09

DECEMBER 2025

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Electricity Generation

Report in Latin America and the Caribbean

Monthly electricity generation report in LAC, August 2025

OLACDE publishes the monthly electricity generation report for Latin America and the Caribbean (LAC) 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 August 2025

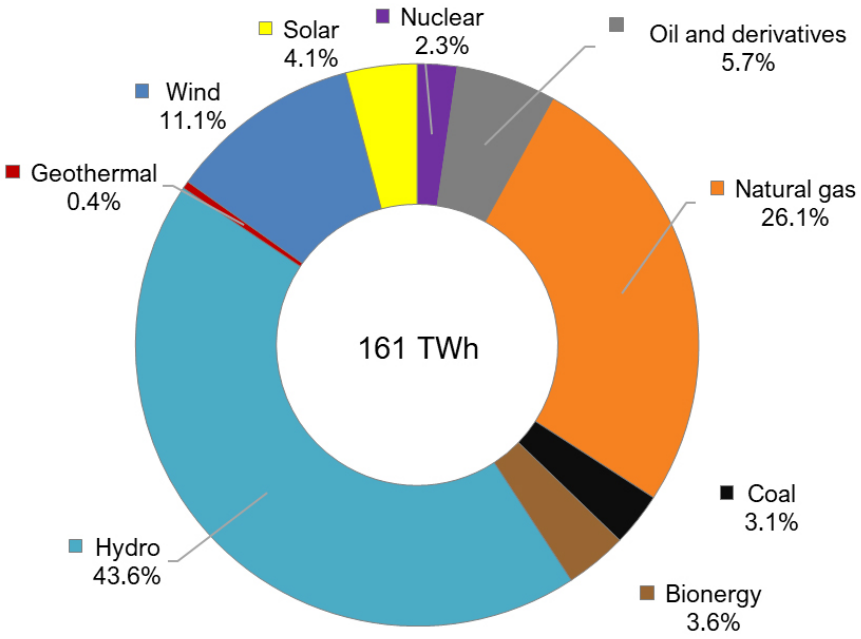
In August 2025, LAC reached a total electricity generation of 161 TWh level similar to that recorded in the previous month. However, variations were observed in the relative participation of the different sources of generation.

Hydropower remained the main source of generation with a share of 43.6%, supported by the abundant water availability of the region. However, in absolute terms, there was a reduction compared to July.

Electricity generation from other renewables such as wind, solar and bioenergy showed a slight increase. These sources are expanding, driven by energy transition policies and the abundance of natural resources, such as high solar radiation and strong winds in certain areas of the region.

Electricity generation from natural gas recorded an increase in its share, reaching 26.1% of the total. This trend reflects the fact that it is considered a firm energy source, which ensures the reliability and stability of the electricity supply in the region. Generation with other non-renewable sources, such as mineral coal and other fossil fuels, also showed an increase in their share.

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



Source: sieLAC – OLACDE 2025

2. Composition of electricity generation in August of the last 3 years

During the months of August over the 2023–2025 period, electricity generation from bioenergy, solar, and coal were the sources that recorded the largest declines, with variations of –14.2%, –13.6%, and –6.8%, respectively. In contrast, electricity generation from nuclear energy showed the largest increase, at 27.4%, followed by wind power at 9.7%

In August 2023, lower electricity generation from natural gas was observed compared to August in subsequent years, as new combined-cycle plants were commissioned within the energy infrastructure of several countries.

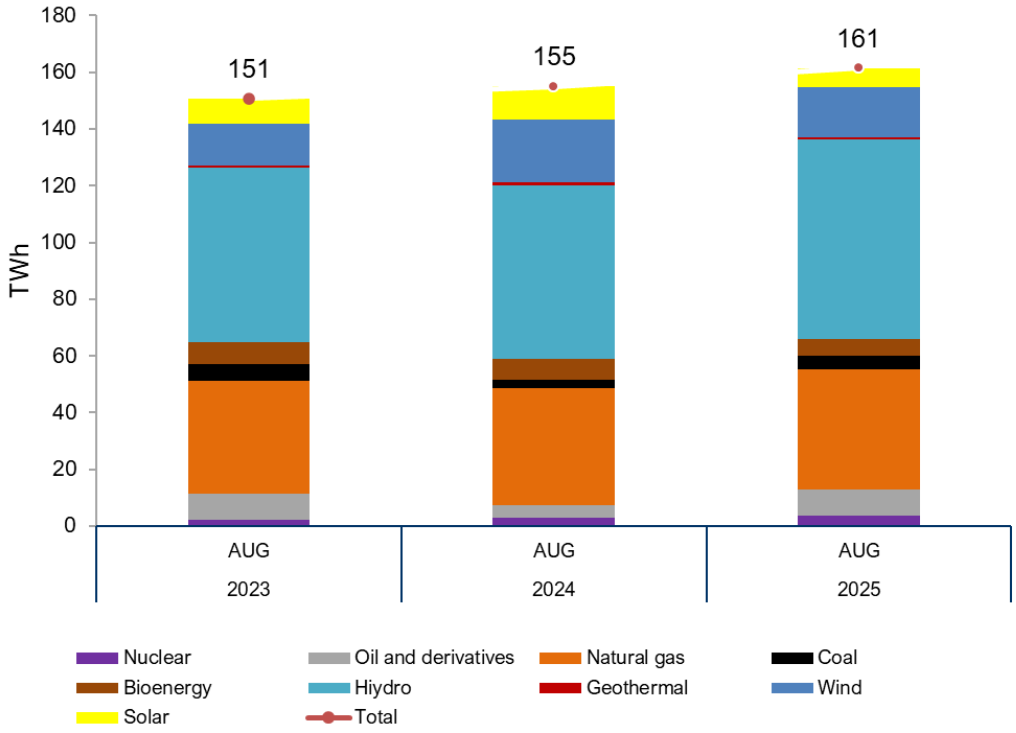
In August 2024, higher solar power generation was recorded compared to August 2023 and 2025, accompanied by a reduction in electricity generation from oil and its derivatives. This behavior was driven by the entry into operation of new photovoltaic complexes in various countries, as well as favorable climatic conditions.

Finally, in August 2025, compared to August of the previous year, hydroelectric generation increased due to the expansion of installed capacity for this type of plant. Similarly, electricity generation from natural gas also increased as several energy complexes entered into operation in different countries, such as Energía del Pacífico

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

(EDP) in Acajutla, El Salvador, considered the largest natural gas power plant in Central America.

Figure 2. Comparison of Electricity Generation for August of Each Year



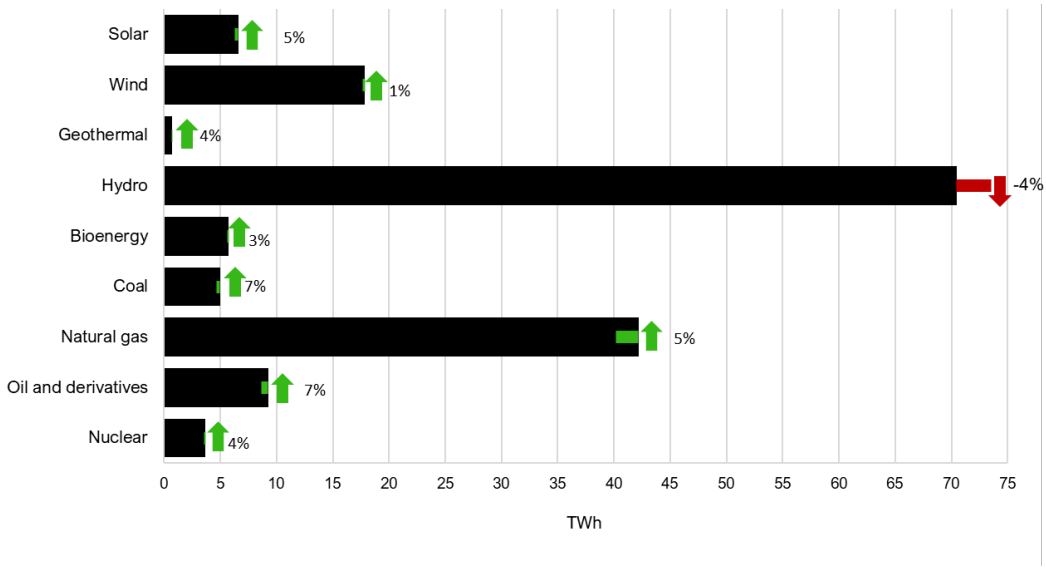
Source: sieLAC – OLACDE 2025

3. Monthly variation

Between July and August 2025, total electricity generation in LAC remained stable; however, the month-on-month variation in electricity generation by source was characterized by a 4% decline in hydropower, attributed to a particularly dry month across much of the region, with the greatest impact observed in the Andean Zone and Central America. This reduction was offset by increases in electricity generation from nearly all other energy sources, particularly those of fossil origin, with a greater contribution from natural gas, thereby ensuring energy supply across the countries of the region.

Regarding solar energy, the 5% growth was mainly driven by the commissioning of new photovoltaic installations. Meanwhile, the slight increase in wind power generation was due to the presence of strong winds in Southern Cone countries, as in the previous month.

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

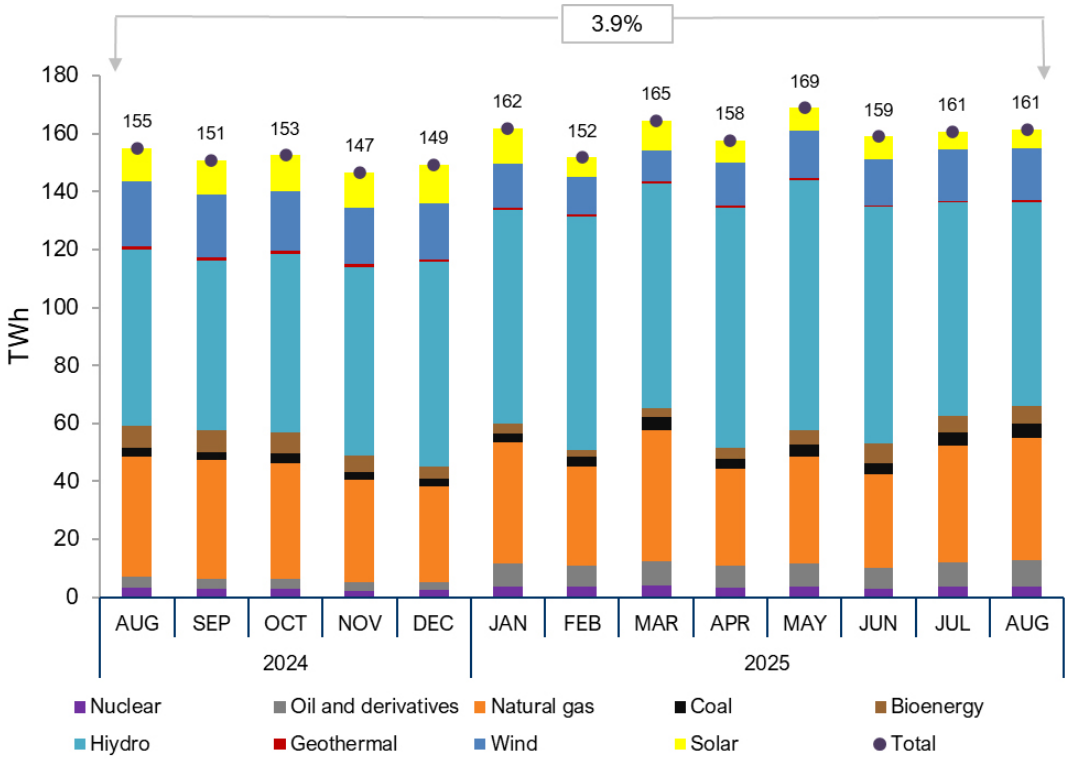


Source: sieLAC – OLACDE 2025

4. Year-on-year variation

Over the annual period from August 2024 to August 2025, electricity generation in LAC shows a slight upward trend, with a year-on-year increase of 3.9%, reaching 161 TWh in August 2025. Monthly performance showed fluctuations, with a peak of 169 TWh in May 2025. The electricity mix continues to be dominated by renewable sources, particularly hydropower, while thermal sources maintain a significant share, especially natural gas, which contributed 42 TWh in August 2025.

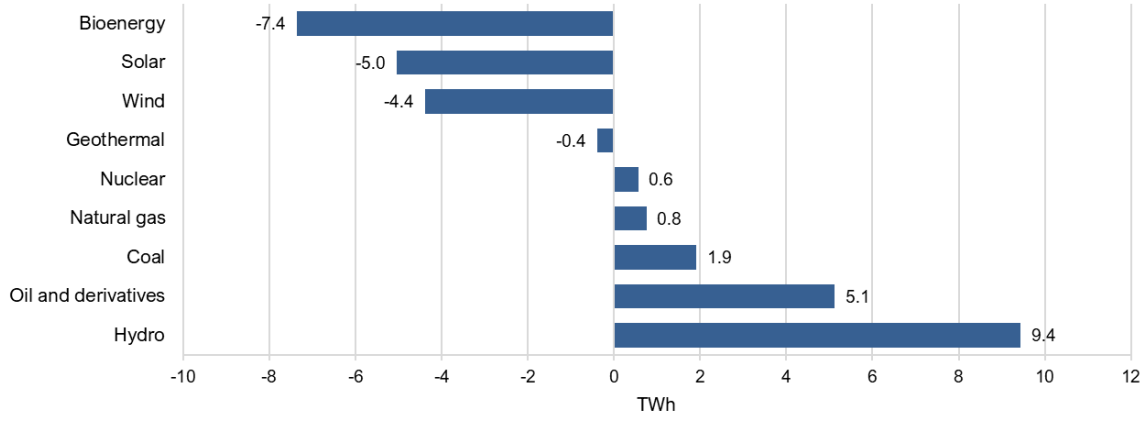
Figure 4. Evolution of Electricity Generation by Source in LAC (August 2024 – August 2025)



Source: sieLAC – OLACDE 2025

According to the year-on-year variations of August 2025 compared to August 2024, hydropower remained the fastest-growing resource during the analysis period, with 9.4 TWh followed by oil and its derivatives, as well as coal, with contributions of 5.1 TWh and 1.9 TWh respectively.

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



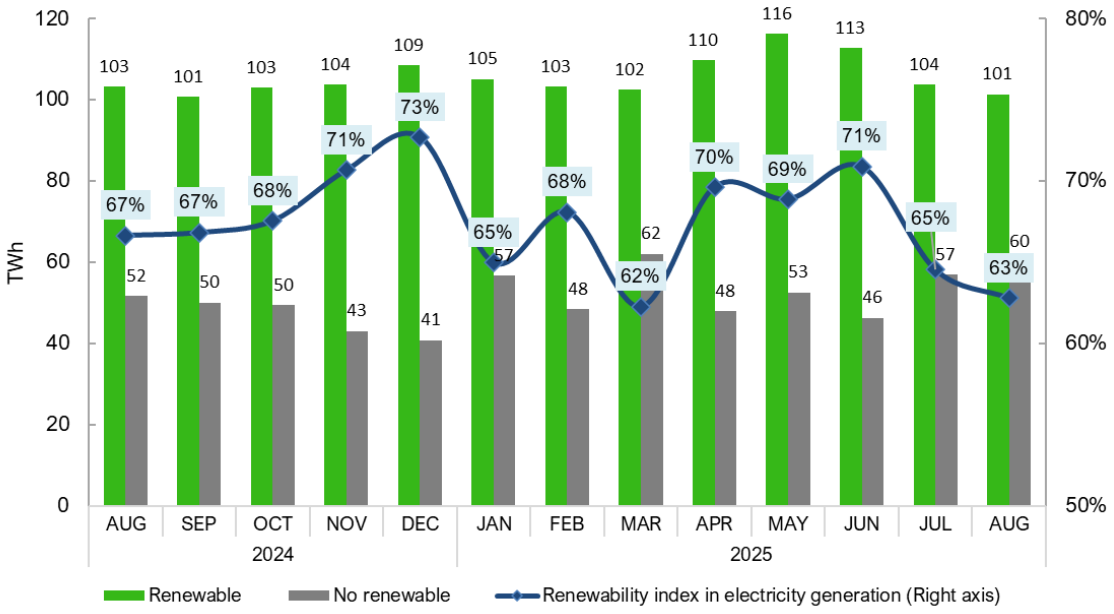
Source: sieLAC – OLACDE 2025

5. Renewability Index

In August 2025, the renewability index in electricity generation in the LAC region fell to 63%, compared to 65% in July, marking one of the lowest values in the last five 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 101 TWh, the increase in non-renewable sources (60 TWh) contributed to the fall in the index.

Of the 27 OLACDE member countries, 12 exceeded the regional index in August 2025, reflecting marked heterogeneity in the share of renewable energy. Nine countries surpassed 75% renewable electricity generation—most notably Paraguay, Costa Rica, and Uruguay, with values close to 99.9%; four countries fell within the 50–70% range; five countries recorded shares between 25% and 50%; while nine countries registered low levels, with only 1% to 25% renewable generation in their electricity mix.

Figure 6. Renewability index in electricity generation, LAC



Source: sieLAC – OLACDE 2025

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

Source: sieLAC – OLACDE 2025

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