuations in clinker production activity. Throughout 2024, CO₂ emissions continued to decline (-1%), extending the downward trend observed the previous year. This reduction reflects lower sectoral demand following the completion or near-completion of several major infrastructure projects in 2022-2023, a process that had previously absorbed a significant share of construction-sector activity.

The other main emissions source within IPPU is the production of lime. Emission trends are similarly influenced by activity levels, with commercial production playing the predominant role, followed by self-consumption in pulp production facilities. Estimated CO₂ emissions from lime production fell by 13% between 2023 and 2024, from 66.5 to 58.2 Gg CO₂eq.



Waste Sector

In the Waste sector, CH₄ and N₂O emissions are estimated to result from the decomposition processes of organic matter contained in municipal solid waste and in wastewater of domestic and industrial origin, related to a per capita waste generation rate, as calculated under KPI-1.

Regarding CH₄ emissions, the waste sector accounts for approximately 7%, primarily from landfill sites. Between 1990 and 2024, the emissions resulting from solid waste disposal have experienced a notable increase. This trend is associated with a larger volume of waste produced, driven by population growth, higher individual income levels, and, to a lesser extent, by the expansion of services such as municipal waste collection and transportation to disposal facilities. Across 2023-2024, total CH₄ emissions rose marginally by 1.7%, mainly due to higher volumes of urban solid waste sent to landfills.

As per N₂O, the estimated emissions for the 2023-2024 period remained unchanged, consistent with the stability of the underlying variables, including per-capita protein consumption and national population trends.

¹³ The largest portion of CO₂ emissions is associated with the Energy sector.

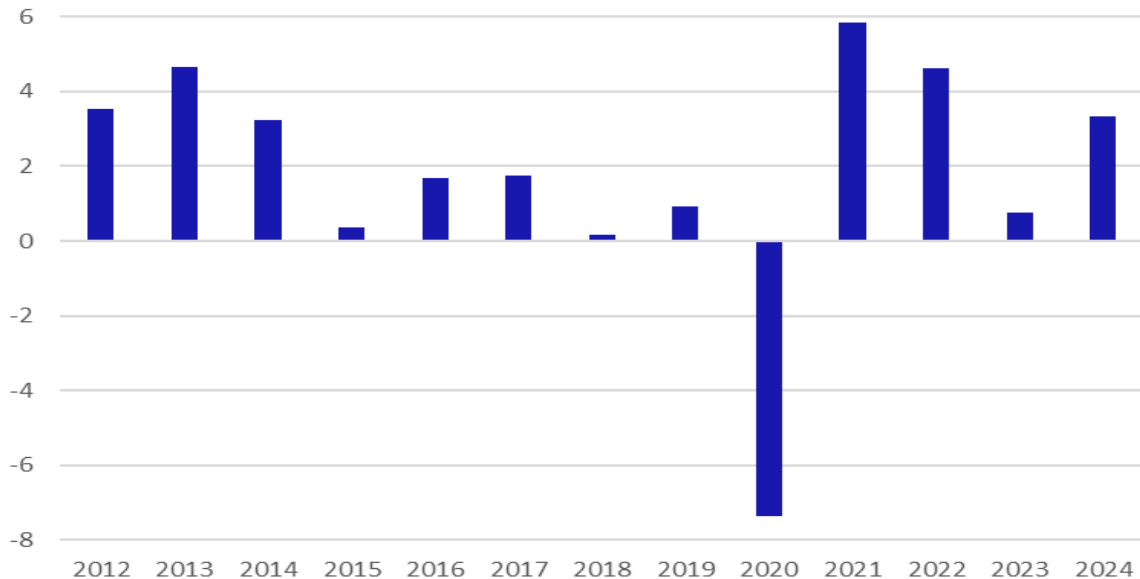


Real Gross Domestic Product

In 2024, the GDP recorded a real growth of 3.3%. The observed expansion was primarily driven by a rebound effect following the slowdown recorded in the previous year, markedly affected by the severe drought of 2023, along with specific sectoral impulses. Among the sectors that contributed most to growth in 2024, the agricultural sector stands out, (11% average annual growth) mainly explained by the recovery of summer crops, particularly soy. In addition, the energy sector grew by 20% in 2024, reversing the decline of the previous year, when hydroelectric generation had been adversely affected by the drought. Furthermore, commercial activity and industrial production both recorded annual growth of 3%. Also, services related to hotels and restaurants experienced a recovery, partly due to the decline in outbound tourism to Argentina. Meanwhile, industrial growth was largely explained by the commissioning of third pulp mill, which more than offset the reduced activity at ANCAP's refinery technical maintenance shutdown (offline until April). In contrast, the construction sector contracted (by 1.6%), reflecting the completion of works on the "Ferrocarril Central" project. Finally, the exports increased between 2023 and 2024 (8%), was supported by higher sales of soy and pulp, particularly due to the mill's operational launch.

Uruguay's Real Gross Domestic Product

Annual percent change



The latest official series published by the National Accounts System of the Central Bank of Uruguay in March 2026, and retroplated using the variation rate method as a statistical splicing technique. Source: SSLB Public Database as of April 2026.



Chapter 4

KPI with Reporting every 4 years (KPI-2)





KPI-2 oversees the maintenance of the native forest area in Uruguay, measured in hectares, with respect to the reference year 2012. As established in Uruguay's SSLB Framework, this KPI is formally reported on a four-year basis, with observations corresponding to 2021 and subsequently to 2025, 2029, and 2033, drawing on national cartography produced from satellite imaging. During the intervening years, updates are provided on policies, regulatory developments, and management measures aimed at the protection and promotion of native forests.¹⁴

Based on the latest available cartographic assessment (2021), the native forest area was estimated at 847,181 hectares, equivalent to full compliance (100%) with the baseline reference. Over the following years, Uruguay has continued to implement a substantial set of initiatives to advance the conservation of native forests. Efforts have been strengthened to adopt and implement effective measures to ensure the sustainable management of native forest ecosystems, particularly in a context of increasing pressures associated with land use change, climate variability, and invasive species. In addition, Uruguay has reinforced actions to increase public awareness of the critical importance of the ecosystem services provided by native forests. These efforts foster broader multi-stakeholder engagement, collaboration and active participation in the monitoring and management of native forest resources, thereby enhancing national capacities to safeguard their long-term resilience and sustainability.

Recent Management and Protection Actions on Native Forests

New native forest registration and management plans. Forest registration remained a central instrument of Uruguay's native forest conservation policy through 2025. During 2025, in particular, the Directorate General Forestry (DGF in Spanish) registered 102 new native forests, reflecting continued adherence to this policy tool. In addition, during 2025, the plans authorized covered 130 interventions across 3,136 hectares, allowing for the sustainable extraction of 19,210 tons of biomass. A record number of 111 management plans were submitted, with an increased engagement from landowners.

As for authorized interventions in 2025, advance clearing accounted for 33.8% of the total, representing 70% of the authorized area and 46% of the total volume of biomass permitted for extraction. Thinning interventions comprised 17.7% of the authorized actions, corresponding to 15.6% of the area and 17.1% of the total authorized tonnage. Clear-cutting represented 10% of the authorized interventions, accounting for 2.8% of the area and 11.7% of the total tons approved for extraction.

The DGF authorizes interventions in native forests upon the submission by landowners of a management plan that meets the applicable technical, environmental, and legal requirements. Activities that result in a reduction of native forest area include clear-cutting,

¹⁴ Information on the measuring methodology can be found in the Technical Data Sheet of KPI-2 [here](#).



road development, and forest clearing. Relative to the mapped extent of native forest in 2021, such interventions accounted for 0.04% of the total area.

Monitoring, enforcement, and regulatory developments. The government has, over the past four years, consolidated and expanded the incentive and enforcement instruments underpinning national policies for native forest management and conservation. These efforts were complemented by continued investments in monitoring systems, restoration activities, data transparency, and communication initiatives.

During 2023–2024, Uruguay updated the conditions for tax exemptions granted to family farmers with native forest areas and introduced new requirements for the Native Forest Register and for submitting management or cutting plans, as part of the development of the National Forest Information System (SNIB). The DGF introduced updated technical standards for forest registration and management plans, strengthening traceability and aligning national procedures with EUDR expectations.^{15, 16}

In line with these measures, the number of inspections conducted through reports or remote sensing has increased over the past three years. This trend is associated with changes in the methodology used to monitor variations in native forest cover, introduced as part of the reporting requirements under Regulation (EU) 2023/1115 (EUDR). In this context, the DGF strengthened its monitoring and enforcement framework in 2025 by carrying out 180 inspections (compared with 127 in 2023 and 141 in 2024), including 60 inspections triggered by satellite alerts or public reports. In addition, a total of 55 complaints were filed through various channels, marking the highest annual figure on record.

As a result of these inspection and enforcement efforts, a total of 62 illegal activities were confirmed, affecting 441 hectares of native forest. While certain activities, such as selective logging or clearing for fencing or forest health purposes, are permitted under duly approved management plans, the overall extent of interventions in 2025 remained very limited. Specifically, only 0.09% of the total mapped native forest area (approximately 803 hectares) was subject to any form of intervention, a proportion that does not indicate a significant loss of native forest cover, particularly when ongoing natural regeneration processes are considered.¹⁷

Public engagement and communication. The communication and dissemination of knowledge and practical experience related to the conservation and protection of native forest ecosystems constitute fundamental components of their effective management. Since 2022, the DGF, in coordination with the MGAP's Communication Department, has been implementing a comprehensive communication campaign aimed at promoting the

¹⁵ See Law 20,075, articles 477, 478, and 491 [here](#).

¹⁶ See the Resolution No. 781/24 [here](#).

¹⁷ EUDR 1115/23. See [here](#).



conservation of native forests, fostering their sustainable management, and increasing public awareness of the importance of this natural resource.

As in previous years, radio announcements continue to be broadcast; however, communication efforts have been significantly reinforced with respect to the registration of native forests. This initiative seeks to increase the number of properties formally registered as containing native forest; to encourage producers to adopt the practice of requesting prior authorization before harvesting; to raise awareness among firewood transporters regarding the obligation to request a transit permit from landowners; and to inform the general public about the conditions under which firewood originating from native forests may be legally consumed.

Institutional strengthening and research. As part of a broad digital transformation effort, the DGF launched the forest management module of the SNIB, enabling the provision of online services such as forest registration, submission of management plans, inspection requests, and updates of ownership records. Beginning in 2025, the digital platform of the SNIB became the sole channel for native forest registration and for submitting management or harvesting plans. The transition to a fully digital system significantly enhances native forest governance by ensuring systematic, up-to-date information to support more effective decision-making.

Alongside these efforts, the Germplasm Centre expanded its research and production capacity in 2025, producing 13,149 native plants and 500 cuttings. This output builds on the 2024 results (12,625 native plants and 555 cuttings), underscoring continued operational capacity. In addition, the Centre collected 40 kilograms of native-species seeds to support reforestation initiatives.

Certification and international standards. For the past three years, Uruguay has been developing a public-policy proposal to support the agro-export sector in meeting the requirements of the EU Regulation 2023/1115 on deforestation-free supply chains (EUDR). This effort includes designing a single, universal platform to verify deforestation-free land parcels, interoperable with existing national information systems such as SNIG, SNIA, and SNIB.



Chapter 5

External Verification of Annual KPI-1





In May 2026, UNDP published the External Technical Verification Report of Uruguay's KPI-1 values through the year 2024. The review concludes that the *"KPI-1 reported in 2024"* as well as *"the preparation of the IEM-BIICC 1990–2024 fully adheres to the quality principles of transparency, accuracy, completeness, consistency and comparability"* and that it *"fully adheres to the 2006 IPCC Guidelines."*¹⁸

The verification further corroborates that KPI-1 *"adheres to the requirements of Decisions 17/CP.8 and 18/CMA.1"*, confirming compliance with the reporting obligations for national greenhouse gas inventories under the UNFCCC and the Paris Agreement.¹⁹

The report also asserts that *"the KPI-1 Emission Reporting process has a robust system of quality control and review of historical values for the inclusion of improvements and implementation of recalculations under a continuous improvement framework."* This includes systematic sector-level QC procedures, cross-checks using IPCC software, and annual recalculations aligned with good practice.

Finally, the UNDP review highlights that *"the BIICC has a robust institutional framework that enables effective planning, oversight, management and implementation of the annual KPI-1 estimation."* It emphasizes the coordinated work of the BIICC, pMRV and NGHGI Working Groups under the National Climate Change Response System, which ensures the effective operationalization of Uruguay's Sovereign Sustainability-Linked Bond.

¹⁸ See UNDP's External Verification Report published May 2026, [here](#).

¹⁹ Decision 18/CMA.1 applies as of December 2024. See [here](#).



Chapter 6

Future Pathways: Actions to Drive Progress on KPIs





Public Policy Initiatives and Incentives to the Private Sector

Uruguay is advancing a comprehensive transition toward a low-carbon and environmentally sustainable development model. The country is implementing a wide range of strategic policies to decarbonize key economic sectors — particularly ground transportation and industry — in line with its long-term clean energy strategy. In the AFOLU sector, efforts focus on scaling up sustainable production practices, strengthening ecosystem conservation and restoration, and enhancing national carbon sequestration capacity. At the same time, the government continues to promote sustainable economic growth through the use of innovative sustainable finance instruments.²⁰

In line with this policy framework, Uruguay took a significant step in December 2025 by adopting Article 162 of the National Budget Law (No. 20,446). This provision formally integrates the environmental dimension into the formulation of economic policy. It requires the Ministry of Economy and Finance to systematically consider the potential environmental impacts of all economic decisions, applying this approach across key areas including tax policy, investment promotion, debt management, trade strategy, budgetary policy, and all other areas under its responsibility.²¹ This measure establishes a mandatory framework for assessing environmental effects in economic analysis, marking a concrete advancement toward a more sustainable and equitable development model.²²

This section presents an updated overview of the main sectoral policy measures that are expected to support the achievement of Uruguay's KPI targets.



Energy Production and Industrial Processes

Uruguay further consolidated its progress in clean electricity generation in 2024, reaching a 99% renewable electricity matrix and reducing the grid's CO₂ emission factor to just 6 tCO₂/GWh, 90% below 2023 levels and the lowest value recorded in two decades. Building on the National Energy Efficiency Plan 2015-2024²³, the country is now advancing the next stage of its energy-efficiency agenda through the recently approved National Energy Efficiency Plan

²⁰ For additional information, please refer to the section "Pathways to Environmental and Climate Progress" in Chapter 3 of the [SSLB Framework](#) published in September 2022, as well as the [First](#), [Second](#) and [Third](#) Annual Reports of the SSLB, published in 2023, 2024 and 2025 respectively.

²¹ For further details, see the *MEF Economía y Ambiente* website, [here](#).

²² See Article No. 162 of Law No. 20,446 [here](#).

²³ The National Energy Efficiency Plan 2015–2024 incorporated a set of instruments aimed at achieving an energy-savings target of 1,690 ktep over the 2015–2024 period, relative to a baseline scenario without significant structural changes in consumption patterns. The Plan included sector-specific measures, awareness and educational initiatives, and the development and strengthening of financial instruments, among other actions.



2025-2035.²⁴ Developed by the Ministry of Industry, Energy and Mining (MIEM, for its Spanish acronyms), the Plan establishes the National Energy Efficiency Council and aims to consolidate and expand the progress initiated under the 2009 Efficient Energy Use Law, in alignment with national climate-mitigation goals. Under its expected scenario, energy demand in 2035 would be 7.2% lower than in the baseline trend, while CO₂ emissions would decline by 6.6%. Moreover, in 2025 the National Policy on Sustainable Urban Mobility was approved and the Inter-institutional Commission on Sustainable Mobility (CIMS) was established for the coordination and implementation of this policy. These sectoral policies feed into the process initiated by MIEM to update the current energy policy, agreed upon in 2010 with a 2030 horizon, with the aim of developing a new energy policy for Uruguay with a vision towards 2050.²⁵

Electric Mobility. In the transport sector, the decarbonization of Uruguay's electricity matrix created a significant opportunity to reduce emissions through the expansion of electric mobility, which became a strategic component of the country's energy policy. The second phase of energy transition therefore focuses on lowering transport-related emissions and progressively replacing petroleum-based fuels with electric vectors. This process entails not only a technological shift but also the implementation of a coordinated set of fiscal instruments, economic incentives, supporting infrastructure, and institutional frameworks.

Given that transportation accounted for the largest share of national petroleum-derivative fuels consumption and represented a significant source of CO₂ emissions, Uruguay developed and implemented a comprehensive suite of measures to promote the adoption of electric vehicles, complemented by targeted programs for specific user segments. In this context, incentives such as the full exemption of IMESI and TGA for electric vehicles, batteries, and chargers, as well as tax benefits under the general investment promotion regime (COMAP), were introduced and continue to be applied.²⁶ As a result, in 2025, electric vehicles reached 21.1% of total annual new vehicle sales (14,387 units sold, more than doubling previous year sales levels).

In addition, programs such as *Subite*, across its Motorcycles, Buses, Passenger Vehicles, Freight, and Pilot segments, were designed to accelerate uptake within defined market niches and remain in force today, continuing to expand. Likewise, subnational governments had introduced additional support measures for public transport and fleet renewal, which also remain in effect.²⁷

In terms of infrastructure, the country established a consolidated and expanding public charging network, creating favourable conditions for the widespread and routine operation

²⁴ See the National Energy Efficiency Plan 2025–2035 [here](#).

²⁵ On the ongoing process to update Uruguay's energy policy with a 2050 horizon, visit [here](#).

²⁶ The Excise Tax (IMESI, in Spanish) was reduced to 0%, and the global tariff rate (TGA, in Spanish) is exempted, meaning that import duties on electric vehicles, lithium batteries, and chargers for electric mobility are set at 0%. Also, Electric utility vehicles were incorporated into the cleaner-production indicator under the Investment Promotion Law, enabling access to tax exemptions. See Decree No. 390/021 [here](#).

²⁷ See "*Subite*" program [here](#).



of electric vehicles. Uruguay currently has an installed network of approximately 460 charging stations in publicly accessible locations, offering both slow and fast charging, thus achieving the goal of providing a charging point every 50 kilometres. The charging tariff is likewise set as a single uniform rate applicable throughout the day, replacing the previous time-differentiated scheme. In addition, the subsidy for the acquisition of home charging equipment is maintained (*“Movilidad Sostenible”*) supporting the expansion of the charging network.²⁸

With respect to the public transportation sector, by 2025, Uruguay continued implementing the Sustainable Mobility Trust Fund (FiMS for its Spanish acronym).²⁹ In 2025, the government operationalized the scheme through Resolution No. 5/025³⁰, which sets minimum requirements for operators to receive reimbursements, and Resolution S/N/025³¹, which defines the conditions for accessing subsidies for newly incorporated fully electric buses. These measures consolidate the restructuring of the diesel-price reimbursement mechanism and reinforce incentives for fleet renewal with zero-emission technologies. The broader policy framework was strengthened by Decree No. 50/025, which approved the National Urban Mobility Policy (PMUS, in Spanish).³² By the end of 2025, Uruguay’s public transport system had incorporated 207 electric buses.

Energy Efficiency. Uruguay continued to strengthen its long-standing policy framework for energy efficiency throughout 2024, consolidating a broad set of instruments aimed at reducing energy consumption across households, firms, and public institutions. Key measures include incentives for the adoption of high-efficiency appliances, the expansion of energy efficiency schemes, and targeted financial support mechanisms. In this context, programs promoting the replacement of outdated technologies—particularly through the uptake of Class A appliances—have played a central role in shaping more efficient consumption patterns and reducing electricity demand.

Building on these efforts, UTE maintained and expanded its incentive schemes for residential users, offering subsidies and tariff discounts linked to the acquisition of efficient equipment. These programs have demonstrated high uptake, with tens of thousands of households benefiting from rebates for energy-efficient appliances, contributing to a progressive renewal of the residential equipment stock. In parallel, initiatives such as *“Confort Central”* have continued to promote the installation of heat pumps and efficient thermal systems in buildings, supporting both energy savings and emissions reductions. At the regulatory level, ongoing improvements have further facilitated access to the energy efficiency certification

²⁸ “Sustainable Mobility” of the National Administration of Electric Power Plants and Transmissions (UTE, for its Spanish acronym) is a component of the overarching national sustainability strategy, accessible [here](#).

²⁹ The FiMS was established under Law No. 20.212, Article No. 584 (in 2023) and regulated through Decree No. 143/024 (2024). See Decree No. 143/024 [here](#).

³⁰ See Resolution No. 5/025 [here](#).

³¹ See Resolution S/N/025 [here](#).

³² The PUMS considers the social, environmental, economic and enabling dimensions of urban mobility with a time frame up to 2050, regulated in March 2025 through Decree No. 50/025, [here](#).



scheme, which provides direct economic incentives based on verified energy savings and has supported more than 1,400 projects nationwide.³³

At the system level, Uruguay achieved a major milestone with the completion of the nationwide rollout of smart meters. By 2024–2025, coverage reached virtually all electricity users—exceeding 1.7 million installations and approaching 100% of households—positioning the country as a regional leader in digitalized energy management. This infrastructure enables real-time monitoring of consumption, facilitates the implementation of time-of-use tariffs, and enhances demand-side management capabilities. As a result, consumers are increasingly engaging with dynamic pricing schemes and adopting more efficient consumption behaviours, contributing to improved grid flexibility and overall system efficiency.³⁴

In parallel, the Ministry of Industry, Energy and Mining (MIEM) has continued to expand the Energy Efficiency Assistance Line (LAEE), a key instrument supporting the identification and preparation of efficiency investments. The program provides non-reimbursable funding to partially cover the cost of energy audits and technical-economic feasibility studies, which are essential for unlocking investment in efficiency improvements across multiple sectors. Recent editions of the program have reinforced its focus on industrial decarbonization, prioritizing projects that enable the substitution of fossil fuels with more efficient and sustainable technologies.³⁵

Electricity generation. Uruguay continued to consolidate and expand its renewable electricity generation system throughout 2024–2026, advancing into a “second energy transition” focused on scaling solar capacity, strengthening infrastructure, and enabling new clean energy vectors. With approximately 99% of electricity already generated from renewable sources, the country is now prioritizing diversification and system flexibility to respond to rising demand and export opportunities.

A significant milestone in this transition was the commissioning of UTE’s first large-scale photovoltaic plant at Punta del Tigre (30 MW) in late 2024, marking the entry of utility-scale solar into the public generation portfolio. Building on this, Uruguay has rapidly moved to scale its solar capacity. The most relevant development is the Melo solar park, currently under construction, which will become the largest photovoltaic facility in the country with more than 75-100 MW of installed capacity and an investment exceeding USD 75 million. Once operational (expected by 2028), it will supply electricity to approximately 65,000 users, significantly increasing the contribution of solar energy to the national mix.³⁶

In parallel, Uruguay is implementing a broader pipeline of solar investments as part of a structural expansion strategy. UTE has confirmed plans to incorporate around 100 MW of new solar capacity annually to keep pace with demand growth, while additional parks are expected to be announced in the near term. This approach is complemented by competitive

³³ See Energy Efficiency Certificates’ program [here](#).

³⁴ See UTE press release [here](#).

³⁵ See Energy Efficiency Assistance Line program [here](#).

³⁶ See Uruguay’s Presidency press release [here](#).

procurement schemes, including auctions for up to 200 MW of new photovoltaic capacity, aimed at attracting private investment and reinforcing Uruguay's role as a regional renewable energy hub.

This expansion is closely linked to a major upgrade of the national transmission system. Uruguay has entered a new phase of infrastructure investment, with over USD 1.1 billion planned for transmission and grid modernization, reflecting the need to connect geographically dispersed renewable resources with demand centers and export interconnections. Projects such as the 500 kV Tacuarembó–Salto line form part of a broader strategy to strengthen grid resilience, enable higher penetration of renewables, and support increasing cross-border electricity trade. In this context, Uruguay has consolidated its position as a net electricity exporter, supplying energy to Argentina and Brazil during periods of high demand while maintaining flexible imports from both neighbouring countries Brazil to optimize system costs.

At the same time, Uruguay is progressing in the development of new clean energy applications, particularly in green hydrogen. Pilot initiatives such as Kahirós, combining renewable electricity generation with hydrogen production for heavy transport applications, continue to progress, providing early insights into the operational feasibility of these solutions under real-world conditions. At a larger scale, the HIF Global e-fuels project in Paysandú, with an estimated investment of around USD 5.3 billion, represents a major integrated development linking renewable power generation, hydrogen production, and synthetic fuel manufacturing within a single industrial value chain. While the project remains at an early stage, in December 2025, Uruguay signed a memorandum of understanding with HIF Global to advance the development of this initiative.³⁷ These projects are expected to support the gradual expansion of hydrogen-based value chains in Uruguay and could contribute to future export activity once the projects become operational.³⁸



Agriculture and Livestock Management

Uruguay's agriculture and livestock sector is advancing an ongoing transition toward production systems that are both environmentally sustainable and economically resilient. The adoption of improved grazing and herd-management practices is enhancing productivity while lowering GHG-emission intensity per unit of output and strengthening the resilience of production systems. Evidence shows that aligning livestock management with the ecological dynamics of native rangelands improves system efficiency, supports ecosystem conservation,

³⁷ See Uruguay's Presidency press release [here](#).

³⁸ See Uruguay XXI press release [here](#).



and promotes a more efficient use of natural resources. These policy directions are aligned with Uruguay's Long-term Climate Strategy and are framed in the programmatic guidelines for 2025–2030 led by the Ministry of Livestock, Agriculture and Fisheries (MGAP), which provide a strategic framework aimed at balancing economic growth, social inclusion, and environmental sustainability.³⁹

Sustainable livestock farming and production. Uruguay continues to make progress in advancing mitigation efforts within its livestock sector. These efforts are supported by a portfolio of measures aimed at reducing greenhouse gas emissions while strengthening the sustainability of the country's food production systems.

The MGAP, in coordination with the MA, is currently implementing a program to promote the adoption of improved technologies in livestock farming systems, with a particular focus on breeding practices under the *Programa de Innovación para la Cría Ganadera Sostenible* ("Pro Cría"). The program aims to strengthen productive efficiency and reduce methane-emission intensity in meat production, while simultaneously improving producer's incomes and promoting biodiversity conservation. It builds on insights and lessons learned from previous initiatives to enhance the effectiveness and scalability of its interventions.⁴⁰

Likewise, the project "Strengthening Sustainable Livestock Farming in Uruguay" remains under implementation by FIAP, in coordination with MGAP, MA and the Uruguayan Agency for International Cooperation (AUCI, for its Spanish acronym), with funding from the European Union through the EUROCLIMA+ program. The initiative aims to reinforce national capacities for sustainability monitoring, management, and policy design—integrating gender and generational perspectives—while advancing territorial capacity-building for good livestock practices and the development of incentive policies aligned with national production realities.⁴¹

Additionally, others initiatives and progress include the adoption of improved grazing and livestock-management practices—such as the incorporation of tannin-rich legumes—to enhance soil carbon sequestration and curb enteric methane. The country is also developing a breeding platform to select more feed-efficient animals and integrate genomic tools into genetic-improvement programs, with validated results in the Hereford breed led by the National Institute of Agricultural Research (INIA for its Spanish acronym). In parallel, research is assessing the performance of methanogenesis inhibitors across different production systems and quantifying their environmental and productivity impacts. Additional work is examining the contribution of improved animal health to methane-emission reductions and its associated co-benefits for climate adaptation.

Reducing use of synthetic nitrogen fertilizers. Uruguay continues to invest in research on slow-release fertilizers and the optimization of nitrogen application timing. These efforts are supported by knowledge-sharing programs with producers aimed at improving nitrogen-use

³⁹ Further information on the "Programmatic guidelines for the agriculture sector 2025-2030" accessible [here](#).

⁴⁰ Further information on the "Pro Cría" [here](#) and [here](#).

⁴¹ Further information on the "Strengthening Sustainable Livestock Farming in Uruguay" initiative accessible [here](#).



efficiency in both crops and pastures. Complementary studies are also under way to assess and update existing economic and fiscal incentives to accelerate the adoption of these technologies. Since November 2021, organic fertilizers, organo-mineral fertilizers, and organic soil amendments (such as compost) have been exempt from value-added tax, placing them on equal footing with mineral fertilizers. In a further step, in December 2025, Law No. 20,446 (Articles 461 and 468) introduced the application of the Excise Tax (IMESI) on highly hazardous pesticides (WHO Class 1a/1b; FAO criteria), as determined by the Executive Branch with technical input from MGAP and MA. Revenues from this tax are allocated equally to the Reconstruction and Promotion Fund for the Horticulture Sector and the National Environmental Fund. The measure aims to support bio-inputs and sustainable practices through coordinated actions by MEF, MGAP and MA, and remains pending regulatory development and operational implementation.⁴²

Agroecological production. Uruguay has continued to build on existing agroecological initiatives through enhanced coordination between the MGAP and INIA. Recent work has focused on systematizing lessons from pilot experiences, developing technical guidance, and strengthening capacity-building efforts to support gradual transitions toward more sustainable production systems.⁴³



Waste Management

Progress in the Implementation of the National Waste Management Plan. Uruguay has continued implementing its National Waste Management Plan (PNGR 2022–2032), with a sustained focus on strengthening coordination with departmental governments and advancing toward a circular economy model. Recent updates confirm that cooperation agreements with most departments remain a central mechanism for closing open-air dumps, improving final disposal systems, and strengthening local capacity, with ongoing efforts to integrate remaining departments into the national framework. At the same time, the Plan has increasingly emphasized waste reduction and the revaluation of materials as resources, consolidating its role as the main policy instrument guiding the transition toward more integrated and sustainable waste management.

Since mid-2025, Uruguay has also introduced new regulatory measures to support these objectives. Between August and October 2025, several decrees were approved to strengthen the legal framework for waste management, including specific regulations for construction and demolition waste, food waste recovery, and the management of end-of-life batteries under extended producer responsibility schemes. These measures aim to improve

⁴² See Law No. 20,446, Articles 461 and 468 [here](#).

⁴³ See MGAP press release [here](#).



traceability, promote recycling and recovery, and reduce the environmental impact of waste across different sectors, reinforcing the shift toward circular economy practices.⁴⁴

In parallel, progress has been made in infrastructure and waste valorization. In July 2025, a project was signed in Maldonado for an integrated waste treatment system, with an investment exceeding USD 36 million. The facility is expected to process and recover more than 80% of municipal solid waste through sorting, energy recovery, and other treatment technologies, reducing the share sent to final disposal. This project illustrates a gradual shift from landfill-based practices toward systems that place greater emphasis on material recovery.⁴⁵

In addition, Uruguay has continued to advance the management of electrical and electronic waste (e-waste) through the implementation of a specific regulatory framework. Following the approval of the regulation for the integrated management of waste electrical and electronic equipment (RAEE), new measures introduced in 2025 include the launch of controls on imports of electrical and electronic equipment, as well as the development of technical guidelines and administrative procedures for classification, registration, and reporting. These actions aim to support the gradual rollout of formal management systems, improve traceability, and facilitate the implementation of extended producer responsibility schemes for this waste stream.⁴⁶



Forestry and Other Land Uses

Advancing certification for deforestation-free agro-exports. Uruguay continued to advance the development of a national system to verify deforestation-free production across agro-export value chains, in line with emerging international requirements such as Regulation (EU) 2023/1115. The MGAP, through its Directorate of Forestry (DGF), is designing a unified and interoperable digital platform that will enable the verification of land free of deforestation and support traceability for products originating from areas with native forest. The platform will be universal, voluntary, and connected to existing national information systems, including the National Livestock Information System (SNIG), the National Agricultural Information System (SNIA), and the National Forest Information System (SNIB), providing a robust basis for future certification processes. These efforts build on earlier diagnostic work and pilot exports of deforestation-free timber, demonstrating Uruguay's capacity to align with new market requirements while reinforcing environmental integrity across export-oriented sectors.

⁴⁴ See new regulations [here](#).

⁴⁵ See MA press release [here](#).

⁴⁶ See MA information on electrical and electronic waste [here](#).



Improving transparency and efficiency in forest governance. Progress in deforestation-free certification has been accompanied by broader improvements in forest governance. In 2025, Uruguay fully implemented the National Forest Information System (SNIB), which modernizes the management of native forests by replacing paper-based procedures with a comprehensive digital platform. SNIB now serves as the sole channel for registering native forests, submitting and updating management or harvesting plans, and processing related administrative requests. The system enhances transparency, efficiency, and oversight by centralizing information, integrating geospatial data, and enabling more agile monitoring and control. This digital transition strengthens institutional capacity, supports more effective conservation of native forest ecosystems, and provides a solid foundation for compliance with international deforestation-free standards.⁴⁷



Sustainable Finance Initiatives

Green Credit Guarantees for Small Firms. Introduced in 2024, as part of Uruguay's broader sustainable finance strategy, *SiGa Ambiente* was created to expand access to credit for micro, small, and medium-sized enterprises (MSMEs) undertaking environmentally sustainable investments. Developed jointly by the MEF and MA, and the National Development Agency (ANDE, in Spanish), the instrument supports innovation and cleaner production models by offering a 50% reduction in the guarantee fee under the National Guarantee System for Enterprises (SiGa) and by covering up to 70% of the loan for firms lacking sufficient collateral. In 2025, the framework was further strengthened through the adoption of a revised and taxative list of eligible green investments.⁴⁸

Climate and Nature Fund. Established in December 2025 through the National Budget Law for the 2025–2029 period (Law No. 20,446, Articles 608–612), the Fund was created to finance actions that advance the indicators embedded in Uruguay's existing and future sustainable sovereign financing instruments. Its purpose is to channel potential benefits—such as interest-rate reductions derived from sustainable debt instruments or non-reimbursable contributions—toward concrete national initiatives. The MEF serves as the Fund's administrator and, in coordination with the MA, the MIEM, and the MGAP, will define financing priorities. The Law also establishes an Advisory Commission composed of representatives from these four ministries and chaired by the MEF, as well as the mechanisms for integrating the Fund's financial resources. Reflecting a strategic and forward-looking vision, the Fund seeks not only to safeguard natural resources and ecosystems for present and future generations but also to strengthen Uruguay's international positioning by

⁴⁷ See SNIB [here](#).

⁴⁸ See *SiGa Ambiente* [here](#) and [here](#).



leveraging its environmental track record to attract investment and additional non-reimbursable funding.⁴⁹

National Framework on Climate Finance. The project “Aligning and Increasing Public and Private Financial Flows with Uruguay’s Climate Commitments and Priorities” is a joint initiative coordinated by the MA, MEF and the Central Bank of Uruguay, financed by the Green Climate Fund (GCF) and implemented by UNDP Uruguay, with the support of the Uruguayan Agency for International Cooperation (AUCI). The initiative seeks to strengthen policies, financial instruments, and institutional capacities that support climate action and sustainable development and mobilize and redirect financial resources toward advancing the country’s climate objectives. As part of the project, training programs on climate-risk management and disclosure have been delivered to financial-sector institutions, and a tertiary-level climate-finance training program is being developed to foster applied learning, cross-sector dialogue, and technical coordination. In parallel, a Strategic Framework for Climate Investment Planning and Mobilization, with a gender perspective, is under development to support the implementation of Uruguay’s second NDC. This framework aims to identify public and private financing sources, assess gaps and opportunities, and promote innovative financial mechanisms to scale climate investments.⁵⁰

⁴⁹ See Law No. 20,446, Articles 608 to 612 [here](#).

⁵⁰ See Climate Finance Project [here](#).



Chapter 7

Case Study





Promoting Sustainability-Linked Private Credit in Uruguay: Insights from the REIF Project

The Renewable Energy Innovation Fund (REIF) is a joint initiative of the United Nations and the Government of Uruguay, supported by the Joint SDG Fund. Launched to accelerate the country's second energy transition, REIF blends concessional resources with commercial bank financing to catalyze private-sector investments in clean technologies and decarbonization solutions across key sectors, including industry, transport, construction, services, and electric mobility.

Since its inception, REIF has actively co-financed private projects that deploy innovative low-carbon technologies and infrastructure.⁵¹

Cumulative Results (as of 2025):

- 17 private projects co-financed
- USD 5.4 million in REIF concessional financing
- USD 30.3 million in total investment mobilized
- Over 114,000 t CO₂ avoided over the estimated lifetimes of the projects

Beyond the provision of concessional financing, REIF incorporates robust impact commitments, emissions monitoring, technical assistance, and gender and inclusion criteria. This comprehensive approach has created a strong enabling environment for sustainability performance while revealing a key opportunity: using economic incentives to reinforce the achievement of verifiable environmental and social outcomes.

From impact commitments to economic incentives

REIF requires participating companies to adopt formal commitments covering:

- Monitoring and reporting of avoided GHG emissions
- Adherence to the Women's Empowerment Principles (WEPs) promoted by UN Women
- Access to no-cost technical assistance on impact management and gender equality
- Project-specific sustainability commitments

Experience has shown that commitments are significantly more effective when paired with tangible incentives. In response, REIF has introduced mechanisms that adjust financing conditions based on the achievement of predefined, verifiable sustainability targets. This performance-based approach aligns with the global rise of sustainability-linked finance, offering companies a direct economic benefit (typically through reduced financing costs) when they meet ambitious sustainability goals.

⁵¹ For further details, refer to Chapter 7, 'Case Studies', of the [Third SSLB Annual Report](#) (2025).



A practical guide presented to the Uruguayan financial system

To strengthen local capacity, REIF commissioned Environmental Resources Management (ERM) to develop a Practical Guide for Structuring Sustainability-Linked Loans and Bonds in Uruguay. The guide adapts international best practices, particularly the ICMA Sustainability-Linked Bond Principles, to the Uruguayan context.⁵² It provides clear, actionable criteria for selecting material KPIs, setting ambitious and measurable Sustainability Performance Targets (SPTs), establishing verification processes, ensuring transparency, and aligning financial instruments with broader corporate sustainability strategies.

While the guide addresses both loans and bonds, REIF places primary emphasis on sustainability-linked loans, given their greater relevance to the companies and financial institutions the Fund works with. The guide has been widely presented to banks, companies, and other stakeholders in Uruguay's sustainable finance ecosystem.

First Pilot: Sustainability-Performance Incentive Loan with IXOU

REIF launched its first performance-based incentive loan with IXOU, a company in the construction sector. The project combines commercial bank financing with REIF concessional resources to deploy energy-efficient technologies, including heat pumps and electric vehicle chargers. It is expected to avoid approximately 3,956 t CO₂ over 15 years.

Following ICMA principles, the loan includes specific Sustainability Performance Indicators (KPIs), Sustainability Performance Targets (SPTs), verification mechanisms, and an interest-rate reduction linked to target achievement. Due to its relatively small scale, the transaction did not include a Second Party Opinion (SPO) or full external verification and is therefore positioned as a "sustainability-performance incentive loan" rather than a formal Sustainability-Linked Loan (SLL).

This pioneering transaction demonstrates how financial incentives can encourage the adoption of sustainability practices in sectors where they are not yet standard. The project's focus on construction and demolition waste valorization is especially relevant, addressing a complex challenge that requires improved traceability, documentation, and value-chain coordination—areas still developing in Uruguay. For smaller firms, such instruments also serve as an important stepping stone to build internal capacities in impact measurement and sustainable management.

A catalytic role for the financial system

By promoting the structuring of sustainability-linked instruments and applying them in its own operations, REIF aims to move sustainable finance in Uruguay beyond isolated pilots toward replicable, mainstream practices. In doing so, the Fund not only mobilizes private capital

⁵² A Spanish version of the *Practical guide for structuring SSL/SSB in Uruguay* is available [here](#).



toward clean technologies but also strengthens the capabilities of banks, companies, and public institutions to systematically integrate sustainability criteria into financing decisions.



Annex 1

Descriptive Statistics on Greenhouse Gas Emissions in 2024

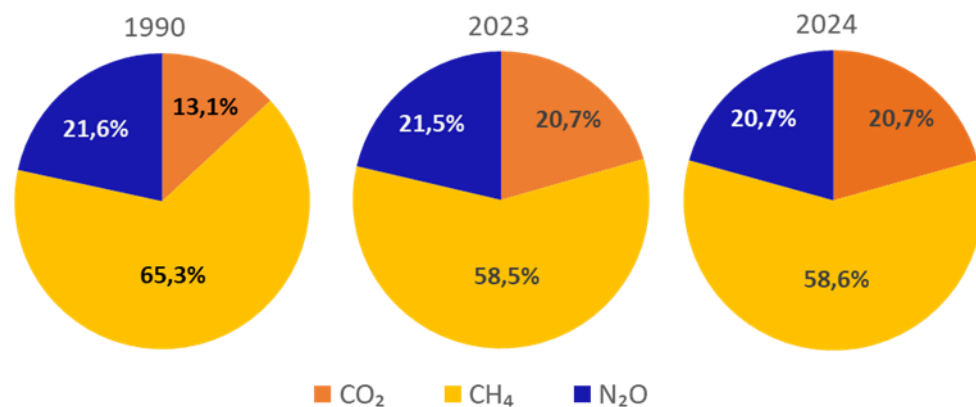




In 2024, Uruguay's emission profile continues to be strongly determined by non-CO₂ GHG emissions. Estimated CH₄ (methane) emissions represented 58,6% of aggregate gross national emissions and N₂O (nitrous oxide) accounted for 20,7%. Both non-CO₂ emissions are almost completely generated in biological processes. Lastly, CO₂ (carbon dioxide) emissions made up 20,7% of the total.

The chart below shows the evolution of the composition of Uruguay's emissions profile in 1990 (reference year), and years 2023 and 2024. Compared to the previously available data for 2023, in 2024 the proportion of CH₄ emissions remained relatively stable, as did the share of N₂O within total aggregate emissions.

Evolution of Uruguay's Gross Greenhouse Gas Emissions Profile
By gas, percentage of total each year



Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC. Expressed in Gg CO₂eq, Metric GWP100 AR5. Due to improvements in the emissions-estimation methodologies, the annual estimates for the 1990-2023 series were revised. For this reason, the percentage shares of the three GHGs in 2023 changed slightly. Source: SSLB Public Source Database as of April 2026.

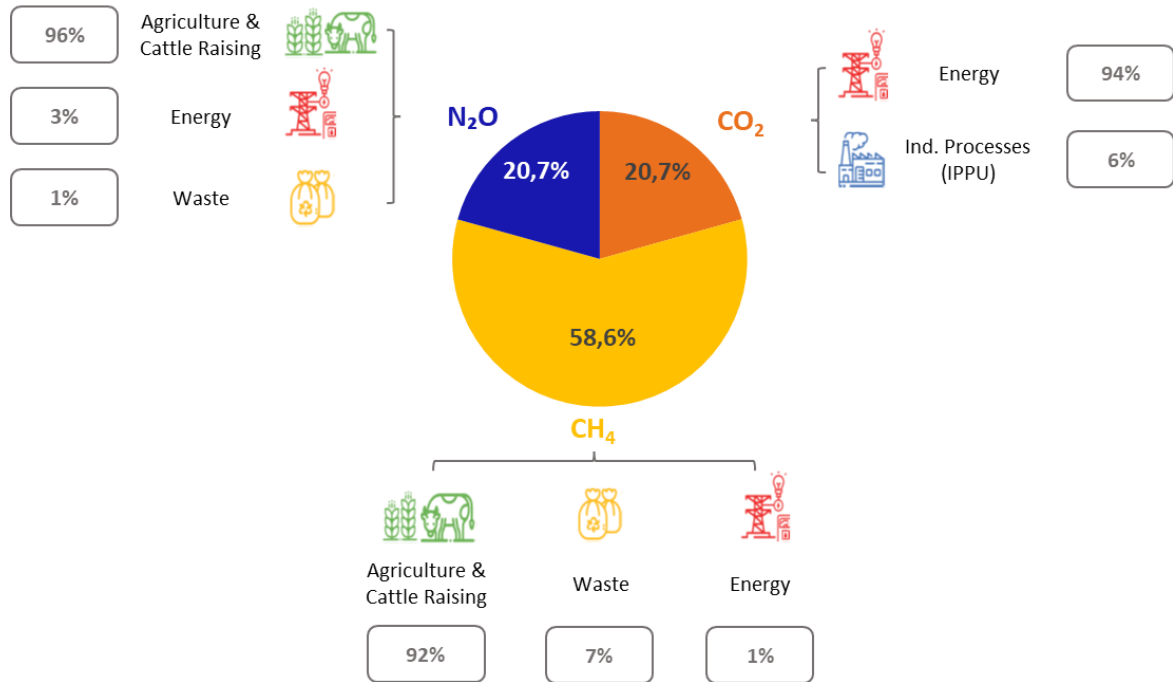
In Uruguay, CO₂ emissions are generated mainly in the Energy sector, specifically from the burning of fossil fuels. As in the previous year, in 2024, CO₂ emissions from the Energy sector represented 94% of total CO₂ emissions. Within the Energy sector, transport represents the predominant contributor to CO₂ emissions. Lastly, the Industrial Processes sector accounted for 6% of CO₂ emissions (predominantly linked with cement production).

CH₄ emissions and N₂O emissions are generated almost entirely in the agriculture sector (including livestock), as methane and nitrous oxide greenhouse gases are strongly linked to primary food production (crops and beef). This sector accounted for 92% of total CH₄ and 96% of total N₂O emissions in 2024, as in the prior year. Lastly, the Waste sector accounted for 7% of total CH₄ emissions and just under 1% of N₂O emissions (primarily arising from disposal of solid urban waste).

Based on the latest available data for 2024, cattle raising remains the most GHG emission-intensive activity in the agricultural sector. Its CH₄ emissions accounted for 87.9% of the

sectoral total (predominantly driven by enteric fermentation, 86.2%) while contributing 68% of the sector's total N₂O emissions.

Uruguay's Gross Greenhouse Gas Emissions Profile, by sector
 Percentage of total within each type of gas, 2024



Considers the three global GHGs and the main sectors contributing emissions of each GHG, as set out in the 2017 NDC. Expressed in Gg CO₂eq, metric GWP100 AR5. Source: SSLB Emissions Report (EMR).

On a sectoral basis, in 2024 the emissions considered under KPI-1 from AFOLU sector accounted for 26,943 Gg CO₂eq. These emissions were primarily driven by CH₄ released from livestock production (17,319 Gg CO₂eq) and by N₂O emissions resulting from manure deposition and management across dairy and non-dairy cattle production systems (5,677 Gg CO₂eq). Additional contributions came from the nitrogen in crop residues (348 Gg CO₂eq) and from the application of synthetic nitrogen fertilizers in crop production (1,220 Gg CO₂eq).



Annex 2

Reporting and External Verification of KPI-1





Reporting

The KPI-1 covers gross GHG emissions of CO₂, CH₄, and N₂O, corresponding to the gases, sectors, categories, and sources set out in the 2012 NGHGI, on which the 2017 Nationally Determined Contribution's emissions intensity reduction commitments were established. The economy-wide emissions of these greenhouse gases are aggregated in CO₂-equivalent units using the 100-year Global Warming Potential metric established in the Fifth Assessment Report (GWP-AR5) of the Intergovernmental Panel on Climate Change (IPCC).⁵³

The GHG emissions reported for 2024 (estimated in 2025), together with any revisions to historical values arising from the incorporation of additional data sources or from recalculations undertaken to reflect methodological enhancements or corrections, have been prepared in accordance with the good practices and scientific standards set forth in the 2006 IPCC Guidelines for the preparation of the NGHGI. The resulting historical series of GHG estimates for the period 1990–2023 are presented in the Emissions Report (EMR, or IEM in Spanish), submitted to the SSLB Inter-ministerial Working Group in December 2025.

The GHG intensity metric for 2024 is calculated by normalizing total gross emissions with real GDP, expressed in billions of constant 2016 pesos. This computation relies on the most recent official National Accounts series released by the Central Bank of Uruguay in March 2026, which is extended back to 1990 through statistical splicing using the variation-rate method.⁵⁴

Lastly, the assessment of KPI performance relative to its baseline year is presented in the 2024 KPI Report (KPIR, or INI in Spanish), which computes KPI-1 in accordance with the formula set out in Uruguay's SSLB Framework. The KPIR was prepared by the Programming, Monitoring, Reporting and Verification Working Group (pMRV), and its final version was submitted to the inter-ministerial SSLB Working Group in May 2026.⁵⁵

Both methodological documents—the Emissions Measurement Report (EMR) and the KPI Report (KPIR)—are made publicly available on Uruguay's SSLB website alongside this fourth Annual Report.⁵⁶ The underlying historical data for each KPI, covering the period 1990–2024, is accessible through the 'Public Source Database' also hosted on the SSLB website.⁵⁷

The reporting preparation was carried out through sustained inter-ministerial coordination among the four participating ministries, in line with the work program originally established.

⁵³ See Uruguay's NGHGI [here](#), and the Uruguay's First NDC [here](#).

⁵⁴ In line with international standards, the Central Bank of Uruguay (BCU) reviews national accounts estimates, particularly gross domestic product (GDP) data, on an annual basis pursuant to its "Data Review and Release Calendar Policy." According to this policy, annual GDP estimates for a given year can undergo up to four annual revision rounds until they become firm (i.e., the fourth vintage is the final one).

⁵⁵ More information on the estimation methodologies for the KPIs and the time series for real GDP can be found in the Technical Data Sheets in the SSLB's [website](#).

⁵⁶ In the "SSLB Annual Report" section of the SSLB [website](#).

⁵⁷ See website SSLB [here](#).



This process ensured full compliance with the SSLB's reporting obligations while further strengthening the robustness of its internal governance arrangements.⁵⁸

External Verification

UNDP conducted an independent external verification of the key performance indicator KPI-1 included in the Sovereign Sustainability-Linked Bond (SSLB) Framework, based on the values reported in the 2024 KPIR prepared by the Government of Uruguay.⁵⁹

The technical assessment of the 1990-2024 EMR time series of CO₂, CH₄, and N₂O emissions, covering the Energy, Industrial Processes, Agriculture, and Waste Sectors, was undertaken in accordance with the methodological guidance set forth in the UNFCCC's Guide for Peer Review of National Greenhouse Gas Inventories. Given that KPI-1 is an intensity-based metric, the denominator used in its calculation (the real GDP time series) was also subject to external verification.

Uruguay and UNDP have set up an accelerated four-month external review process for the KPI-1. Despite the inherent complexities associated with compiling and externally validating the annual national GHG emissions, Uruguay's publication of externally verified annual GHG data, with an approximate lag of one year and five months from the end of the observation year (2024), represents a significant enhancement to the country's existing reporting and peer-review verification processes under UNFCCC requirements.

⁵⁸ More information on the work-streams for the reporting of KPIs can be found at Uruguay's SSLB website section "Inter-Ministerial SSLB Governance." See [here](#).

⁵⁹ See KPIR [here](#).