

Renewables 2023 Global Status Report collection

Renewables in Energy Supply

Latin America Factsheet

Key Headlines in 2022

- In terms of heating supply, renewable heating solutions are being adopted, although to a lesser extent compared to electricity.
- In the fuel supply sector, some countries in Latin America and the Caribbean are exploring alternative fuels and clean transportation solutions. For example, Brazil has a well-established biofuel industry, particularly in the production of ethanol from sugarcane.
- After a change in government, **Brazil's** total investment in renewables rose 18.3% to USD 14.8 billion. The country is clearly leading in diverse renewable technology deployment including Solar PV, Wind Power, Biopower and Solar Thermal Heating
- Outside Brazil and the United States, renewable energy investment in the Americas totalled USD 16.6 billion, slightly down from 2021. Solar PV investment increased 16% to USD 11.8 billion, whereas investment in other technologies fell.
- Latin America and the Caribbean continued to achieve highest global shares in renewable electricity at 61% in 2022 (up from 56% in 2012).

Key drivers

- Renewable energy developments in the region have social implications, promoting social inclusion and sustainable development.
- Enhance energy security, reduce vulnerability to global energy market fluctuations, and create local economic opportunities.

Key challenges

- Lack of clear and supportive policies and regulations for renewable energy development. Inconsistent or outdated policies and complex permitting processes.
- Access to financing and investment.

Technologies

Bioenergy:

- **Brazil** added more biopower capacity becoming the second largest country with installed capacity at 17 GW.

Geothermal:

- In 2022, **Nicaragua** commissioned a 10.4 MW (net) binary-cycle unit.

Hydrogen:

- **Brazil** installed the country's first industrial scale renewable hydrogen production plant as well as establishing the National Hydrogen Program (PNH2) to promote the development of a competitive hydrogen market in the country, with a focus on renewable hydrogen.

- **Argentina** launched a Green Hydrogen Strategy to produce a targeted 5 GW of renewable hydrogen by 2030.
- **Uruguay** announced a renewable hydrogen roadmap with the target of 1 million tonnes of production annually by 2040 as well as installation of 20 GW of renewables.
- The Haru Oni project in **Chile** commissioned in 2022 to produce hydrogen, e-methanol and e-petrol is powered by 3.4 MW wind turbines.

Hydropower:

- In 2022, Latin America and the Caribbean had a total installed capacity of 20.9 GW and generated 69 TWh.
- **Colombia, Costa Rica, Ecuador, Panama** and **Venezuela** – produce more than 70% of their electricity from hydropower.

Solar PV:

- **Brazil** continued to lead in solar PV capacity in Latin America, adding nearly 10 GW of installed capacity, followed by **Chile** (1.8 GW), and **Mexico** (680 MW).

Solar Thermal Heating:

- **Brazil** ranked in the top 20 countries for new additions of Solar Thermal Heating capacity.
- Solar thermal for industrial heating is becoming increasingly popular globally. As a result, **Mexico** signed the first purchase agreement for solar generated steam as part of solar industrial heat plants.

Wind:

- **Brazil** ranked third in the world for new installed wind power capacity, representing almost half of the country's new power capacity. Almost 80% of installations in Latin America and the Caribbean during 2022 were in Brazil.
- More than 25.6 GW wind power capacity was in operation in **Brazil**, accounting for 13.6% of the country's power mix in 2022.