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Electricity Generation

Report in Latin America and the Caribbean

Monthly electricity generation report in LAC, March 2025

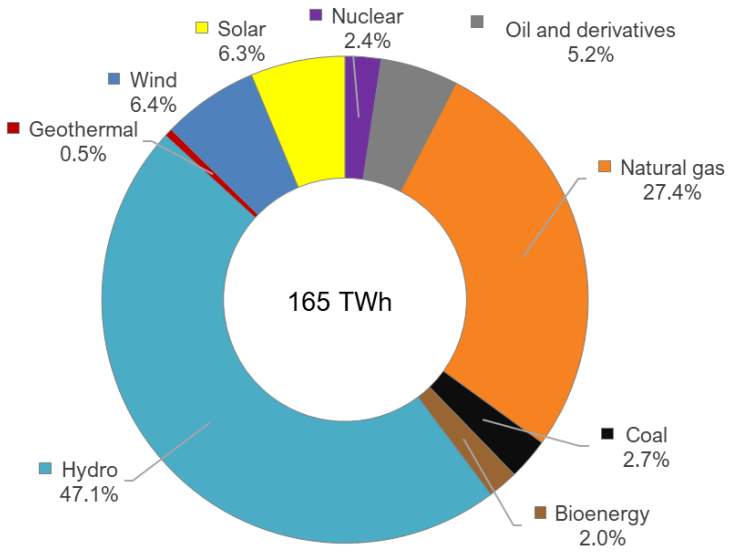
The electricity sector plays a key role in the economic, social, and environmental development of Latin America and the Caribbean (LAC) Its ability to ensure access to safe, affordable, and sustainable energy makes it a key driver of regional competitiveness, equity, and resilience.

In this context, having monthly data on electricity generation becomes strategically important for continuously monitoring and assessing the system's performance, identifying trends, and supporting decision-making in energy planning.

1. Electricity generation March 2025

In March 2025, total electricity generation in Latin America and the Caribbean (LAC) reached 165 TWh, representing a 5% year-over-year increase compared to March 2024. Of this total, 47.1% was generated from hydropower, 27.4% from natural gas, 6.4% from wind energy, 5.2% from oil and derivatives, 6.3% from solar energy, 2.4% from nuclear energy, 2.7% from coal, 2.0% from bioenergy,[1] and 0.5% from geothermal sources. See Figure 1.

Figure 1. Electricity generation by source in LAC, March 2025 [2] *(%)*



Source: sieLAC – OLADE 2025

[1] Bioenergy, includes biogas, solid biomass and liquid biofuels.

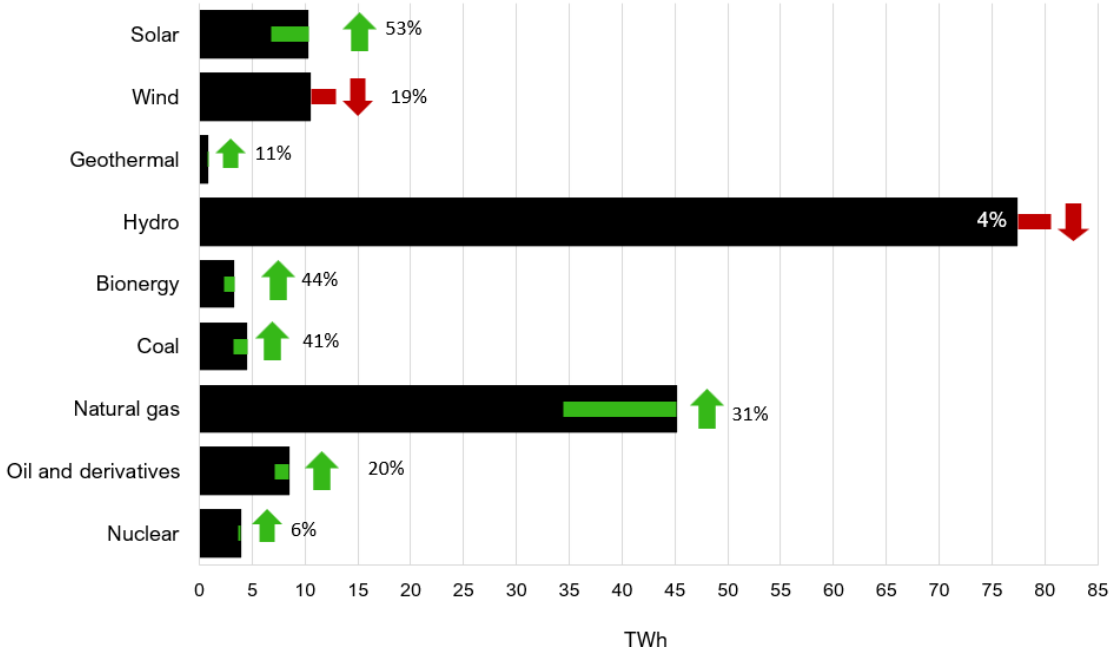
[2] The figures were prepared using the information available on sieLAC - OLADE [https://sielac.olade.org/]

2. Monthly variation

In March 2025, compared to the previous month, total electricity generation in LAC increased by 8%, driven by a rise in almost all energy sources except for wind and hydropower, which declined by 19% and 4%, respectively. These decreases were offset by increased generation from solar energy, bioenergy, and fossil fuels.

Solar energy generation experienced the highest growth between the two months, with a 53% increase, followed by bioenergy at 44%, coal at 41%, natural gas at 31%, and oil and derivatives at 20%. Increases of 11% in geothermal and 6% in nuclear were also recorded. See Figure 2.

Figure 2. Monthly variation of electricity generation by source in LAC, Feb 25/March 25



Variation in electricity generation by source		
Source	Monthly variation FEB 25 / MAR 25	
Nuclear	6%	↑
Hydro	-4%	↓
Geothermal	11%	↑
Oil and derivatives	20%	↑
Natural gas	31%	↑
Coal	41%	↑
Bionergy	44%	↑
Wind	-19%	↓
Solar	53%	↑

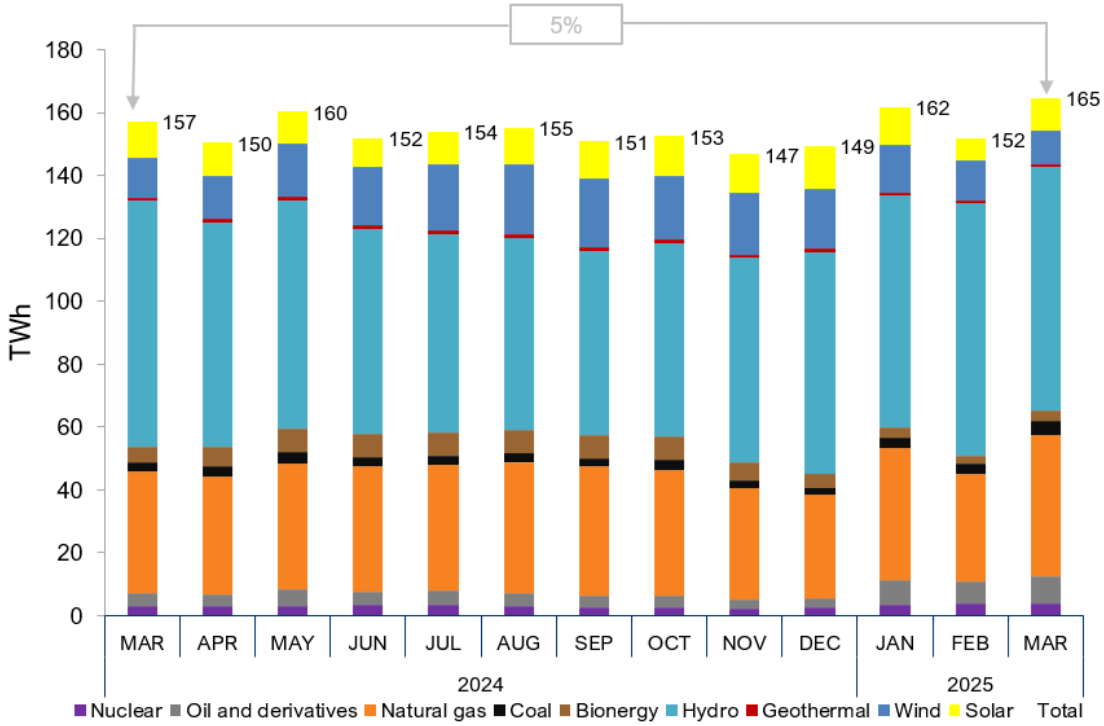
Source: sieLAC – OLADE 2025

3. Inter-annual variation

Electricity generation in LAC registered a 5% year-on-year increase in March 2025 compared to March 2024. In the electricity generation matrix during the mentioned period, hydropower predominates, followed by generation from natural gas, whose share has been varying monthly with an upward trend.

March recorded the highest electricity generation in the past 12 months (165 TWh). See Figure 3.

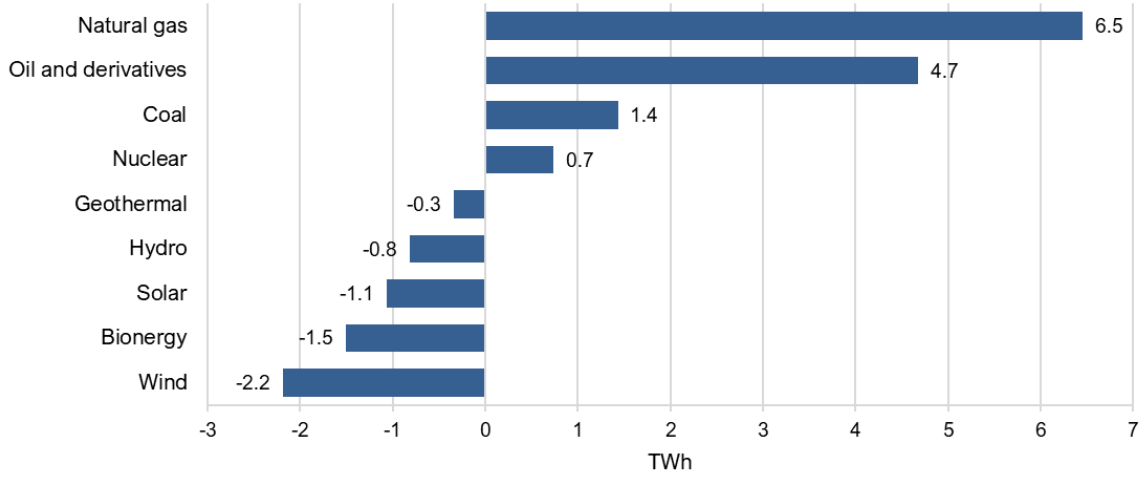
Figure 3. Evolution of electricity generation by source in LAC



Source: sieLAC – OLADE 2025

As seen in Figure 4, the year-on-year variation in absolute terms of generation by source is positive for fossil sources and nuclear power, while it is negative for renewable sources. However, generation with renewable energy sources continues to predominate in the annual balance sheet.

Figure 4. Year-on-year variation of electricity generation by source in LAC.



Source: sieLAC – OLADE 2025

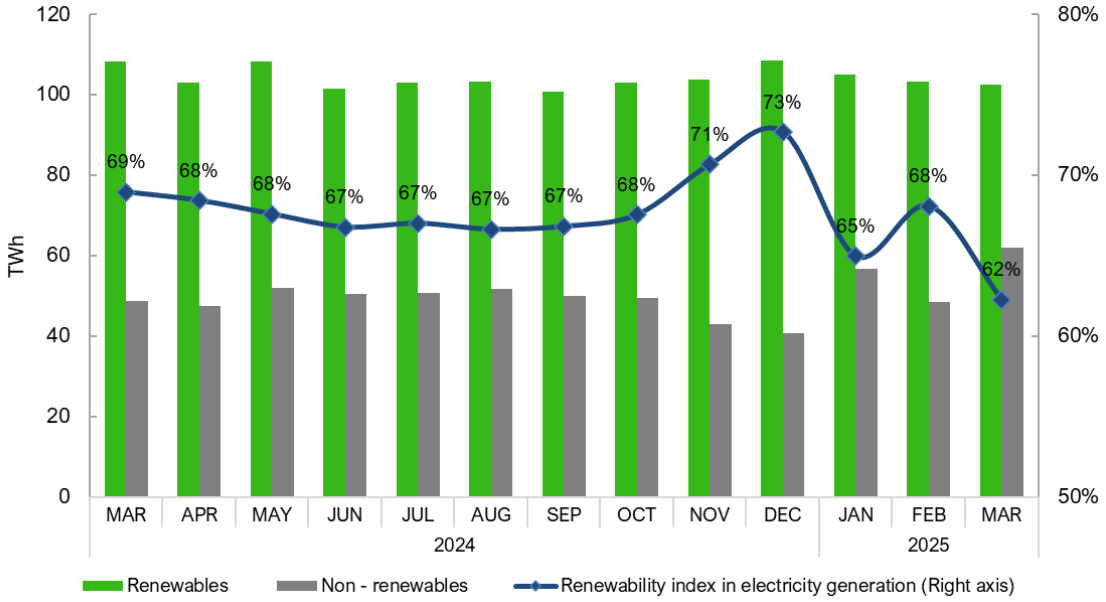
4. Renewability Index

In LAC, during the period from March 2024 to March 2025, this indicator ranged between 62% and 73%.

In March 2025, this indicator reached 62%, recording one of the lowest monthly values for the period analyzed, due to the increased generation with fossil energy sources and the decrease in hydro and wind generation. See Figure 5.

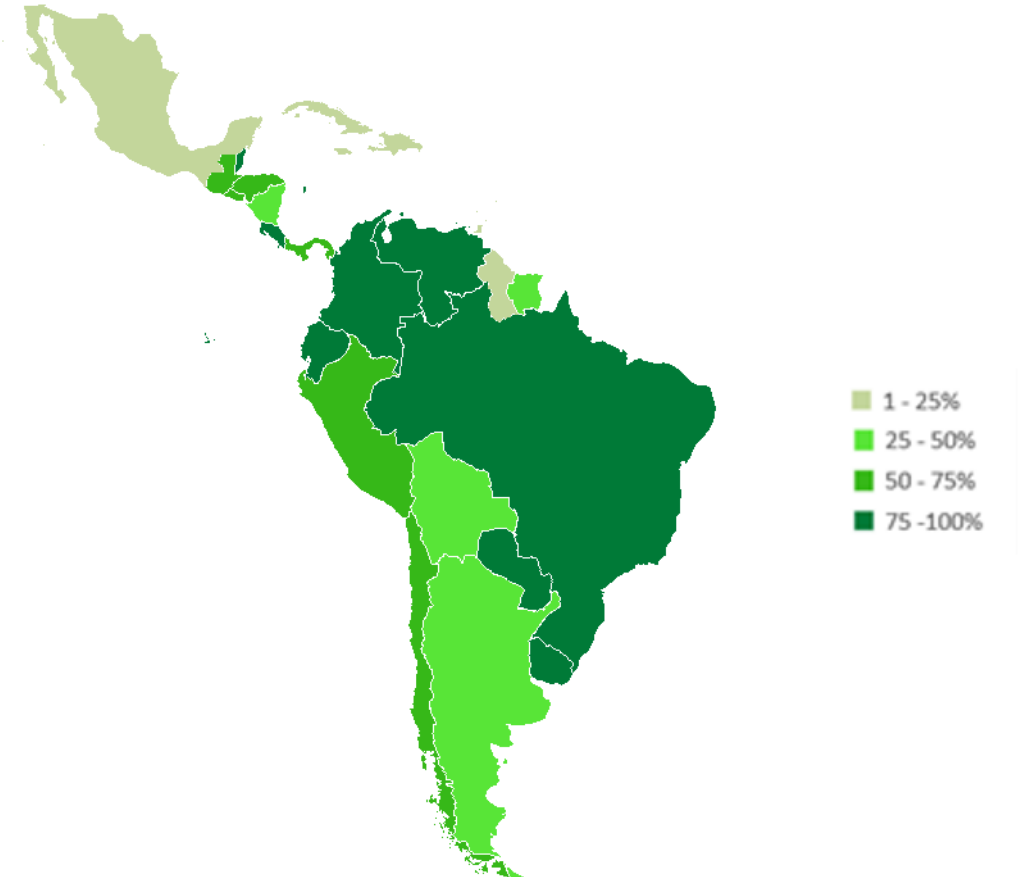
It is worth mentioning that seven countries in the region exceed renewability index values of over 75%, with Paraguay leading the ranking at approximately 100%, followed by Costa Rica, Brazil, Uruguay, Venezuela, Colombia, and Belize. See Figure 6.

Figure 5. Renewability index in electricity generation, LAC



Source: sieLAC – OLADE 2025

Figure 6. Map of the Renewability Index in electricity generation in LAC, March 2025



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