RENEWABLE ENERGIES
IN URUGUAY







Uruguay XXI
INVESTMENT, EXPORT AND COUNTRY BRAND PROMOTION AGENCY

OCTOBER 2025

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WHY INVEST IN RENEWABLE ENERGY?

Uruguay is a success story and a strategic investment platform for clean energy, characterized by proven political and regulatory stability and a coherent vision for the future. The country has successfully completed its first energy transition, transforming its electricity matrix into one of the cleanest in the world, and is now moving forward with a second phase focused on the decarbonization of transportation and industry, opening up high-value opportunities in fast-growing sectors.

An electrical platform: sustainability, reliability, and competitive costs

Uruguay's main strategic advantage is its electrical system, which offers a solid, low-risk foundation for any investment.

- A nearly fully decarbonized electricity mix: **99% of its electricity generation comes from renewable sources**, meaning that any industrial or commercial operation in the country runs on clean energy, a key competitive advantage at the global level.

- **International recognition and reliability:** Uruguay's electricity system is the highest quality in Latin America and ranks eighth worldwide in energy performance according to the World Economic Forum. **The infrastructure is robust, covering 99.8% of households** and featuring a redundant transmission network that guarantees security of supply.

- Net exporter of energy: thanks to its generation capacity and strategic interconnections with Argentina and Brazil, Uruguay has gone from being an importer to a **net exporter of energy**, demonstrating the resilience and surplus of its system.

Electric mobility: a rapidly growing market with production incentives

The most direct consequence of clean energy is a booming electric mobility market, supported by a comprehensive government policy.

- **Exponential growth in demand:** the adoption of electric vehicles has skyrocketed. Market share rose from 4% in 2023 to 23% in the first eight months of 2025. Imports in the first eight months of 2025 already exceeded the record for the whole of 2024.

- **Strong government support:** a framework of tax incentives eliminates import duties (TGA) and the Specific Internal Tax (IMESI) for electric vehicles. In addition, there are benefits for corporate fleets through the Investment Promotion Law (COMAP) and a 50% reduction in the vehicle registration tax.

- **Opportunity as a regional production platform:** Uruguay offers an attractive regime for the assembly and export of electric vehicles. Benefits include zero-tariff access to the Argentine and Brazilian markets, flexible origin requirements (only 25% regional content in the first year), tariff exemptions for the import of assembly kits (SKD/CKD), and a 10% refund of the FOB value.

Green hydrogen: a strategic bet for the future

Uruguay is well positioned to become a major producer and exporter of green hydrogen (H2V) and its derivatives, representing an opportunity for investors with a long-term vision.

- **Natural resources and competitive costs:** the country has excellent combined wind and solar energy potential that would allow H2V production costs to reach between **US$1.2 and US$1.4** per kilogram by 2030, positioning it competitively against world leaders such as Chile and Australia.

- **Additional advantages:** Uruguay has water availability, biogenic CO_2 sources for the production of synthetic fuels (e-methanol, e-jet fuel), a developed logistics infrastructure, and a strong government commitment, materialized in a national strategy and support funds for pilot projects.

- **Investments underway:** major international projects such as **HIF Global** (US$6 billion for electricity generation and e-fuel production) and **Tambor Green Hydrogen Hub** are already in development, validating the country's potential and demonstrating the investor's confidence in the local ecosystem.

1. ENERGY OVERVIEW

A country's energy supply refers to the set of energy resources available to meet demand. It includes both supply to households and productive sectors and covers all stages of the energy chain: generation, imports, transformation, distribution, and end use of energy. Its importance is not limited solely to the quantity of energy, but is also reflected in the structure of the energy mix, i.e., the composition and proportion of the different generating sources, in energy security, understood as the ability to guarantee a continuous supply at reasonable prices, and in environmental sustainability, which assesses the level of emissions and dependence on fossil fuels.

In Uruguay, energy provision has very particular characteristics that distinguish it in the international context. Until the early 2000s, the country was heavily dependent on imports of oil products, while its electricity generation was largely based on hydroelectricity. This situation began to change in the mid-2000s, when a state energy policy was launched that marked a turning point. The 2005-2030 Energy Policy defined diversification of sources, energy sovereignty, and environmental sustainability as its central pillars.

The result of this strategy was a profound transformation of Uruguay's energy mix. With the arrival of investments and a stable regulatory framework, the country managed to diversify its sources and significantly reduce its dependence on oil in the electricity sector.

However, when considering transportation and other thermal uses, it is clear that oil derivatives continue to be relevant, particularly in activities such as mobility and industry. The challenge for the coming decades will be to extend the achievements of the electricity sector to the rest of the economy. The electrification of transportation, the promotion of biofuels, green hydrogen, and greater energy efficiency appear to be key opportunities to drastically reduce dependence on fossil fuels, consolidate energy security, and move toward a completely clean and sustainable mix.

1.1. ENERGY SOURCES IN URUGUAY

Between 2000 and 2024, Uruguay's energy mix (including electricity consumption, transportation, and thermal uses in households and industry) underwent a process of transformation in its energy supply.

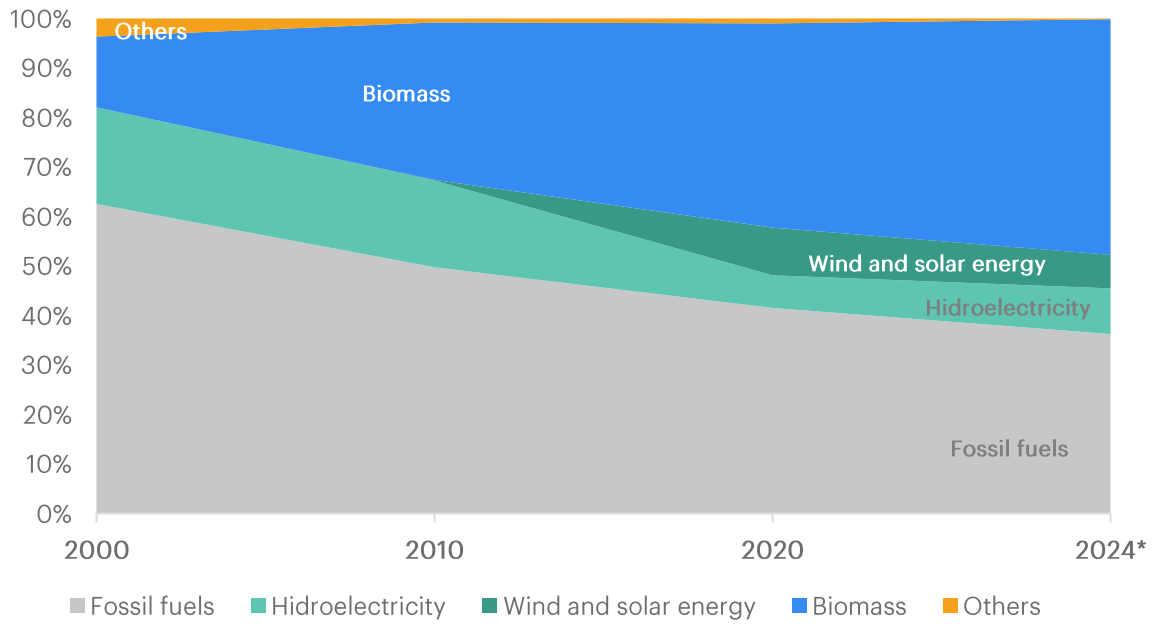
In the early 2000s, the energy supply structure was clearly dominated by fossil fuels. These accounted for almost two-thirds of the energy generated, making Uruguay highly dependent on imports of oil and its derivatives. Hydroelectricity, meanwhile, accounted for one-fifth of the total,

being the main source of supply for the electricity sector, while biomass, associated with some industrial uses, played a minor role. At that time, modern renewable energies, such as wind and solar, were not yet present in the supply mix.

Graph No. 1

EVOLUTION OF THE ENERGY SUPPLY MIX

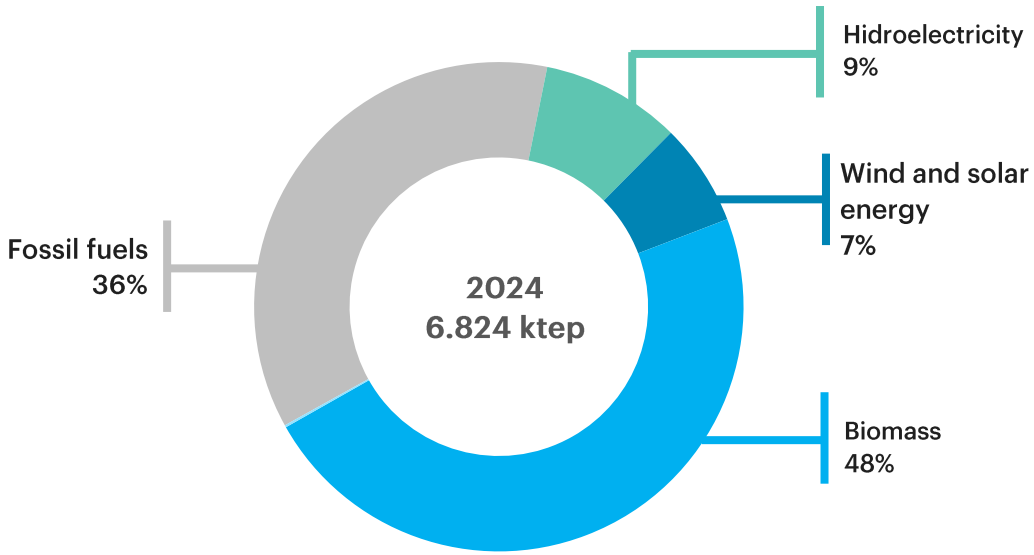
Source: Energy Balance, National Directorate of Energy, Ministry of Industry, Energy and Mining (DNE–MIEM). (*) Preliminary balance.



In 2024, the situation was very different: total energy supply doubled in volume, reaching 6,824 Ktep, and the composition of energy sources also shifted significantly. Fossil fuels fell from 62% to 36%. Hydroelectricity, which had played a prominent role in previous decades, declined to 9%. Meanwhile, the major driver of this transformation was the emergence and expansion of renewable energies. Biomass increased sevenfold in just over two decades, moving from a secondary role to becoming the country's main energy source, contributing nearly half of all energy generated in 2024. At the same time, wind and solar sources reached a 7% share in 2024, consolidating themselves as a key pillar of the structural transformation of the electric system.

Graph No. 2

DISTRIBUTION OF THE ENERGY SUPPLY MIX – URUGUAY (2024)



Source: Energy Balance, National Directorate of Energy, Ministry of Industry, Energy and Mining (DNE–MIEM).

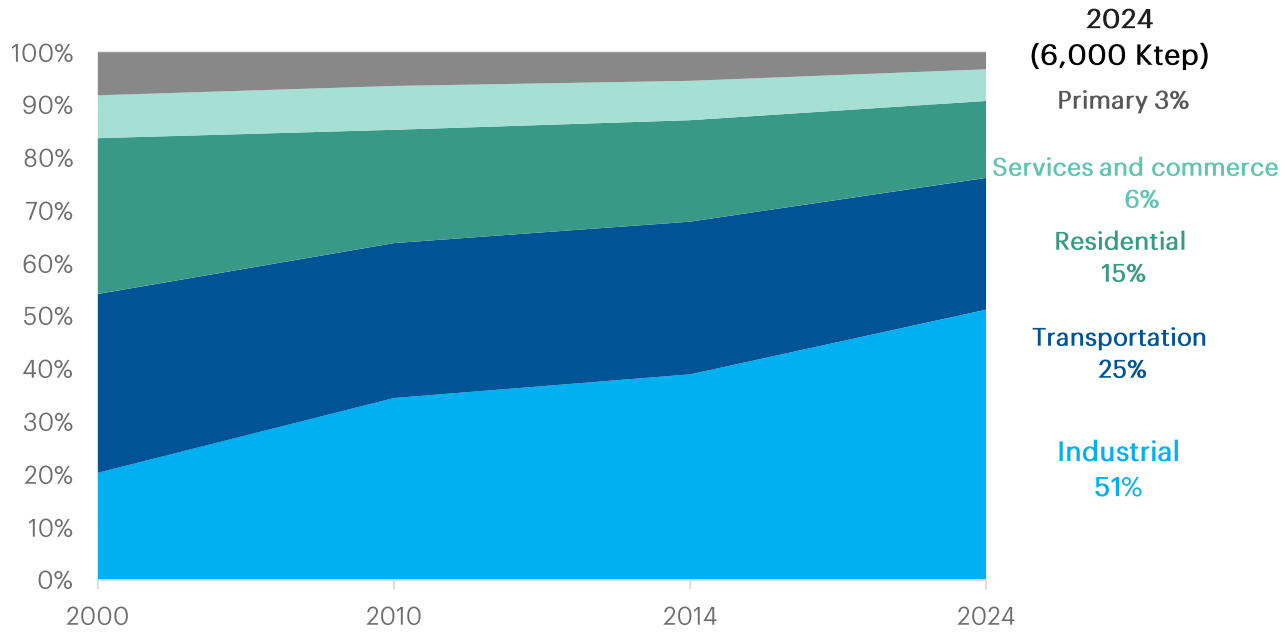
The comparison between 2000 and 2024 shows how Uruguay moved away from a highly concentrated and oil-dependent energy mix to build a more diversified, renewable, and sustainable model. The country not only doubled its total energy supply capacity, but also redefined the balance among sources, reducing fossil fuels to just over one-third and achieving a more balanced and resilient mix.

1.2.COMPOSITION OF ENERGY DEMAND

The analysis of energy demand focuses on the combined energy needs of the different consumer sectors: households, transportation, industry, agriculture, services, and others. Demand, in this sense, is the counterpart of supply and makes it possible to understand how energy use is distributed across sectors, as well as the role that each energy source plays in meeting the needs of each use. It also provides deeper insight into the progress achieved in diversification and sustainability, as well as the challenges that remain ahead.

Graph No. 3

ENERGY CONSUMPTION MIX – URUGUAY 2000–2024 (Ktep)



Source: Energy Balance, DNE- MIEM.

Recent trends in energy demand show a shift from a pattern dominated by transportation and households to one in which industry now accounts for more than half of all energy use. This transformation is closely linked to changes in the country's productive profile and in its energy sources.

The **industrial** sector is largely responsible for the overall increase in national energy demand. In the 2000s it represented one-fifth of total demand, but the expansion of industrial activity—driven largely by the installation of three major cellulose mills—generated a significant rise in industrial energy consumption. Energy consumption in these activities came mainly from biomass (67%), generated from wood residues, which gives the industrial mix a renewable and decarbonized profile. However, other industrial activities still rely on fossil fuels, such as cement, food processing, and metallurgy. For this reason, although the industrial sector is the most renewable one in absolute terms, it still faces challenges in achieving full decarbonization.

The **transportation** sector remains the main source of emissions, as it depends almost entirely on fossil fuels (97%) to power land, maritime, and air mobility. Although progress in electromobility is gaining momentum, its contribution to overall activity remains limited. As a result, transportation continues to be the most carbon-intensive sector and the main challenge for the next stage of the energy transition.

Residential consumption grew moderately during this period, even though its share of total demand fell from 30% to 15%. Households use a combination of different energy sources:

electricity, almost entirely renewable, ensures a high degree of decarbonization, while firewood still plays an important role in home heating, with efficiency and local air-quality challenges.

There are also residual uses of LPG and kerosene of fossil origin. Therefore, the sector's main challenge is not decarbonization, which is already advanced, but improving efficiency and phasing out the remaining fossil uses.

Services and commerce increased their consumption. However, their share of total demand remains small. Their energy supply comes mainly from renewable electricity, making this one of the most decarbonized sectors in the mix, though small amounts of fossil fuels remain associated with transportation.

Agriculture and fisheries have an energy profile heavily concentrated in diesel, widely used for agricultural mechanization and internal transportation, making this sector, together with the transportation sector itself, one of the most dependent on fossil fuels. In recent years, renewable electricity has gained some presence in certain activities such as dairy farms and irrigation systems, but its overall share remains limited. A major challenge going forward is reducing this dependence through machinery electrification and the adoption of advanced biofuels, with the goal of moving the sector toward deeper decarbonization.

2. URUGUAY, A LEADER IN CLEAN ELECTRICITY

Uruguay's electric system is now an international benchmark for the success and consistency of its transformation. Supported by a clear regulatory framework, the country laid the groundwork for an orderly and competitive development of the electricity sector. Following a broad multi-party political agreement, Uruguay pursued a strategy of decarbonization and energy sovereignty with a strong commitment to renewable energy. Through an auction-based scheme, the country incorporated large-scale biomass, wind, and solar generation, reaching 99% of renewable sources in the generation of electricity[1].

The strengths of this process can be seen across multiple dimensions. From the environmental point of view, a nearly fully decarbonized electricity mix has led to a drastic reduction in greenhouse gas emissions and enabled the use of productive-chain residues as an energy input. In economic terms, the transformation translated into lower generation costs. At a technical level, reinforcing the transmission grid and geographically diversifying generation enhanced the system's robustness and resilience. On the international stage, Uruguay went from being a historic

[1] 2024 data.

net importer to becoming an exporter of electricity, playing an active role in regional energy integration.

Nowadays, Uruguay's electric system combines energy security, competitive costs, environmental sustainability, 99.9% household coverage, and a solid regulatory framework, positioning it as one of the country's greatest structural strengths and a key platform for advancing the energy transition in sectors that still depend on fossil fuels.

This is supported by its outstanding position in the System Performance (SP1) indicator of the World Economic Forum's Energy Transition Index 2025[2], where Uruguay ranks eighth globally. This places the country among a select group of leaders in current energy performance, alongside European nations traditionally recognized for their strength in this area. The SP1 indicator measures the observable performance of energy systems, and Uruguay excels because it has managed to combine three fundamental pillars: energy security, sustainability, and equity, ensuring near-universal access to clean energy at relatively affordable prices.

In a world where many countries still depend on imported fossil fuels or face challenges related to access and high costs, Uruguay demonstrates that even a small country can become a global reference when it combines strategic vision, infrastructure investment, and coherent public policies aligned with the future of energy.

2.1.ELECTRICITY INFRASTRUCTURE

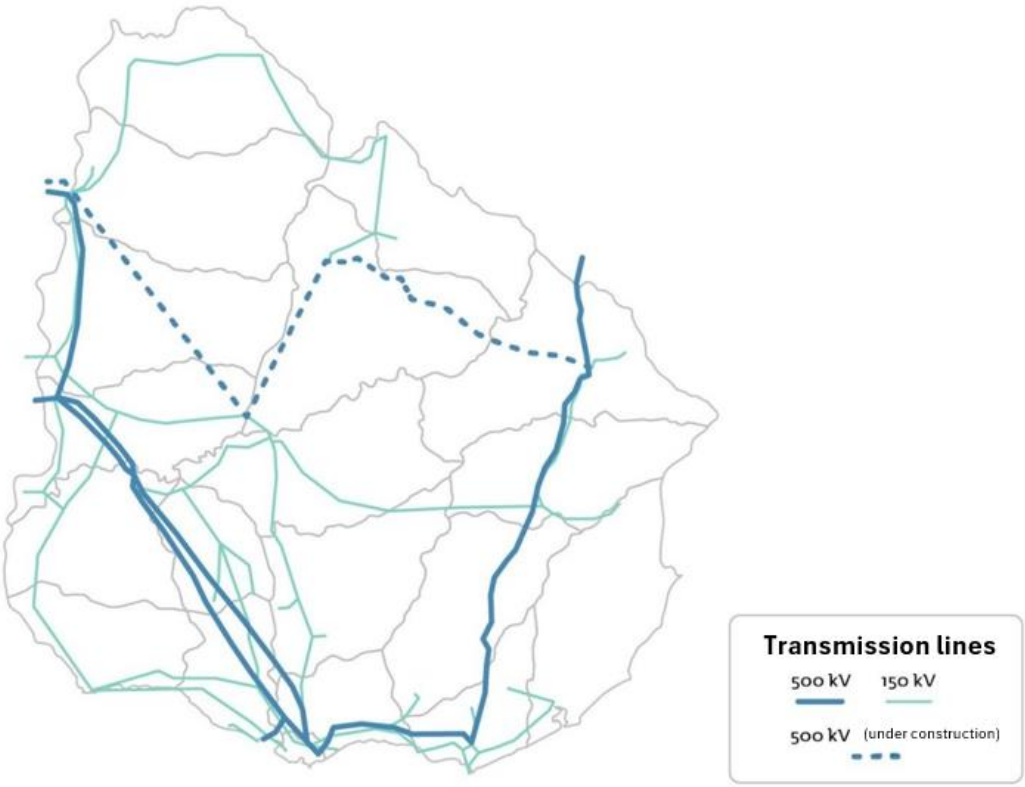
Uruguay has one of the densest and most reliable electrical grids in Latin America. It stands out for its exceptional coverage, reaching **99.9% of households** nationwide, thanks to a robust distribution system with nearly **90,000 kilometers of lines**. The backbone of this system is an extensive high-voltage transmission network that, in 2024, totaled **5,857 kilometers**. This network is organized into two main levels: the **500 kV** network, which carries electricity from major hydroelectric dams to the metropolitan area of Montevideo; and the **150 kV** network, which distributes electricity to department capitals and major consumption centers through more than 90 transmission substations, ensuring reliable and extensive supply across the entire territory.

[4] WEF Report Fostering Effective Energy Transition 2025 :

Graph No. 4

MAP OF THE URUGUAYAN ELECTRIC SYSTEM (500 kV and 150 kV)

(2024)



Source: Transmission Grid Map of UTE i.

Currently, Uruguay's electric system is geographically distributed and integrates a diverse mix of renewable generation sources—primarily wind, solar PV, and biomass—while maintaining hydroelectricity as a fundamental component. This diversification relies on a robust transmission network that continues to be strengthened through the ongoing works to complete the 500 kV ring in the northern and central regions of the country. Once finalized, this ring will complete the national high-voltage interconnection, significantly increasing the robustness, flexibility, and reliability of the National Interconnected System (SIN).

Reinforcing the grid not only enhances the security of domestic supply but also enables greater regional energy integration. Uruguay currently has strategic interconnections with Argentina, through three 500 kV and 230 kV links; and with Brazil, via a 500 kV interconnection between Rivera and Livramento, that allows for bidirectional energy exchanges.

This transformation process is further supported by the modernization of the distribution network through digitalization, automation, and the development of smart grids, enabling improvements

in efficiency and service quality. Uruguay has also begun incorporating battery storage solutions and pilot projects related to green hydrogen, aimed at increasing system flexibility, facilitating the integration of variable renewable energy, and preparing the electrical infrastructure for the challenges of the energy transition and the electrification of mobility.

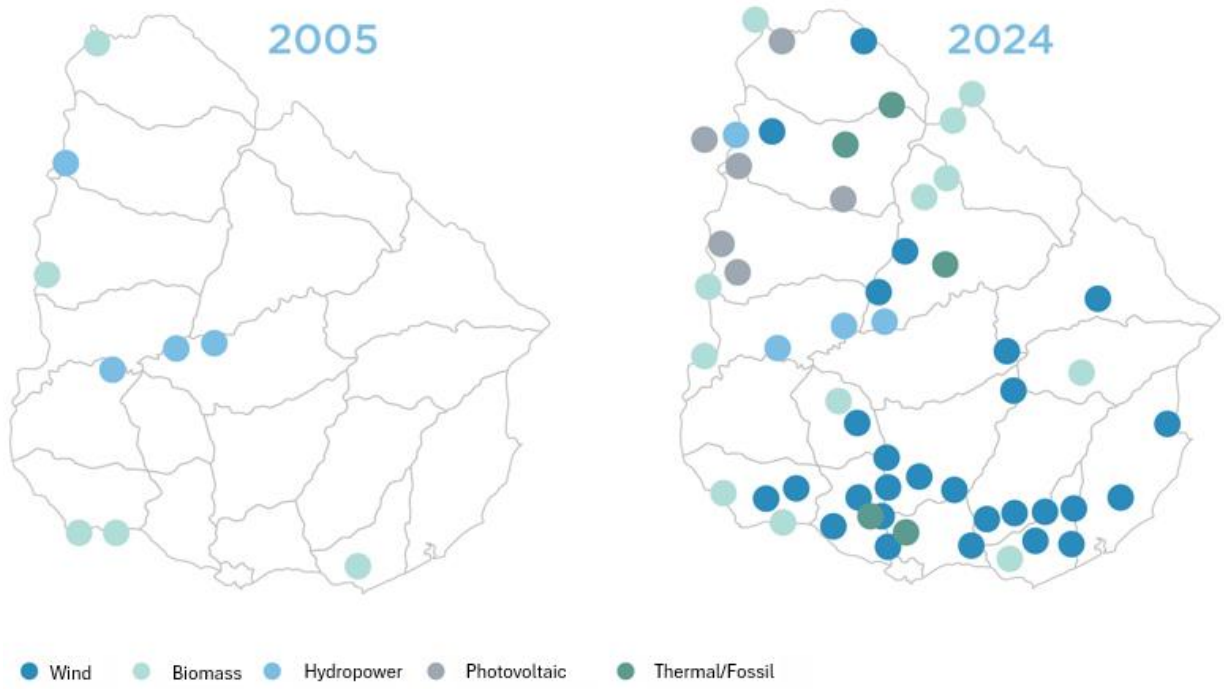
2.1.1. ELECTRICITY GENERATION

Uruguay has an installed capacity of approximately 4,900 megawatts (MW) for electricity generation.

Graph No. 5

MAP OF ELECTRICITY GENERATION SOURCES

(2005 vs. 2024)



Source: Generation Sources Map of UTE i.

Wind farms play a significant role, contributing more than 1,500 MW, equivalent to 31% of total installed capacity. Within this total, 1,000 MW correspond to private generators, while 500 MW come from wind farms owned or operated by UTE. Hydroelectricity contributes another 1,500 MW; biomass feeds approximately 400 MW (8%) into the grid; solar power accounts for around 270 MW (5%); and fossil-fuel-based thermal plants total roughly 1,200 MW, or about 25% of total installed capacity.

The state-owned energy company UTE plays a key role in the sector, as it generates and purchases electricity from private producers and distributes it to consumers[3]. Contracts entered into with

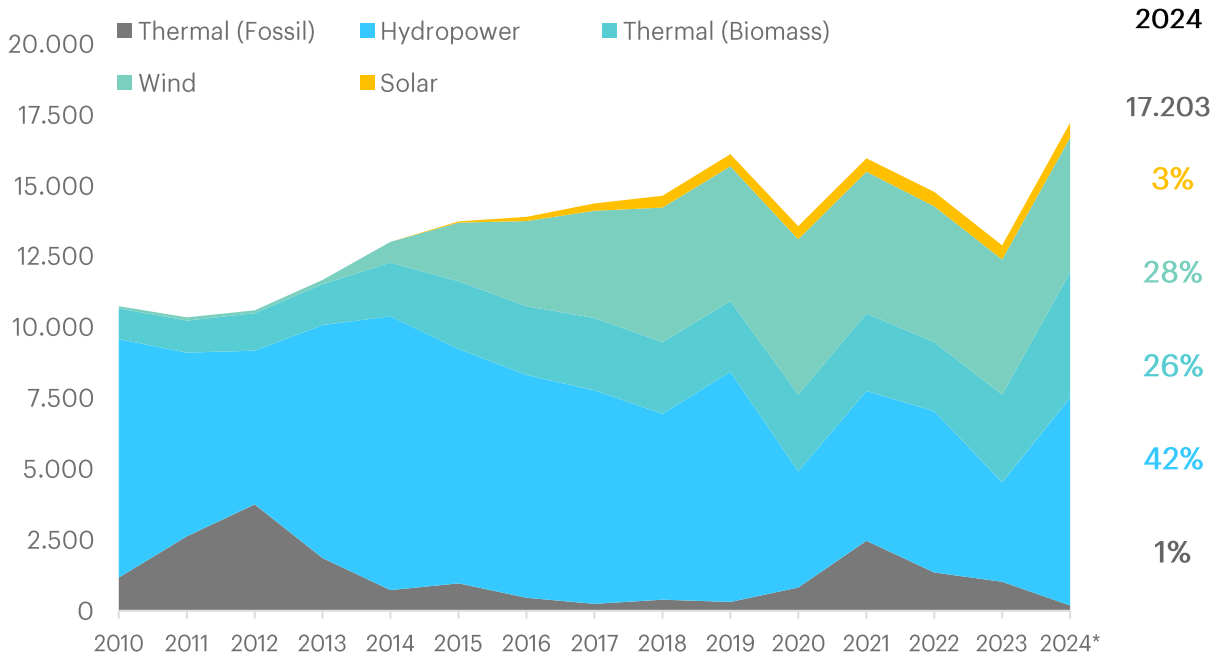
[3] Information on electricity generators and installed and authorized power to be injected into the grid, source ADME

private entities carry an implicit state guarantee, and in practice, UTE has been the executing arm of public policies that enabled the diversification of the energy matrix.

Graph No. 6

ELECTRICITY GENERATION BY SOURCE (GWh)

(2010 –2024)



Source: prepared by Uruguay XXI based on preliminary 2024 BEN data[4].

Uruguay's electric system stands out for its high reliability. According to the World Economic Forum's Global Competitiveness Index, Uruguay ranks first in Latin America in terms of the quality of the country's electricity supply.
In 2024, UTE received for the fifth time the "2024 Gold Award" granted by the Regional Energy Integration Commission (CIER), which recognized it as the best-rated company by its customers among 35 companies in the region, both public and private.

In 2024, electricity generation from renewable sources reached 99%, whereas in 2023 it stood at 92% due to a drop in the water supply, caused by one of the strongest droughts in the country's recent history. However, despite specific events in recent years, the trend indicates that non-conventional renewable energy sources, such as wind, biomass, and solar PV, will continue to hold a significant share in Uruguay's electricity mix.

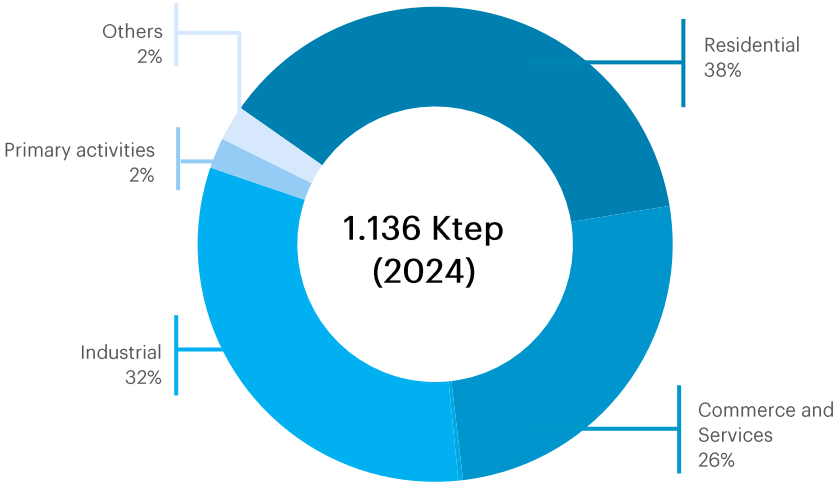
2.1.2. ELECTRICITY DEMAND

Total electricity consumption reached 1,063 Ktep in 2023, representing a 2% year-on-year increase.

[4] The BEN includes all energy generated in the country, both for self-consumption and for generation injected into the National Interconnected System (SIN).

Graph No. 7

ELECTRICITY DEMAND BY SECTOR (Ktep)



Source: prepared by Uruguay XXI based on 2021 BEN data[5].

The residential sector is the main consumer of electricity, with a 38% share of the total, followed by the industrial sector with 32%, and the commercial sector with 26%.

Residential consumption

Over the past decade, consumption increased by 20%, driven mainly by the greater electrification of household uses and broader access to house appliances and climate-control systems. Within this sector, the interior of the country has been the main driver of recent growth, accounting for around 60% of consumption and growing faster than Montevideo, reflecting the expansion of the electricity grid and changing consumption patterns in cities and towns outside the capital.

Industrial sector

Industry has been the most dynamic sector in recent electricity consumption, with an increase of nearly 50%. This growth has been strongly concentrated in electro-intensive activities, particularly cellulose and paper production, which doubled its consumption over the last decade and accounts for nearly 40% of total industrial electricity use.

Commerce, public sector, and services

[5] The BEN includes all energy generated in the country, both for self-consumption and for generation injected into the National Interconnected System (SIN).

This sector recorded very moderate growth (+3%) and relative long-term stability. Within it, electricity consumption by electricity, gas, and water services experienced significant peaks. By contrast, public lighting saw a sustained reduction, likely due to the adoption of more efficient technologies such as LED lighting. The rest of commercial and service activities have remained at stable levels.

Primary activities

Agricultural, mining, and fishing activities account for a smaller share of electricity consumption. Growth over the past decade has been marginal and is influenced by variability in irrigation processes, automation, and mechanization in certain productive areas.

2.1.3. INTERNATIONAL ELECTRICITY TRADE

Historically, Uruguay depended on electricity imports to meet its domestic demand. Over the past fifteen years, it has improved electrical interconnection with neighboring countries and diversified its generation sources, allowing it to produce electricity more sustainably and at competitive costs.

As a result, Uruguay not only ensured the availability and reliability of domestic supply but also reversed its historical role: it went from being a net electricity importer to a net exporter. In the accumulated total of the past decade (2016–2025[6]), electricity exports reached US$1.324 billion, representing an annual average of more than US$130 million, similar to exports of wheat or margarine and oils over the same period.

It is important to consider that the international electricity market is volatile and influenced by climatic factors, especially in the Southern Cone, where hydropower plays a crucial role. Therefore, export flows tend to be variable in the short term.

To mitigate the noise introduced by climatic cycles in electricity exports, the following chart considers longer time intervals (five years). This medium-term perspective makes it possible to identify more structural aspects, confirming that diversification and investment in the energy mix have ensured a shift toward a surplus position, reversing the historical deficit and turning the sector into one with export potential.

[6] As of August 2025, the latest available data for electricity export value.

Graph No. 8

EXPORTS AND IMPORTS OF ELECTRIC ENERGY, VALUE (MILL US$).



Source: prepared by Uruguay XXI based on data from the Central Bank of Uruguay (BCU).

The trade balance, represented by the yellow points in the previous chart, shows how Uruguay overcame its condition as a net importer of renewable energy to become an exporter. Even taking into account that over the last five years it went through one of the most severe droughts in its recent history, the country managed to increase its energy trade surplus with the region.

International electricity trade between Uruguay, Argentina, and Brazil is governed mainly by the principle of Coordinated Economic Dispatch [7]. This principle determines that energy flows occur if the marginal generation cost in the exporting country is lower than the marginal cost in the importing country, ensuring mutual economic benefit.

In the current system, UTE is the sole operator for electricity trade through interconnections with Argentina and Brazil. Exchanges are managed under a system of bilateral interconnections in which UTE acts as the transaction agent on the Uruguayan border[8].

Wind farms, solar PV farms, and biomass plants, mainly privately owned, sell their energy to UTE through long-term power purchase agreements (PPAs). The energy enters the National Interconnected System (SIN) and is managed by UTE.

In 2012, decrees were enacted to allow third parties to use UTE's transmission grid (paying the corresponding fees) to exchange electricity even beyond the country's borders9. However, in practice, large export volumes and the management of surplus renewable energy at the regional

[7] https://adme.com.uy/db-docs/Docs_secciones/nid_582/mig.pdf
[8] https://www.impo.com.uy/bases/decretos-originales/22-1999
[9] Decree 119/023, related to Law 16.832.

level remain centralized and are carried out by UTE. This is because energy exports are not a simple over-the-counter transaction, but require:

- Intergovernmental agreements: exchanges take place within the framework of interconnection agreements and operational protocols with companies and regulatory entities in neighboring countries (such as CAMMESA in Argentina and ONS in Brazil).
- Dispatch and technical coordination: exported energy must be coordinated with the National Load Dispatch (DNC) and regional operators to guarantee the stability of both systems. UTE is the entity responsible and qualified to carry out this technical coordination.

To maximize generation surpluses, Uruguay has multiple interconnection points with Argentina—including 500 kV lines that form part of the Salto Grande binational ring—, and with Brazil through a 500 MW link (500 kV / 50 Hz⇹60 Hz converter) between San Carlos-Melo and the Brazilian border, as well as a historical lower-capacity line (ffi70 MW) between Rivera–Livramento. These interconnections make it possible to manage the variability of renewable generation in Uruguay and export or import energy when it is operationally convenient.

Energy exports by destination

Uruguay's electricity exports by destination between 2016 and 2025 reveal a foreign trade pattern characterized by the short-term energy needs of Argentina and Brazil. Adverse climatic effects were the main drivers of electricity demand.

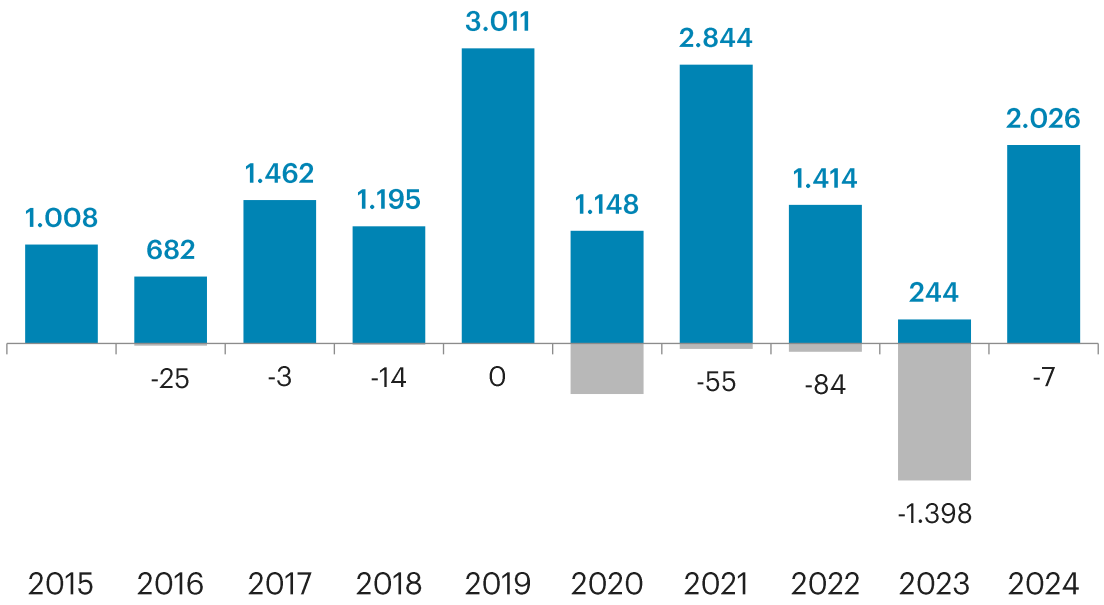
Over the period analyzed, of the total exported energy, Brazil accounted for the main share with 55% of purchases by value, while Argentina absorbed the remaining 45%. However, the aggregated distribution hides significant variability. For example, 2021 marked a milestone in trade relations with Brazil, which was experiencing a severe drought. In that year, exports to the Brazilian market reached a record of more than US$435 million, accounting for 83% of total external electricity sales. Similarly, in 2017 and 2018, Brazil was almost the sole buyer, with 88% and 91% of exports, respectively.

Argentina emerges as a more regular buyer, with sustained demand reflecting a structural generation deficit in recent years, leading it to import energy more consistently over time. Although its needs also intensify during adverse climatic events, such as in 2019, when it absorbed 69% of Uruguayan exports during a drought, its role as the main destination was consolidated in recent years. Between **2022 and 2025**, Argentina became the almost exclusive recipient of Uruguayan electricity, absorbing between **87% and 100% of total annual exports**.

In the short term, according to UTE data, electricity exports in 2024 totaled 2,026 GWh, representing 14% of the country's total electricity generation and a 729% increase in volume. This is explained by the rebound effect from the end of the water deficit that severely affected hydroelectricity generation in Uruguay during late 2022 and a good part of 2023. As a result, for the first time in twelve years, Uruguay posted a negative net balance in electricity trade.

Graph No. 9

FOREIGN TRADE OF ELECTRICITY (GWh)



Source: prepared by Uruguay XXI based on UTE data[10].

Between January and October 2025, Uruguay exported 1,000 GWh, representing a 42% decrease compared to the same period of the previous year, when 1,738 GWh were exported. The year 2025 was marked by the normalization of climatic conditions, which has resulted in relatively lower exports compared to previous years.

3. GREEN HYDROGEN – THE PATH TOWARD DECARBONIZATION

The second stage of Uruguay's energy transition aims to extend decarbonization beyond the electricity sector, with a strong impact on transportation, industry, and end-use sectors. It is built on two key pillars: sustainable electric mobility, and the development of green hydrogen and synthetic fuels. In addition, it seeks to strengthen an innovation ecosystem, build institutional capacities, reform the regulatory framework to attract investment, manage demand and storage, and promote efficient energy use.

Leveraging the achievements of the first energy transition—decades of renewable energy project development, solid regulatory frameworks, political, institutional, and legal stability, as well as macroeconomic soundness—Uruguay positions itself as an attractive destination for investments

[10] The BEN includes all energy generated in the country, both for self-consumption and for generation injected into the National Interconnected System (SIN).

in projects that enable the decarbonization of sectors where reducing the carbon footprint is particularly challenging.

3.1. GREEN HYDROGEN: A NATURAL NEXT STEP FOR URUGUAY ON THE PATH TO DECARBONIZATION[11]

3.1.1. WHAT IS GREEN HYDROGEN?

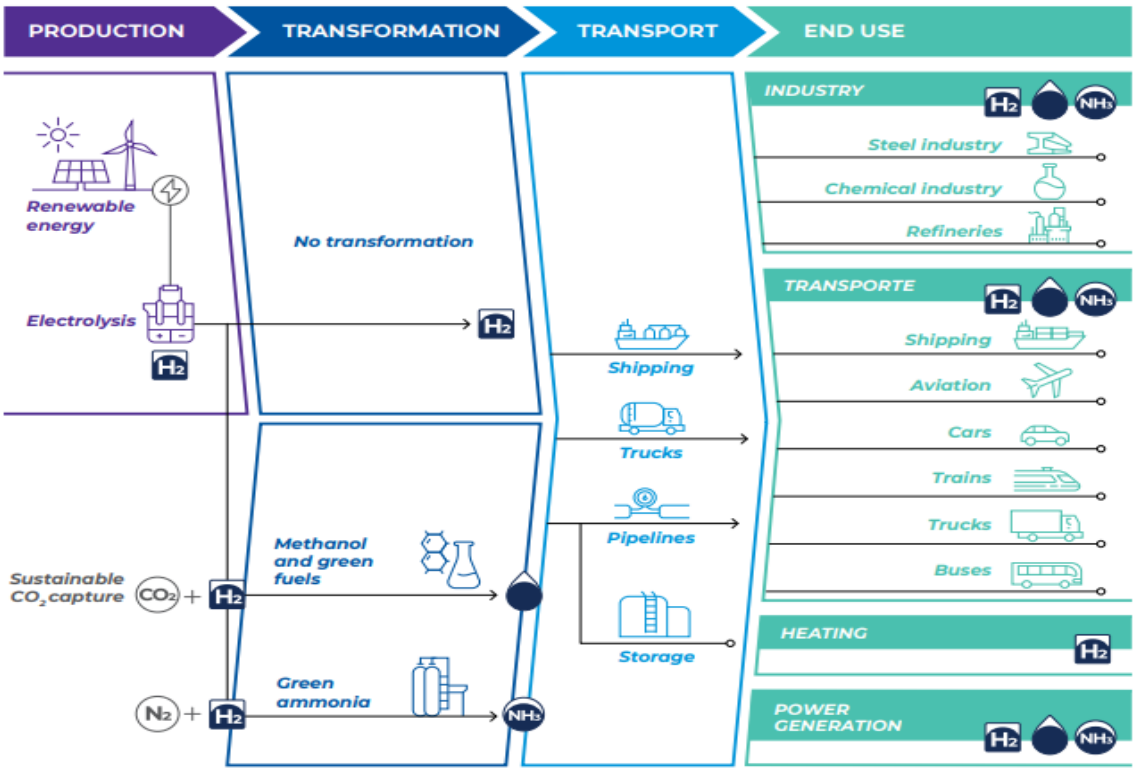
Hydrogen is one of the most abundant resources on the planet. It can store and transport energy that can be used directly or in the production of other energy sources. Hydrogen can be produced from renewable electrical energy for a wide variety of uses.

Green hydrogen can decarbonize various uses (transport, thermal energy, industrial energy, raw materials and stabilization of highly renewable electricity grids), becoming an energy vector with great potential, especially in scenarios where decarbonization cannot be completed directly or through electrification.

The cumulative property of hydrogen could allow improving the participation of renewable energies in the energy system, balancing the peaks and valleys of electricity demand and storing renewable energy at times of high availability to be dispatched at other times of high demand.

Figure No. 3

USES OF HYDROGEN AS AN ENERGY SOURCE OR FEEDSTOCK



[11] Uruguay's Roadmap for Green Hydrogen – 2023 (Link)

Source: prepared by the Ministry of Industry, Energy and Mining (MIEM) based on a document from the International Energy Agency, *"Green Hydrogen: A guide to policy making"* (International Renewable Energy Agency, 2020).

Green hydrogen favors the integration of renewable energies on a large scale. Its condition as an energy vector allows it to be used to store and transport energy generated through renewable sources from regions of the world with high productive capacity to areas with a deficit of resources. This process of global transition in energy generation will allow countries that historically have not had relevant energy resources to position themselves as new players with diverse roles and possibilities.

3.1.2. WHY GREEN HYDROGEN IN URUGUAY?

After the decrease in the use of fossil fuels in the electricity mix, green hydrogen is a natural step in the process of decarbonization of energy demand. In addition, the country has important competitive advantages to be a relevant producer of green hydrogen and derivatives, both for the local market and for export.

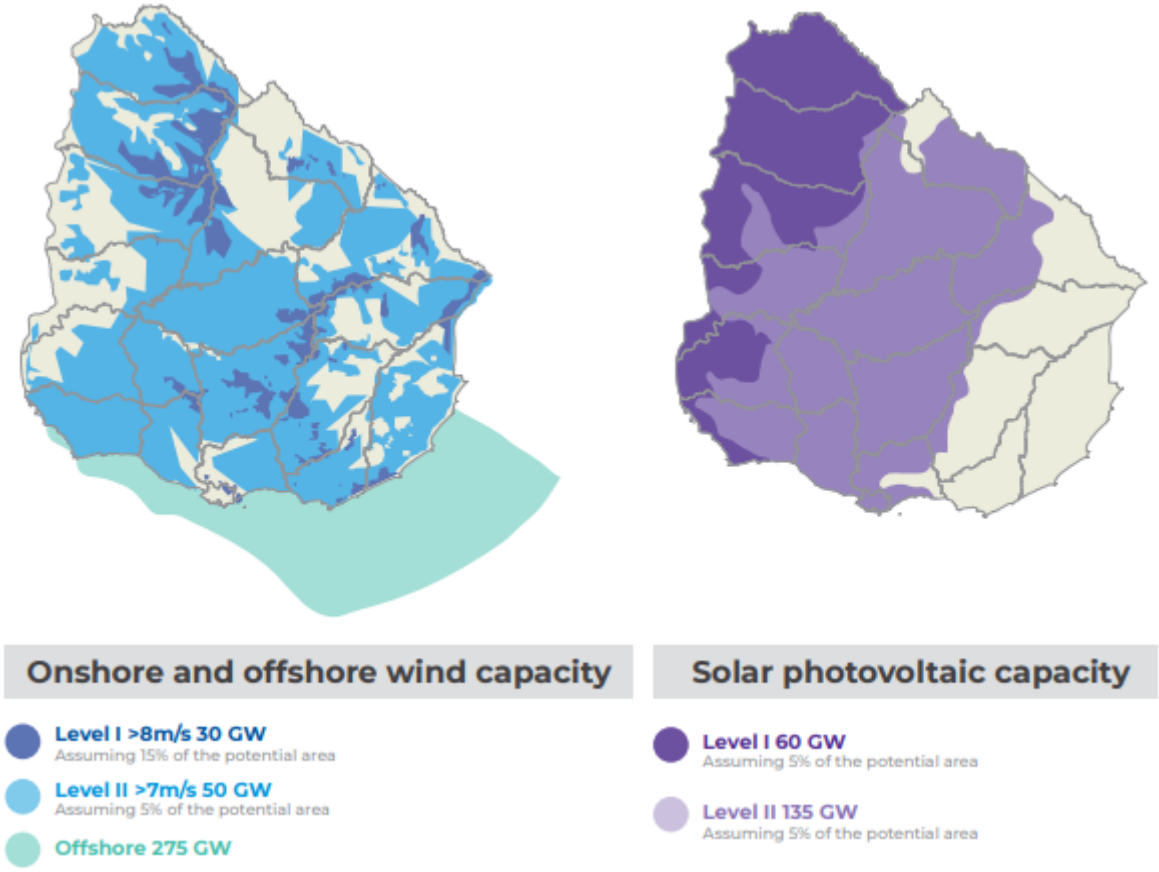
High renewable energy generation potential and resource complementarity

Uruguay has great potential to generate renewable energy, mainly wind and solar. The country has a good combination of wind and sun, which allows obtaining high-capacity factors in the electrolyzer and low hydrogen production costs.

Solar and wind renewable energies in Uruguay could reach levelized cost of energy (LCOE) of between US$16 and US$19 per MWh by 2030. Offshore wind energy would have costs in the range of US$26 to US$28 per MWh. In 2040, these costs could be reduced to US$11 per MWh for solar energy, US$15 per MWh for wind energy and US$21 per MWh for offshore wind energy. The western regions of the country have the best characteristics for solar power generation, while the northern and central regions have medium quality resources.

Figure No. 4

POTENTIAL CAPACITIES (GW) BY RENEWABLE SOURCE

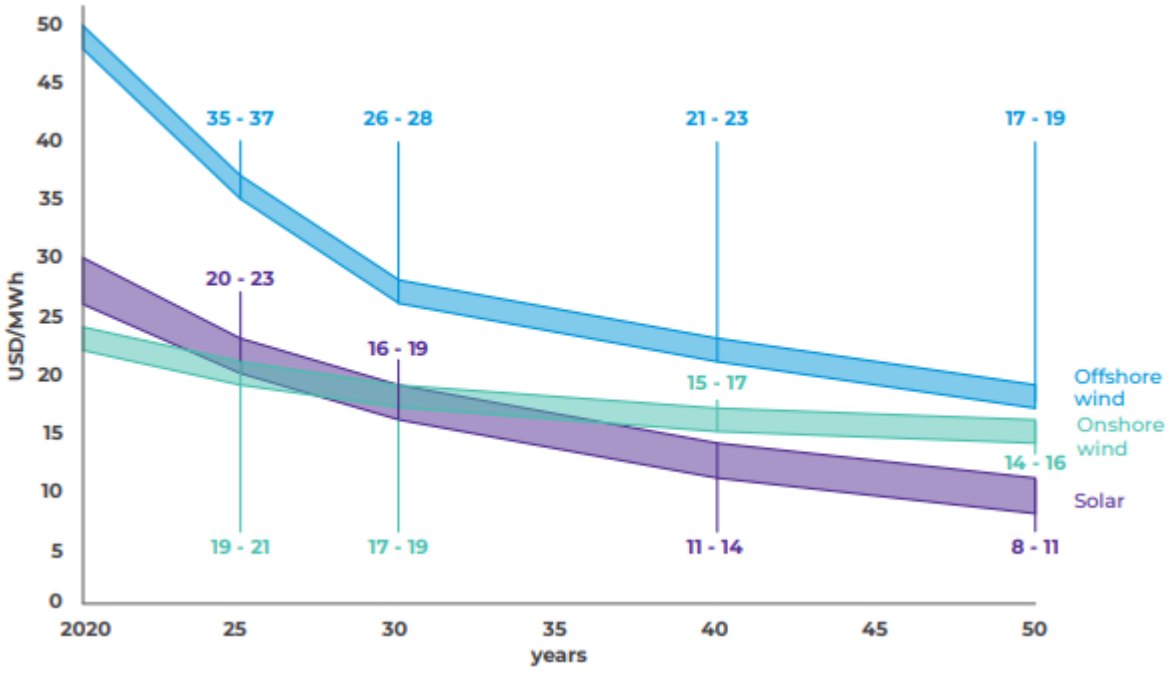


Source: Uruguay's Roadmap for Green Hydrogen - Atlas Solar, MIEM, McKinsey & Company, 2021, according to contract # :C-RG-T3777-P001 concluded with the Inter-American Development Bank (IDB).

For wind energy, high quality areas are located on the border between the departments of Rivera, Tacuarembó and Salto, and between Lavalleja, Florida and Treinta y Tres. The area available for offshore wind energy development would allow the installation of an additional 275 GW of capacity.

Graph No. 7
LEVELIZED COST OF ENERGY

(BASED ON 5% WACC, NOT INCLUDING TRANSPORTATION COSTS) AT SCALE (+500 MW), US$/MWH.



Source: Uruguay's Roadmap for Green Hydrogen - Atlas Solar, MIEM, McKinsey & Company, 2021.

High water availability

Uruguay has great potential to produce green hydrogen, but it is necessary to analyze a critical input for this industry: water.

Green hydrogen production requires relatively low volumes of water, from 18 to 30 liters per kilogram of hydrogen, which would imply a total consumption of less than 1% of the water currently authorized for use in the country.

Even so, it is essential to carefully assess the local impacts in the basins where projects are developed to ensure sustainable use of the resource and compatibility with other productive sectors.[12]

Availability of biogenic CO_2

Uruguay has potential in the production of hydrogen derivatives as raw materials, fuels and green fertilizers. Biogenic CO_2, which is carbon dioxide produced by the decomposition of biomass, is available in the country. This CO_2 is used in the production of hydrogen derivatives through processes such as artificial photosynthesis or hydrogenation.

It is estimated that in 2024 Uruguay would emit approximately 11 million tons of biogenic CO_2 that could be used to produce hydrogen derivatives. These emissions occur mainly in industrial

[12] Based on the study of green hydrogen production by electrolysis (UdelaR, 2023)

facilities that use biomass for energy generation, such as cellulose mills and smaller scale plants of energy production. Domestic forest biomass production is sustainable, and Uruguay is very well positioned in terms of sustainable development certifications in forestry production. More than 90% of the forests are certified by the two main certifiers worldwide: FSC (Forest Stewardship Council) and PEFC (Program for the Endorsement of Forest Certification)[13]. All of the timber marketed by the industry is certified. Annual availability is around three million cubic meters, far exceeding the country's industrial capacity[14].

Logistics

The country has no major geographical features, and it has access routes throughout the territory and infrastructure for local transportation of hydrogen and its derivatives. It is important to point out that the Central Railway will connect the area with the greatest renewable energy potential with the port of Montevideo, providing very good opportunities for the transportation of hydrogen derivatives and facilitating their export possibilities.

Competitive green hydrogen production costs

Renewable energy production costs would allow Uruguay to reach green hydrogen production values (LCOH) of between US$1.2 and US$1.4 /kgH2 in the Western region and between US$1.3 and US$1.5 kgH2 in the Eastern region, for a scale above 500 MW, by 2030.

These production costs would allow Uruguay to position itself competitively among net exporters such as Chile, Saudi Arabia, Oman, Namibia or Australia.

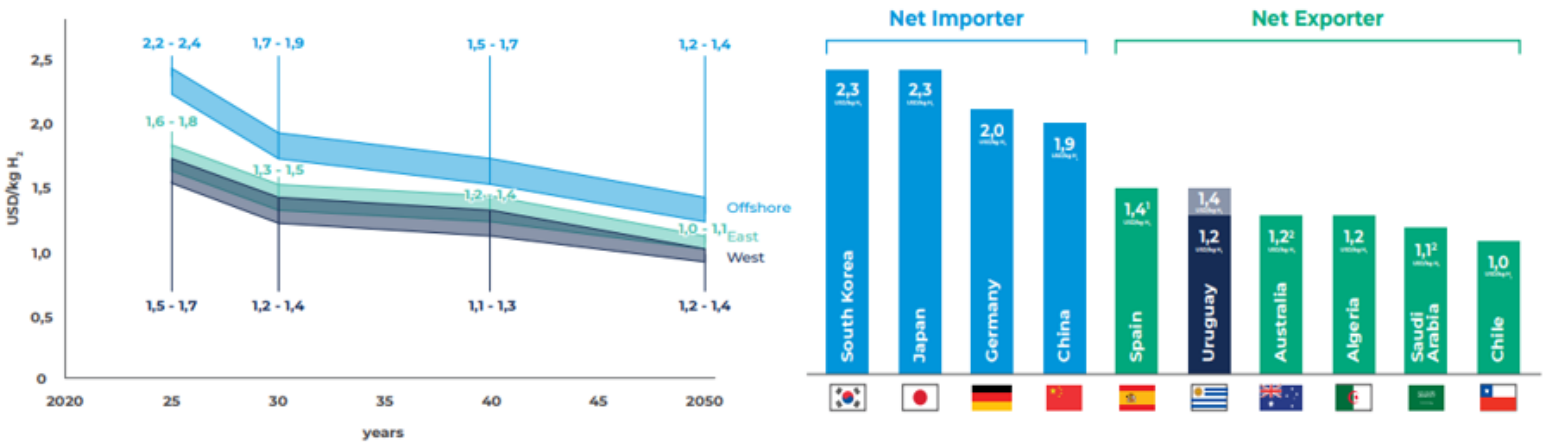
For projects larger than 500 MW in scale, local transport and storage of hydrogen by pipeline emerges as the most economical option. This is achieved by installing electrolysis plants next to the renewable energy generation plants. The cost associated with local transport and storage is between US$0.3 and US$0.5 /kgH_2[15].

[13] FSC and PEFC are certifications from international non-governmental organizations that promote environmentally appropriate, socially beneficial and economically viable management of the world's forests.
[14] See analysis of CO_2 availability for the production of green h2 derivatives in Uruguay.
[15] For more information see Uruguay's Roadmap for Green Hydrogen and Derivatives

Graph No. 9

HYDROGEN PRODUCTION COST IN URUGUAY

(WACC: CHILE 6%, AUSTRIA 5.4%, SAUDI ARABIA 5.3%, SPAIN 5%) (US$/KG H_2)



Source: Uruguay's Roadmap for Green Hydrogen - McKinsey & Company, 2021.

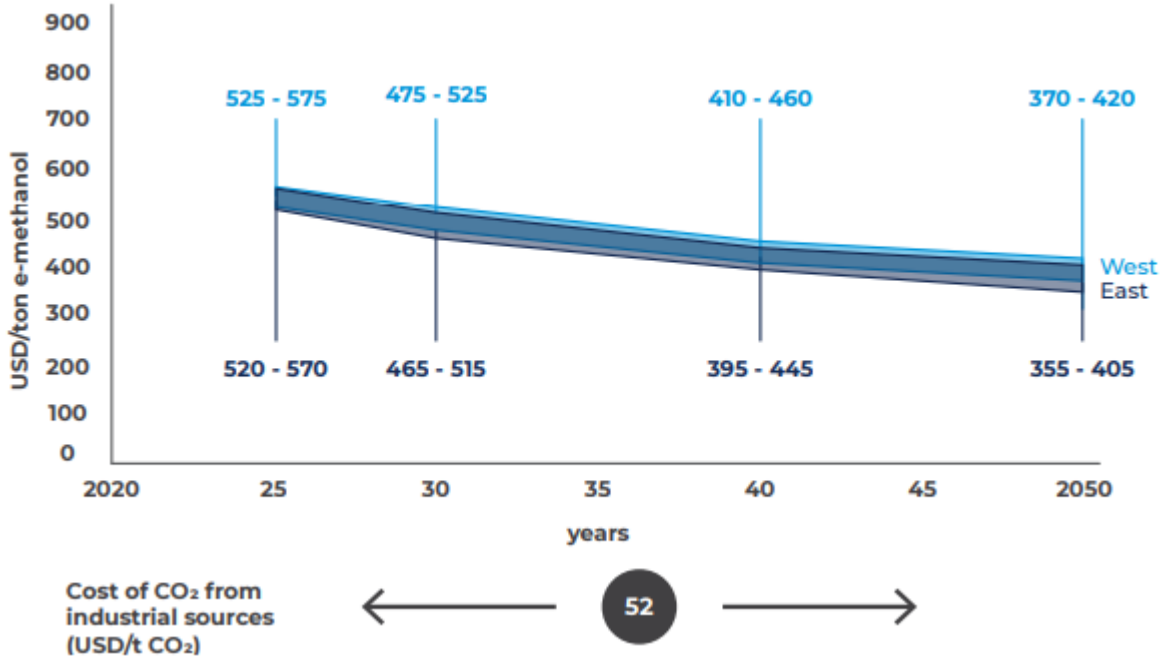
Competitive production costs of derivatives

Regarding the production of derivatives, by 2030 the production costs of green e-methanol and e-jet fuel could reach 465 US$/t and 1,205 US$/t respectively, considering industrial sources for biogenic CO_2.

Graph No. 10

PRODUCTION COST CURVE FOR E-METHANOL

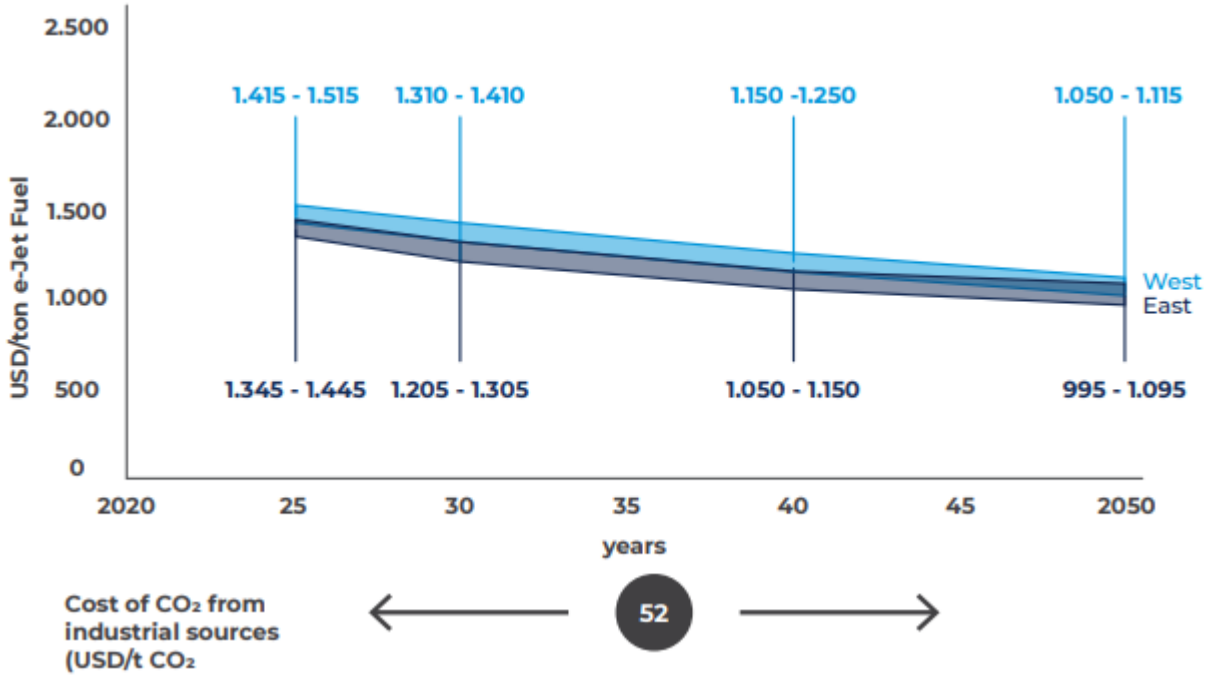
(US$/TON E-METANOL).



Source: Uruguay's Roadmap for Green Hydrogen - McKinsey & Company, 2021.

The competitiveness of these products compared to those of fossil origin is linked to the application of CO_2 taxes in importing countries, as well as to the definition of quotas for green products in particular sectors such as maritime and aviation.

Graph No. 11
JET FUEL PRODUCTION COST CURVE
(US$/TON JET FUEL)



Source: Uruguay's Roadmap for Green Hydrogen - McKinsey & Company, 2021.

Government commitment

- The government of Uruguay is moving forward in promoting its green hydrogen ecosystem through the development of its national strategy, that gives continuity to its long-term policy of decarbonizing the energy mix.
- In 2022 the government launched the Hydrogen Sector Fund, instrument that promoted the presentation of innovation and production pilot projects with up to US$10 million nonrefundable. The winner of the fund was a project that will encompass 17 cargo trucks, adapted

  to run on green hydrogen. The consortium leading the proposal operates with forestry companies that will deliver the cargo to UPM.[16]

[16] Green hydrogen project in freight transportation (link)

- In turn, there are tax incentives for the development of large-scale projects for the production of green hydrogen and derivatives.

Based on these actions, the government is making progress in regulatory aspects, formalizing the country's interest, attracting the participation of private actors, increasing the knowledge about the technology, its production and logistics, and the development of local capabilities, among others.

3.1.3. INVESTMENT PROJECTS

HIF Global

HIF Global will invest US$6 billion in Paysandú to produce synthetic fuels (e-fuels). Of this total, US$4 billion will be allocated to the industrial plant and US$2 billion to the installation of renewable energy parks[17].

The project will produce 700,000 tons of e-methanol per year, using 900,000 tons of captured biogenic CO_2, of which 150,000 tons will be captured from ALUR's ethanol plant. In a modular setup, 2 GW of renewable generation capacity, combining wind and solar power, will be installed to ultimately supply a 1 GW electrolysis plant.

Following a redesign to optimize its environmental impact, the company expects to make the final investment decision in 2025 and begin construction in the second half of 2026.[18]

Tambor Green Hydrogen Hub

Tambor project, developed by Enertrag in collaboration with SEG Ingeniería, is a project located in the municipality of Tambores, department of Tacuarembó[19].

The project consists of the construction of a wind farm and a solar farm with a total capacity of 470 megawatts (MW), intended to power a 150 MW electrolyzer. Using the hydrogen produced through electrolysis, it will generate e-methanol by combining it with captured carbon dioxide.

According to data published by the Ministry of Industry, Energy and Mining (MIEM), the estimated annual production of green hydrogen from the project will be 13,000 tons. This hydrogen will be used to produce 70,000 tons of e-methanol, primarily intended for export.

The project is currently under evaluation by the Ministry of Environment, which received the Environmental Viability of Location request in December 2021.

[17] https://es.hifglobal.com/locations/paysandu

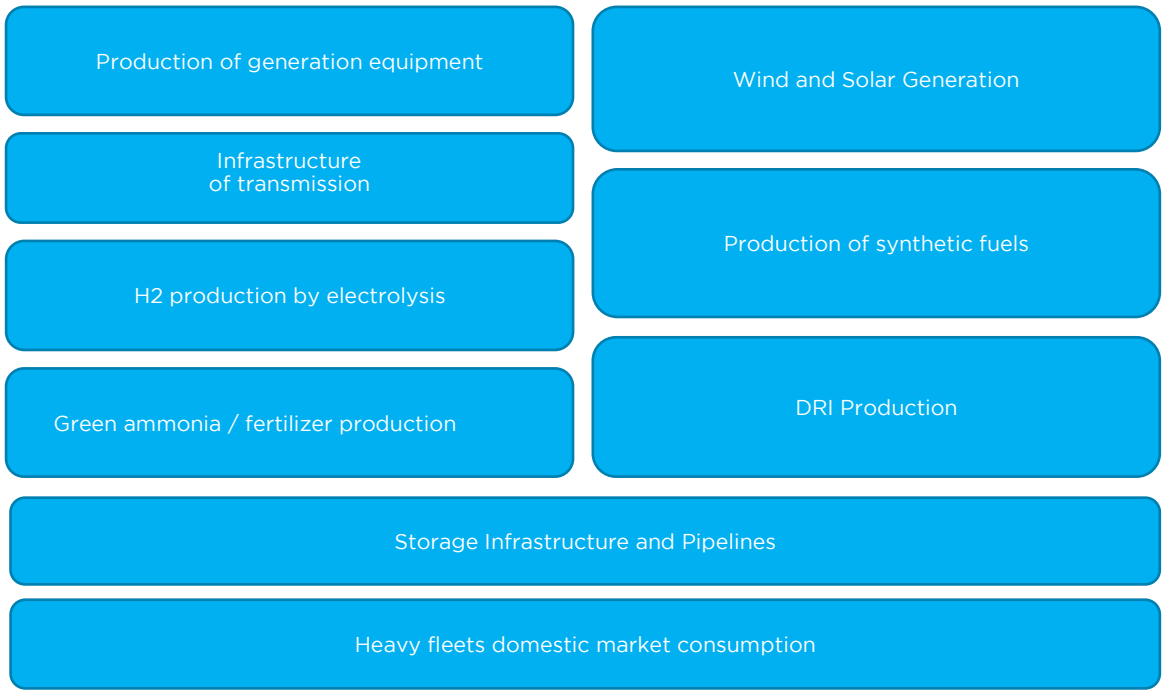
[19]https://www.gub.uy/ministerio-industria-energia-mineria/politicas-y-gestion/proyectos-hidrogeno-verde-derivados-uruguay

Kahirós[20]

The Kahirós project will be the first green hydrogen plant in Uruguay. With a total investment of US$39 million, it will be located in Fray Bentos and is expected to start operations in 2026. The project will have a 4.8 MW photovoltaic solar farm and a 2 MW electrolyzer, capable of producing 76,700 kilograms of green hydrogen per year.

The main objective of the project is the decarbonization of heavy transportation, using the green hydrogen produced to supply Montes del Plata trucks with a range of 700 kilometers and refueling times of only 12 minutes. It also seeks to strengthen forestry logistics and the cellulose production chain, positioning itself as a key player in the sustainability of these sectors.

3.2. INVESTMENT OPPORTUNITIES



Wind Farms

The policy of incorporating wind energy as a renewable and competitive source for the country was very successful. Prior to 2008, there were no large-scale wind farms in the country. In 2023 there were 41 wind farms in operation with an installed capacity of 1.50 MW[21].

Regarding the development of medium-scale wind farms, since 2014 Uruguay enables its subscribers to generate their own electricity from any energy source, without losing their

[20] https://kahiros.com.uy/

[21] These totals do not include microgeneration facilities or subscribers with generation. (link)

subscriber status. This framework has no limitations on the voltage of connection to the electric grid and does not enable the injection of electric energy to the national electric grid.

In the case of wind farms financed through the domestic capital market, participation in the financial trusts structured for the Pampa and Arias wind farms demonstrated the eagerness of retail and institutional investors to include these instruments in their investment portfolio.

Solar Parks

The use of solar energy transformation technology has undergone significant development in the country. To date, there are 19 large-scale photovoltaic plants that feed their energy into the power grid, with a total capacity of around 264 MW. The plants range from a few MW installed up to 50 MW (in plants such as "La Jacinta" or "El Naranjal", installed in the area of Salto, in the northwest of the country). In addition, the number of connected small-scale PV generation facilities reached 1,708 projects and the grid went from 0.04 MW in 2011 to 44.5 MW in 2025.

Bioenergy Plants

The development of energy production from non-traditional biomass occurred in parallel with the growth of forestry activities and the cellulose industry, as well as agricultural production in areas such as soybeans, rice and wheat. It was done under the protection of an institutional framework for the development of instruments and incentives for the energy use of biomass by-products from forestry and other chains.

The main raw materials used to generate energy from biomass (heat and electricity) are black liquor, forestry residues, firewood, sugarcane bagasse, rice husks, and biogas from waste of dairy products, wool production, as well as urban solid waste. The country's existing bioenergy plants represent 9% of the installed capacity (425 MW). In 2023, it was increased when the new cellulose plant came into operation, generating a firm, predictable and renewable energy surplus of more than 150 MW, which is fed into UTE's electricity grid[22].

Currently, the low price of electricity generation from other renewable sources is the key challenge for the development of new bioenergy plants in the country. For this reason, it is likely that new bioenergy projects will operate in association with other industrial processes in integrated complexes (biorefineries).

Other alternatives for bioenergy development could be the generation of advanced fuels (renewable diesel, green hydrogen, methanol, renewable natural gas, aviation and marine biofuels), as well as solid biofuels (pellets).

Waste thermo-valorization plant

[22] More information (link)

The recovery of urban waste through its transformation into energy is one of the explicit objectives of the energy policy and one of the pillars of the National Waste Management Plan, which proposes the efficient management and valorization of waste[23].

According to a study carried out by the National Directorate of Environmental Quality and Assessment (DINACEA), with more than one million tons of solid waste generated annually, the metropolitan area of Montevideo would be the most attractive for the installation of a large-scale plant to generate energy from the thermal treatment of waste.

There is also the possibility of a project covering urban waste from all over the country or regional partnerships that would allow the feasibility of generating energy from waste from several departments.

On the other hand, based on globally available technology, it is now possible to profitably handle smaller volumes (e.g. 100-150 tons/day), which makes the possibility of setting up several plants in the interior of the country more feasible.

Energy storage

In order to continue expanding generation capacity based on wind and solar resources (which are non-dispatchable energy sources), it will be necessary to introduce more complex forms of variabilities management in the long term. One possible strategy is to achieve more dynamic exchanges with neighboring countries' systems (Argentina and Brazil), while another option is to implement energy storage mechanisms. The technologies available today are in the process of increasing efficiency and competitiveness (e.g., batteries) or are associated with high investment amounts and construction periods (dams and/or storage and pumping plants). However, it is estimated that in the future they would be a technically and economically viable option for the country.

Energy storage makes it possible to move the supply from one moment to another, reducing the need for backup thermal power plants in the system. In addition, it is very useful if the storage is

installed in a distributed manner for a more efficient use of the grids. On the other hand, due to its almost 100% renewable mix with an important hydroelectric participation, characterized by a high variability and increasing participation of wind and solar energy, storage is not a good mechanism to use Uruguay's structural surplus of electric power.

In September 2021, the first energy storage system began operating. It is a 30 kW power system and 12 lithium-ferro-phosphate batteries that accumulate a capacity of 97 kWh. In 2020, the installation of storage systems was enabled in Uruguay for UTE customers. Investments in this technology are also eligible for tax benefits by the Commission for the Application of the Investment Law (Comap).

[23] National Waste Management Plan (link)

4. ELECTRIC MOBILITY

The ecosystem for electric mobility in Uruguay is the result of a structured and coherent State policy. It is built on a key strategic advantage: an electricity generation mix with one of the lowest carbon footprints in the world, where all electricity is generated from renewable sources.

This full decarbonization of the power grid means that the transition to electric transport has a real and immediate environmental impact, a concept the government has termed the "Second Energy Transition." While the first transition cleaned up electricity generation, the second focuses on decarbonizing the sectors that still depend on fossil fuels, with transportation as the top priority.

Thus, electric mobility in Uruguay is not an isolated trend, but a strategic State policy designed to:

- **Reduce dependence on imported oil**, improving energy security.
- **Meet the climate commitments** of the Paris Agreement in a tangible way.
- **Create new economic opportunities** and position the country as a hub for innovation in sustainable mobility.

Uruguay's market offers regulatory stability, clear government support, and alignment among public and private actors that significantly reduces risk and creates a predictable environment for growth.

4.1. THE PILLARS OF URUGUAY'S STRATEGY:

4.1.1. A FAVORABLE POLICY AND FISCAL FRAMEWORK

The government has implemented a multi-layered incentive structure to make the adoption of electric mobility options economically viable for both individuals and companies.

- **1. Tax exemptions**

Full exemption (0%) on the import of electric vehicles, lithium batteries, and chargers. This remains in effect as part of current fiscal policies. Internal Specific Tax (IMESI)[24]

- **Benefits for corporate fleets (through COMAP): the Investment Promotion Law** is a key tool. Companies investing in the electrification of their fleets may submit their projects to the Commission for the Application of the Investment Law (COMAP). The purchase of electric utility vehicles grants **additional points in the "clean technologies" category**, which translates into greater Corporate Income Tax (IRAE) exemptions. This has been a catalyst for last-mile logistics and corporate fleet renewal.

- **Reduced ownership costs:** locally, electric vehicles benefit from a **50% reduction in the annual vehicle registration tax.** Combined with the lower cost of "energy-fuel" and simpler maintenance, the Total Cost of Ownership (TCO) of an EV in Uruguay is often lower than that of a comparable combustion vehicle within just a few years.

4.1.2. INFRASTRUCTURE: A STATE-PLANNED NATIONAL CHARGING NETWORK

In terms of infrastructure, Uruguay is a regional pioneer and has the first electric highway in Latin America. The country has installed more than 460 public charging points, roughly one charger every 50 km[25]. Of the total chargers installed, 130 are fast chargers, which allow 80% of the battery to be charged in 20 minutes.

- Unlike other countries where charging infrastructure has expanded in a fragmented way, in Uruguay the state-owned energy company **UTE** has taken on a leading and planning role.

- **The "National Electric Route":** UTE has carried out a deliberate strategy to install a public charging network along the country's main highways, ensuring a charging point approximately **every 50 kilometers**. This eliminates "range anxiety," one of the biggest barriers to mass adoption, and ensures that it is possible to travel throughout the country in an electric vehicle.

- **Centralized and accessible management:** any user can locate chargers, manage payments, and monitor the status of the network in real time, through the **"UTE Mueve"** mobile app**.** This creates a standardized and reliable user experience.

- **Incentives for residential and public charging:** UTE actively promotes the installation of private chargers with plans such as the **"Double and Triple Smart Time-of-Use Tariff"**, which offers drastically reduced energy costs at night. This not only reduces charging costs but also helps manage demand on the national electric grid.

[24] Tax exemptions for the import of electric vehicles link.
[25] Charging points - Presidency and UTE

4.1.3. A GROWING MARKET[26]:

- The combination of these factors has created a dynamic and rapidly maturing market.

- **Exponential growth:** sales of fully electric vehicles have skyrocketed. For example, the first quarter of 2025 recorded an **increase of more than 200% in sales** compared to the same period in 2024. These vehicles represent a significant and rapidly rising share of new vehicle sales, one of the highest in the region.

- **Leadership in brands and segments:** the passenger-vehicle market is led by Asian brands, with BYD holding a dominant position thanks to a wide range of models. In public transport, Montevideo **has advanced** in electrifying its bus fleet, and the taxi and ride-hailing sectors have been early adopters due to direct subsidies and clear operational savings.

- **Focus on utility and freight transport:** while the first wave centered on passenger vehicles and public transport, strategic attention is now shifting toward logistics and freight transport, where COMAP benefits and lower operating costs offer enormous growth potential.

4.2. RESULTS IN ELECTRIC MOBILITY

4.2.1. ADOPTION OF ELECTRIC VEHICLES AND MARKET IMPLICATIONS

The effectiveness of Uruguay's electric mobility policy can be quantified by analyzing the share of these vehicles in the automotive market. To measure the evolution of electric vehicle adoption, one may use sales data for new vehicles (0-km), such as import data, and compare them against the total market.

Evolution of Electric Vehicle Market Share

The trajectory of electric mobility in Uruguay has grown from a modest initial presence to becoming a relevant market factor. The following table illustrates this evolution, using sales of electric vehicle units compared to the total market.

Table No. 1

SALES OF ELECTRIC VEHICLES[27]

Type of vehicle	Electric	Full oil / hybrid	Total	Share (%)
2023	1.474	36.771	38.245	**4%**

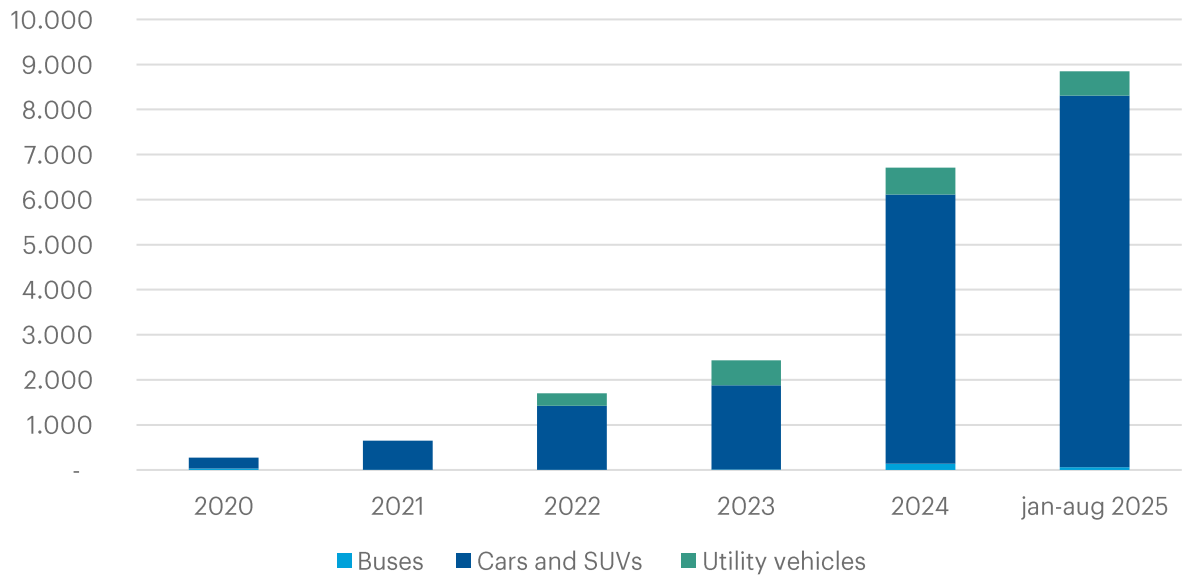
[26] For more information, see the Automotive Sector Report.
[27] For more information, see the Automotive Sector Report.

2024	5.367	36.801	42.168	**13%**
Jan-Sept 2025	9.136	25.085	34.221	**27%**

Source: prepared by Uruguay XXI based on data from the Uruguayan Automotive Trade Association (ACAU).

The data show that after several years with a market share below 5%, the market reached a turning point starting in 2024, when its share exceeded 13%, more than quadrupling the figure from the previous year. This growth rate demonstrates that electric vehicle adoption has entered an acceleration phase. Between January and September, the data indicate an even faster increase, with electric vehicles accounting for 27% of all cars sold. In particular, in the most recent month for which data are available, the figure rose to 37% of new vehicle sales.

Graph No. 12
IMPORTS OF ELECTRIC VEHICLES (Units)[28]



Source: prepared by Uruguay XXI based on Customs data.

When analyzing import data, this acceleration becomes even more evident, offering a broader temporal perspective that covers all vehicle segments, including buses and utility vehicles. While annual imports remained below 700 units between 2019 and 2021, a clear break in the trend occurred in 2022, when imports exceeded 1,600 vehicles.

Growth intensified notably in 2024, a year in which more than 6,700 electric units were imported, nearly tripling the previous year's figures. In the first eight months of 2025, imports reached 8,847 units, surpassing the historic record for all of 2024. These data, therefore, not only validate the

[28] NCM 870380 and 870490.

trends observed in sales, but unmistakably show that the transition toward electric mobility in Uruguay is progressing at an increasingly rapid pace.

This evolution suggests that the market is shifting from an "early adopters" phase to an "early majority" phase, where purchasing decisions are no longer driven solely by technological novelty but by rational economic factors such as total cost of ownership, confidence in the charging infrastructure, and a broader range of available models.

This transition toward electric mobility is being driven decisively by consumer segments, while the commercial sector is advancing at a slower pace.

Implications of the Observed Trend

The growing penetration of electric vehicles indicates a substantial shift in consumer preferences and corporate fleet strategies, directly influenced by the regulatory framework and the incentives in place. The sustained positive trend in market share suggests that the adoption of this technology is becoming mainstream.

This transition has direct implications for the entire automotive value chain, including:

- The need to adapt after-sales and maintenance services.
- The development of new products in the insurance and financing sectors.
- The expansion of infrastructure and services associated with energy charging.

In summary, market data show that electric mobility in Uruguay has moved beyond the introductory phase and has entered a stage of mass adoption. The direction and pace of this trend point to a progressive and far-reaching transformation of the national vehicle fleet in the coming years.

Electric vehicle imports, which include purchases made by companies and public agencies, indicate increasing dynamism. While 270 vehicles valued at US$14 million were imported in 2020, just five years later a total of 6,700 electric vehicles worth about US$185 million were imported. From January to August 2025, the value imported doubled year-over-year, totaling US$192 million. Over the past five years, approximately 20,000 electric vehicles entered the country.

Although electric vehicles do not yet dominate the market, the growth in sales and imports shows increasing consumer interest in cleaner, more sustainable mobility alternatives.

4.3. URUGUAY AS A PLATFORM FOR ELECTRIC VEHICLE PRODUCTION AND EXPORT

Beyond its dynamic domestic market, Uruguay is strategically positioning itself as a platform for electric vehicle production and export in the region. International companies can leverage the country's strong reputation in clean energy to manufacture products with a "sustainable country-

of-origin" label, benefiting from an industrial and trade regime designed to encourage local production aimed at larger South American markets.

This strategy is based on three key competitive advantages:

1. Preferential Access to an Expanded Market

- Setting up operations in Uruguay offers direct access to a regional market of more than 400 million people. Through bilateral automotive agreements and within the Mercosur framework, the country enjoys preferential entry for its vehicles (excluding motorcycles) and machinery into the markets of Argentina and Brazil.

- **Zero-tariff exports:** the main benefit is the ability to export to Mercosur partners with zero tariff, provided the rules of origin are met.

- **Flexible rules of origin:** to facilitate the establishment of new industries, the agreements include a flexible Origin Regime for new models. This requires a Minimum Regional Content (MRC) which, for example, in exports to Brazil is just **25% during the first year** of production, rising gradually to **40% from the third year onward**.

- **Available margins:** within this regime, which operates with quantitative limits, there is still significant room for new companies to export units to both Argentina and Brazil, creating a concrete opportunity for establishing new assembly lines.

2. Direct Incentives for Production and Assembly

- Uruguay's regulatory framework includes specific tax benefits that drastically reduce establishment and production costs for assembly companies.

- **Tariff exemption for assembly kits:** under **Decree No. 251/019**, companies may import **SKD (Semi Knocked Down)** and **CKD (Completely Knocked Down)** vehicle kits with a full exemption from the Global Tariff Rate, both extra-zone and intra-zone. This eliminates one of the largest initial costs and enables competitive assembly operations.

3. Export Incentives

- To complete the competitiveness cycle, the automotive and auto-parts sectors benefit from a direct incentive to exports, improving the profitability of operations with an export focus.

- **Export tax refunds:** under **Decree No. 316/992**, this long-standing and still-valid regime provides a refund equal to **10% of the FOB value** of exports. This direct fiscal refund acts as a powerful incentive, improving the final price of the product in destination markets.

- The **Temporary admission regime** allows companies to import inputs, raw materials, and components, such as auto parts, without paying customs duties, provided these goods are used in production processes destined for export. The **automotive sector** is the main user of this regime: 49% of goods imported under this modality in 2024 corresponded to the sector, with a value of US$393 million. This promotes the integration of Uruguayan industry into regional and international value chains, reducing costs and facilitating production.

Taken together, these three pillars —preferential access to key markets, low assembly costs, and export incentives — create a highly competitive ecosystem.

For an international electric mobility company, Uruguay offers not only a domestic market undergoing rapid acceleration, but also a stable production platform with a strong sustainability identity and the legal and fiscal tools needed to become a strategic supplier for the entire region.

5. ANNEXES

5.1.ENERGY SYSTEM INFORMATION

The BEN compiles information related to the production, transformation, and consumption of energy, and its main purpose is to serve as a reference on the evolution of the country's energy situation and its various indicators.

Link: BEN - MIEM

UTEi contains information on the management, consumption, billing, and service status of Uruguay's main energy company, which carries out electricity generation, transmission, distribution, and commercialization, and provides advisory and technical assistance services in its areas of expertise and related fields in the country.

Link: UTEi

The Electric Market Administrator (ADME) is the institution responsible for the technical operation and commercial administration of the wholesale electricity market in Uruguay. Its main role is to ensure the continuous balance between electricity generation and consumption, coordinating the operation of the national and regional interconnected systems.

Link: ADME

The green-hydrogen initiative is one of the pillars of the second energy transition now underway in Uruguay. The Ministry of Industry's Green Hydrogen site provides relevant information about this process.

Link: Green Hydrogen

ADDITIONAL ANNEXES

The annex consists of the following sections.

MAIN PRIVATE RENEWABLE ENERGY COMPANIES

The sector's remarkable transformation was made possible through close coordination between the public sector (issuing calls for proposals, selecting and signing long-term power purchase agreements-PPAs, that enabled financing and project execution) and private-sector involvement. Both national and foreign companies contributed to the development and implementation of new technologies. As a result, many of these companies, including numerous SMEs, expanded their capabilities and now provide services throughout the region.

INSTITUTIONAL FRAMEWORK AND REGULATIONS

The sector's success is partly due to the existence of a guiding energy policy, strong institutions, and a regulatory framework that is attractive to investors.

ACTIVE RENEWABLE ENERGY SOURCES

Uruguay has natural resources that enable the development of renewable energy. Abundant hydrological flow, constant and predictable winds, uniform solar irradiation throughout the territory (with seasonal variation), and a strong agro-industrial sector create opportunities for biomass-based energy.

6. URUGUAY'S OVERVIEW (2025)

URUGUAY AT A GLANCE

Official name	Oriental Republic of Uruguay
Geographical location	South America, located between Argentina and Brazil
Capital	Montevideo
Surface Area	176.215 km². 95% of the territory is productive land suitable for agriculture and livestock
Population (2023)	3.44 million
GDP per capita (2023)	US$23,526
Currency	Uruguayan Peso ($)
Literacy rate	0.98
Life expectancy at	77.9 years of age
Form of government	Democratic republic with presidential system
Political division	19 departments
Time Zone	GMT - 03:00
Official language	Spanish

KEY ECONOMIC INDICATORS

Indicators	2020	2021	2022	2023	2024	2025*
GDP (Annual Var %)	-7.36%	5.84%	4.49%	0.74%	3.1%	1.9%
GDP (US$ Millions)	53.505	60.709	70.672	77.885	80.931	81.531
Population (Millions of people)	3.44	3.44	3.44	3.44	3.44	3.44
GDP per Capita (US$)	15.562	17.643	20.522	22.641	23.526	23.701
Unemployment rate - Annual Average (% Workforce)	10.4%	9.3%	7.9%	8.3%	8.2%	8.0%
Exchange rate (Pesos per US$, Annual Average)	42.1	43.6	41.1	38.8	40.2	42.4
Exchange rate (Average Annual Variation)	19.2%	3.6%	-5.6%	-5.6%	3.6%	5.4%
Consumer Prices (Cumulative annual % variation)	9.4%	8.0%	8.3%	5.1%	5.5%	4.2%
Exports of goods and services (US$ millions)**	14.076	19.991	23.560	21.946	23.329	23.753
Imports of goods and services (US$ Millions)**	11.598	15.448	19.639	19.259	19.117	19.616
Trade Surplus / Deficit (US$ Millions)	2.477	4.543	3.921	2.687	4.212	4.137
Trade Surplus / Deficit (% of GDP)	4.6%	7.5%	5.5%	3.4%	5.2%	5.1%
Overall Fiscal Result (% of GDP)	-5.8%	-4.1%	-3.4%	-3.2%	-3.9%	-
Gross Capital Formation (% of GDP)	16.2%	18.2%	18.7%	17.5%	15.6%	-
Public sector Gross Debt (% of GDP)	74.6%	69.8%	67.6%	68.6%	67.5%	-
Foreign Direct Investment (US$ Millions) ***	831	2.977	3.386	2.284	-1.735	-
Foreign Direct Investment (% of GDP)	1.6%	4.9%	4.8%	2.9%	-2.1%	-

Sources: Central Bank of Uruguay (BCU), National Institute of Statistics (INE), MEF and estimated data (*). Fiscal result data includes the effect of Law No. 19,590 (fifty-year-olds). In 2017 the Central Bank of Uruguay adopted the methodology of the 6th balance of payments manual. Data based on this new methodology include purchase and sale of goods and re-exports and are available since 2012. Data are net flows so they may show negative values (**).



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