08

NOVEMBER 2025

Electricity Generation

Report in Latin America and the Caribbean

Monthly electricity generation report in LAC, July 2025

OLADE publishes the monthly electricity generation report for Latin America and the Caribbean (LAC) in order to monitor monthly and year-on-year variations, as well as the contributions of each energy source in the electricity generation mix.

In this context, considering the electricity sector as a key driver of economic, social, and environmental development, having up-to-date information on monthly electricity generation is strategic for the comprehensive monitoring and evaluation of the electricity system. This report highlights the evolution of electricity generation until July 2025.

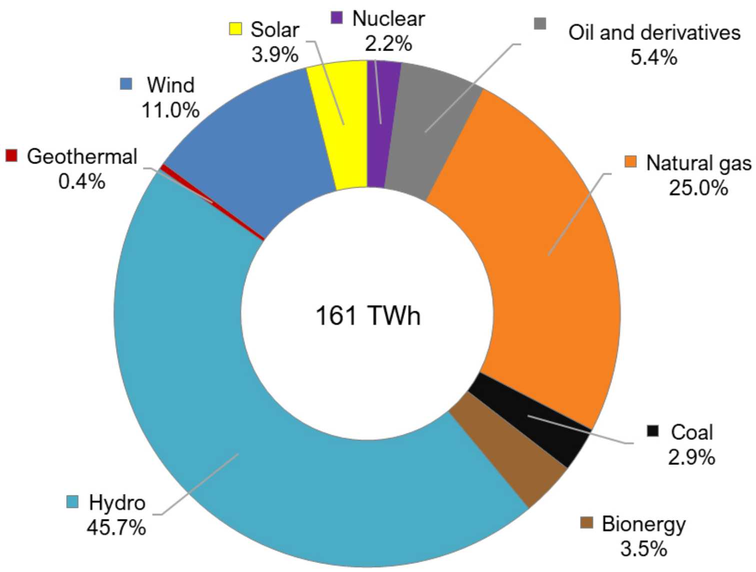
1. Electricity Generation July 2025

In July 2025, LAC reached a total electricity generation of 161 TWh, with hydropower as the predominant source with a 45.7% share, reflecting the high dependence that the region has on water resources. However, in absolute terms, there was a decrease in generation with hydropower compared to the previous month.

It is worth mentioning that the increase or decrease in hydroelectric generation cannot be directly attributed to the climatic phenomenon of La Niña, since it does not have a uniform effect throughout the region, since in some areas such as the Andean and Amazonian basins, they may experience a water deficit while in the Southern Cone there may be an excess of rainfall.

On the other hand, natural gas generation maintains its upward trend mainly due to the need for support in the face of the variability and intermittency of generation with non-conventional renewable energy sources (such as wind and solar) and the increase in installed capacity for generation with this energy source.

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



Source: sieLAC – OLADE 2025

2. Composition of electricity generation as of July each year

During the months of July in the period 2023–2025, electricity generation from bioenergy, oil, and derivatives were the sources that experienced the greatest decline, with 15.5% and 10.7% respectively, while nuclear energy recorded the highest growth with 26.9%, followed by hydroelectricity with 12.6%.

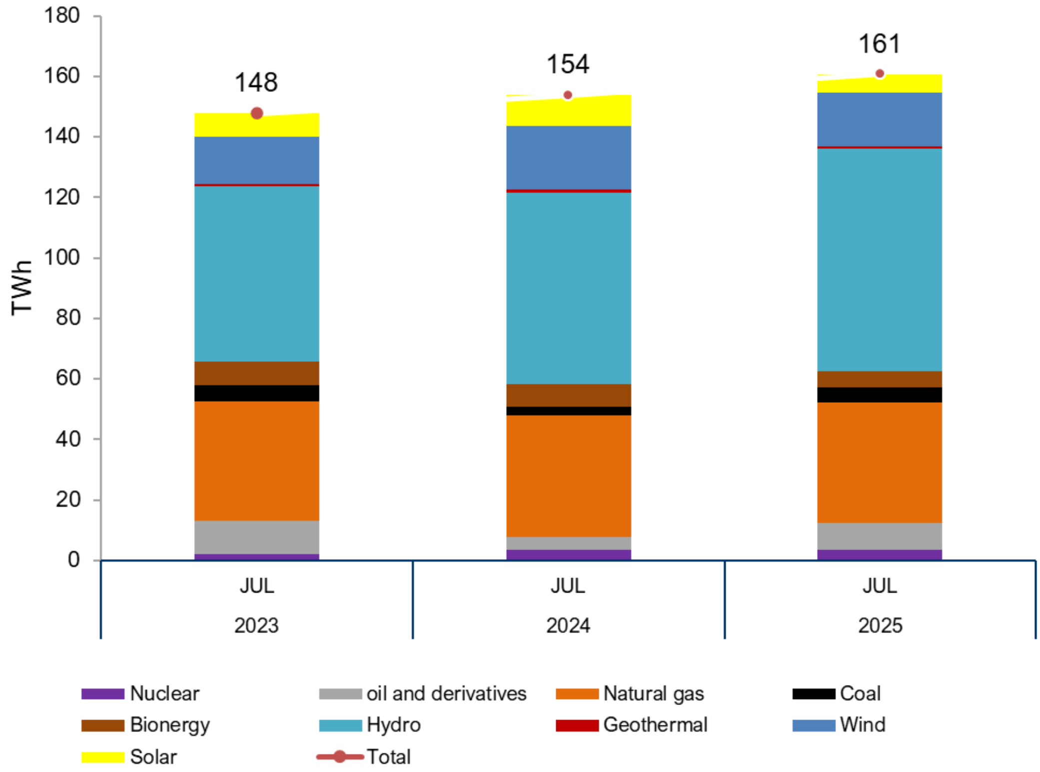
In July 2023, the lowest hydroelectric generation of the period was observed, due to the intensification of the El Niño Phenomenon, which caused severe droughts in the Amazon and Central America, increasing thermal participation.

In July 2024, there was no significant influence of La Niña on climatic conditions, which allowed a partial recovery of hydroelectric generation with respect to July 2023.

Finally, in July 2025, compared to July of the previous year, hydroelectric generation increased due to the increase in the installed capacity of this type of plant.

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

Figure 2. Composition of electricity generation as of July each year



Source: sieLAC – OLADE 2025

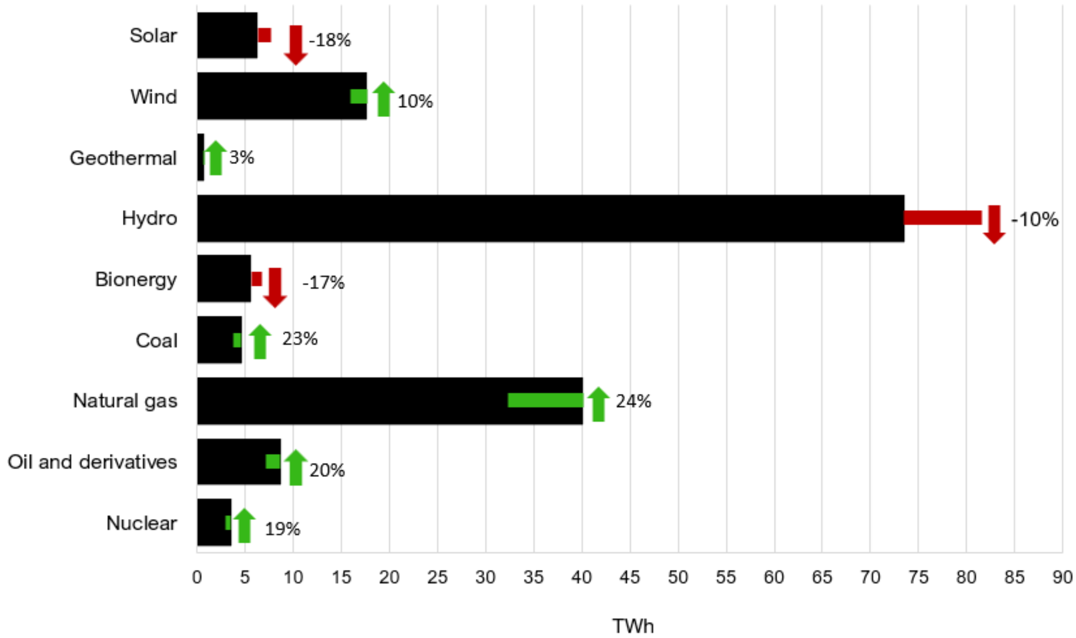
3. Monthly variation

In July 2025, hydroelectric generation showed a decrease compared to June 2025, mainly because this month was particularly dry in most of the region, especially in the Andean Zone and in Central America, which caused greater generation from fossil fuels (mainly with natural gas).

In relation to generation with solar energy, the decrease is mainly due to the presence of less radiation, especially in the southern hemisphere due to winter, while wind generation increased due to the presence of strong winds, especially in countries of the Southern Cone.

As for the increase with nuclear, it is since in July 2025 the plants operated at full capacity, given that in June there were some scheduled maintenance.

Figure 3. Monthly variation in electricity generation by source in LAC, June 25 / July 25

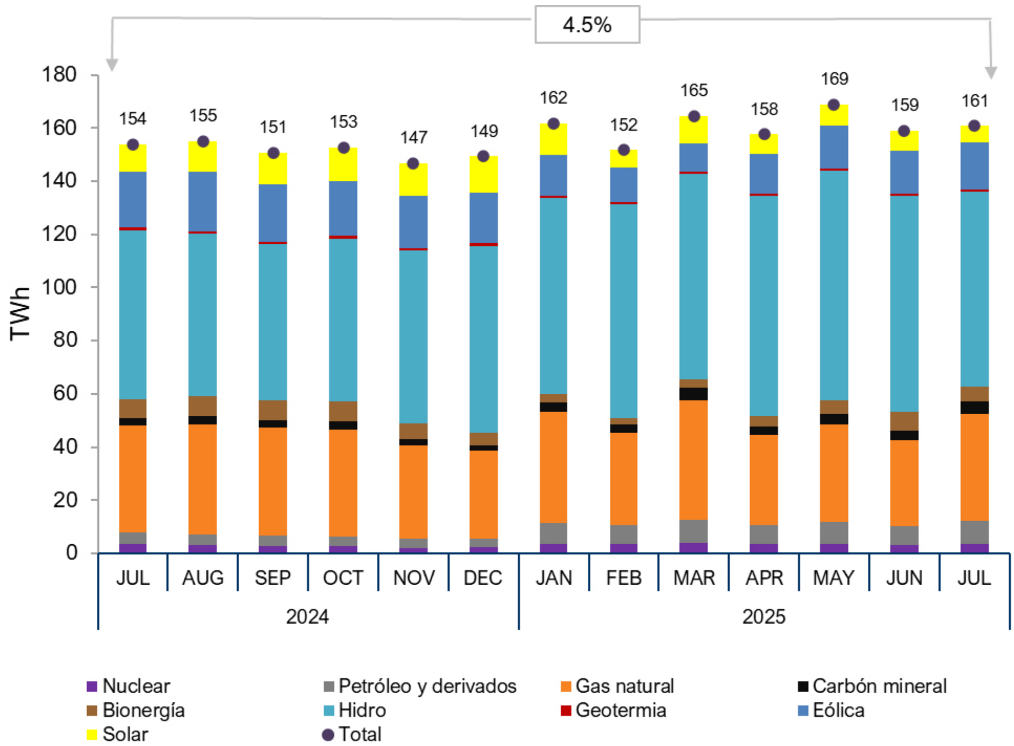


Source: sieLAC – OLADE 2025

4. Year-on-year variation

In July 2025, the total generation of Lac compared to July of the previous year shows a growth of 4.5%. During the period of analysis, hydroelectricity is the dominant energy source, although with lower values if we compare with other rainy months such as January 2025 in which 162 TWh were generated with this resource.

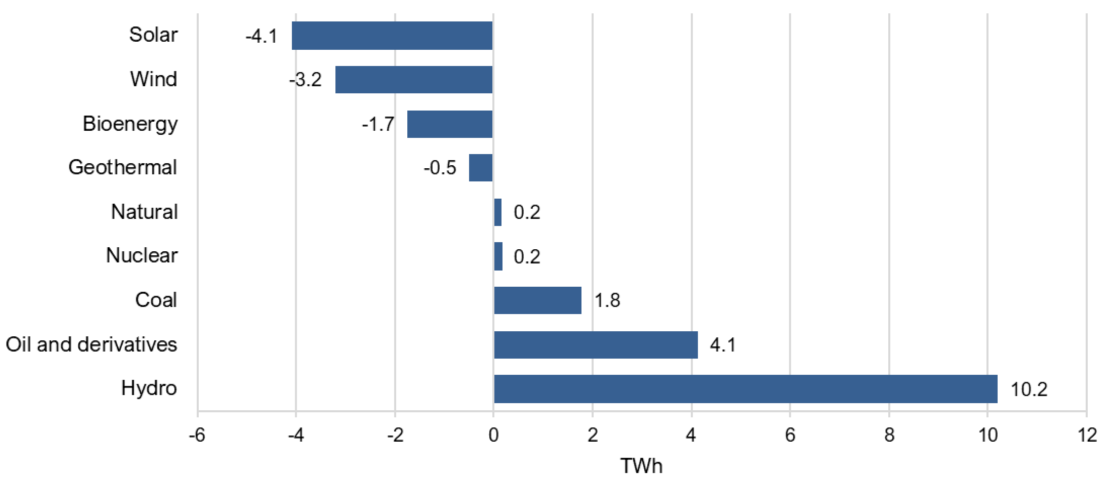
Figure 4. Evolution of Electricity Generation by Source in LAC (July 2024 – June 2025)



Source: sieLAC – OLADE 2025

According to the year-on-year variations of July 2025 compared to July 2024, hydropower remained the fastest-growing resource during the analysis period, with 10.2 TWh followed by oil and its derivatives and coal with respective contributions of 4.1 TWh and 1.8 TWh respectively. See Figure 5.

Figure 5. Year-on-year variation in electricity generation by source in LAC, July 2025 vs. JUL 2024



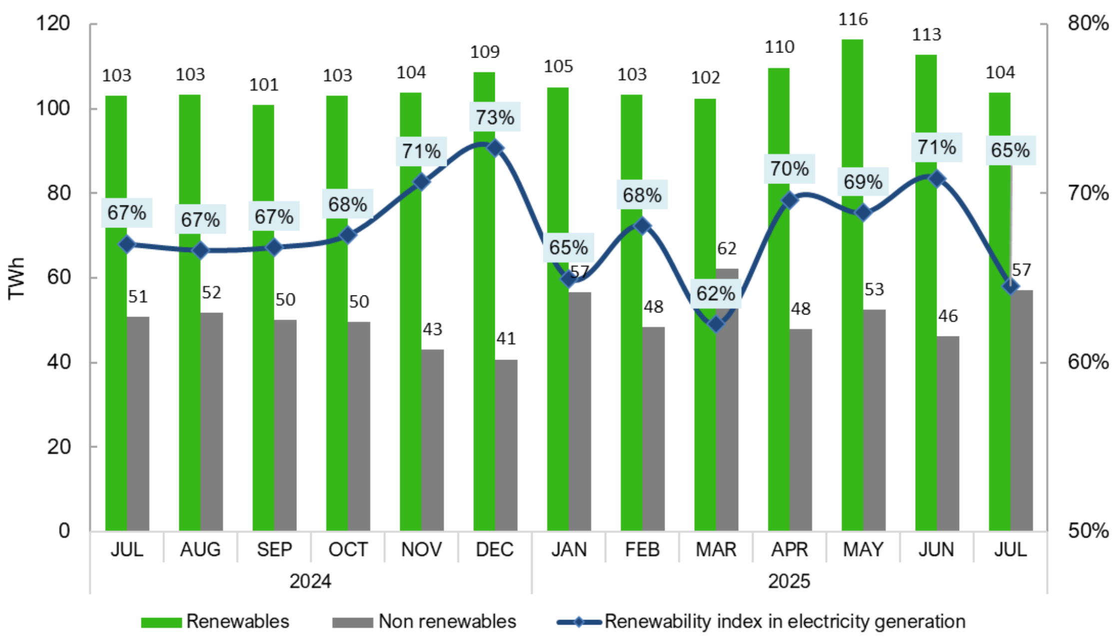
Source: sieLAC – OLADE 2025

5. Renewability Index

In July 2025, the renewability index in electricity generation in the LAC region fell to 65%, compared to 71% in June, marking one of the lowest values in the last four months. This decrease is mainly explained by the reduction in hydroelectric generation, which shows the high dependence on this source to maintain high levels of renewability. Although total renewable generation reached 104 TWh, the increase in non-renewable sources (57 TWh) contributed to the fall in the index.

At the country level, 10 surpassed the regional index in July 2025, highlighting; Paraguay and Costa Rica (100%), followed by Uruguay (97%), Venezuela (94%), Colombia and Ecuador (90%), Brazil (88%), Panama (83%), Belize (77%) and El Salvador (68%), as shown in Figure 7. This heterogeneity reflects structural differences in energy matrices, where some countries have achieved an almost complete transition to renewable sources, while others maintain a dependence on fossil fuels.

Figure 6. Renewability index in electricity generation, LAC



Source: sieLAC – OLADE 2025

Figure 7. Map of the Renewability Index in electricity generation in LAC, July 2025

Source: sieLAC – OLADE 2025

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