

# URUGUAY'S RENEWABLE ENERGY REVOLUTION

By Daysi Mamani Suaquita

In 2015, Uruguay's head of climate change policy stated that in less than 10 years, Uruguay has slashed its carbon footprint without government subsidies or higher consumer costs. Now, renewables provide 94.5% of the country's electricity and prices are lower than in the past. There are also fewer power cuts because a diverse energy mix.

15 years ago, oil accounted for 27% of Uruguay's imports and a new pipeline was just about to begin supplying gas from Argentina. Now the biggest item on import balance sheet is wind turbines, which fill the country's ports on their way to installation. Biomass and solar power have also been ramped up. Adding to existing hydropower, this means that renewables now account for 55% of the country's overall energy mix (including transport fuel) compared with a global average share of 12%.

Despite its relatively small population of just 3.4 million, Uruguay is being recognized for progress on decarbonizing its economy. As well, Uruguay has been praised by the World Bank and the Economic commission for Latin America and the Caribbean, proclaiming: *The country is defining global trends in renewable energy investment.*

In Uruguay the key to success was a clear decision-making, a supportive regulatory environment and a strong partnership between the public and private sector. Uruguay has a comprehensive, long-term energy plan, the [National Energy Policy 2005-2030](#), with the overall objective to diversify the energy mix, reduce dependency from fossil fuels, improve energy efficiency, and increase the use of endogenous resources, mostly renewables. The plan sets a target of 50% primary energy from renewable energy sources by 2015, including renewable energy for electricity generation, industrial and domestic heat, and transport. The National Energy Policy 2005-2030 was approved in 2008, and in 2010 it was endorsed by all political parties represented in Congress.

Given the multi-party endorsement the plan has been maintained even under a change of government. As a result, during the last 15 years energy investments for renewables were increasing, mobilizing public and private funds and in 2015 the renewables provide 94.5% of the country's electricity.



Many investors also discovered that clean energy makes good business sense. Uruguay's state utility guarantees fixed energy prices for 20 years, which has encouraged foreign companies to build plants.

Uruguay's renewable energy development was driven by a desire to increase energy security. The country had relied heavily on hydropower historically, but with a decade of dry years between 1997 and 2007, hydro's share of electricity generation fell from more than 90 percent to around 50 percent and by 2007, imported fossil fuels provided a third of generation. Given the steadily rising electricity demand, the government sought ways to diversify its energy sources.

The country went from having virtually no wind generation in 2007 to become a double world-record holder in less than a decade. By 2013, it was receiving the largest share of clean energy investment as a percentage of GDP, and in 2014, installed the most wind per capita of any country. By 2015 the country had installed 581 megawatts of wind capacity, providing an average 17 percent of total electricity generation over the year. Wind energy is now cost competitive in the nation, and is displacing the most expensive fossil-fuel generation.

In 2015, Uruguay's forestry production reached 21% of monthly power generation in the country, providing 184'941.500 kWh. It includes the production of two cellulose plants and other forestry industries, which supply and support the country's electricity grid. The production of electricity from forest biomass is equivalent to the average consumption of more than 800.000 households, creating sustainable development in rural areas.

The Wind Energy Program, co-founded by the Global Environment Facility, supported the Government of Uruguay in creating an ambitious national policy on renewable energy. This included crafting a competitive bidding mechanism for large-scale renewable energy development and a fed-in tariff for smaller-scale systems, which allowed non-utility power producers to sell renewable energy to the grid at standardized prices. The state-owned utility was required to buy all clean power generated. To encourage early development, producers receive a higher price for electricity generated from projects that came online before 2015.

The government also used funding to train staff at the national electricity utility on how to work with renewable energy sources to integrate them into the grid. With little prior experience in dealing with variable generation, the

state utility developed a demonstration wind farm and created a renewable energy technology curriculum at Uruguay's *Universidad de la República* to train its staff. The utility also conducted outreach to developers and investors to build their knowledge and address perceptions of risk in the wind sector. Dialogues among stakeholders also helped regional cooperation, with Uruguay now working with several inter-regional projects. Interesting information about renewable energy in



Uruguay is presented in the [IRENA \(International Renewable Energy Agency\) case study](#).

**To know more**

[Energiasolar.gub.yu](#)

[IRENA website](#)

[Article in world resources institute website](#)

[Article in theguardian.com](#)

[Article in el observador.com](#)

[Article in energiaestrategica.com](#)

[Article in elpais.com.yu](#)

[Article in todelcampo.com.yu](#)

[Article in fortune.com](#)

[Article in IPS noticias.org](#)

