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TECHNICAL NOTE Nº 8

ELECTRIC MOBILITY IN LATIN AMERICA AND THE CARIBBEAN

Monitoring Electromobility

Energy Join us

This document was prepared under the guidance of
Latin American Energy Organization
(OLADE)

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Methodological note

This Technical Note: "Monitor of Electric Mobility in Latin America and the Caribbean", is an update with data at the end of the year 2024, which OLADE published in September 2024 with data up to the first half of that year.

The information presented corresponds to official data provided by OLADE member countries, and information from platforms specialized in the collection and dissemination of electromobility statistics in Latin America and the Caribbean.

At the end, data on electrified vehicle sales for most countries is included, corresponding to the first quarter of 2025.

Acknowledgements

Special thanks to the professional Advisors of the Energy Information System of Latin America and the Caribbean (sieLAC) of OLADE and to the Energy Ministries and Secretariats of the member countries of the Organization.

The collaboration of the Latin American Association of Automotive Distributors (ALADDA) is also appreciated.

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1. INTRODUCTION

As indicated in the previous edition of this Monitor, in OLADE's Technical Note No.1[1], the size of the light electric vehicle fleet in the Latin America and the Caribbean (LAC) region has had an exponential growth trajectory during the last 4 years, practically doubling every year to reach a quantity close to 250,000 units in circulation by mid-2024, which represents a growth of more than 14 times compared to the values recorded in 2020.

This rapid growth responds, among other things, to the implementation of public policies in LAC countries, which seek to achieve the decarbonization goals of their economies and energy systems in compliance with their international climate change mitigation commitments included as targets in their Nationally Determined Contributions (NDCs).

It was also noted that the development of electromobility goes hand in hand with the improvement of the renewability index of the electricity generation matrix in most of the countries of the region, due to the significant penetration of unconventional clean generation technologies such as wind and solar photovoltaic.

Moreover, advances in electric vehicle manufacturing technology, the growing number of manufacturers, and the decreasing cost of batteries have made the acquisition of these vehicles increasingly competitive compared to combustion vehicles with similar performance.

Other promotion mechanisms, such as the improvement in charging infrastructure and the enactment of laws to encourage electromobility, have made it possible to mitigate some of the gaps and challenges mentioned in the first edition of this Monitor.

In this context, with the data presented below, it will be possible to observe that, during the year 2024, the numbers of electrified light vehicles, both globally and in LAC, have experienced a significant

[1] https://www.olade.org/publicaciones/nota-tecnicas-olade-primera-edicion-monitor-movilidad-electrica-para-america-latina-y-el-caribe/

increase. Likewise, thanks to the collaboration of the Latin American Association of Automotive Distributors (ALADDA), an overview of electrified vehicle sales for some countries in the region for the first quarter of 2025 is presented.

2. Electromobility in the world

2.1. China

In 2024, China reached approximately 49 million electric vehicles in circulation, representing more than half of the world's electric vehicle fleet. This figure includes both 100% electric cars (BEVS) and plug-in hybrids (PHEVs).

During 2024, 12.87 million electric passenger vehicles were sold in China, of which 60% were BEV and 40% PHEV.

Electric vehicles accounted for 47.9% of all new car sales in the country, consolidating China as the largest and most dynamic vehicle market in the world.

China not only leads in sales, but also in production and export of electric vehicles. In 2024, the country exported almost 5 million passenger cars, of which 2.24 million were electric, which contributed significantly to the growth of its total exports.

This leadership is due to a combination of government policies, massive investments in charging infrastructure, and a robust domestic automotive industry.

Overall, China has consolidated its position as the global leader in electric mobility, both in terms of fleet in circulation and in production and export capacity.

2.2. European Union

It is estimated that approximately 9 million battery electric vehicles (BEVS) circulated in the European Union during 2024. This figure represents about 3.5% of the total car fleet in the block, which exceeds 250 million vehicles.

During 2024, 1,447,934 all-electric vehicles were registered in the EU, a drop of 5.9% compared to 2023.

Electric vehicles accounted for 13.6% of total new car sales in the EU in 2024.

Despite decarbonisation policies and restrictions on combustion engines planned for 2035, the growth of e-mobility in the EU has been affected by several factors:

- End of subsidies in key countries such as Germany.
- Lack of adequate charging infrastructure.
- Shortage of affordable models for the average consumer.
- Imposition of tariffs on electric vehicles manufactured in China of up to 45.3% since October 2024.

These challenges have generated a debate on the need for new strategies to accelerate the adoption of electric vehicles in the region.

Overall, although the fleet of electric vehicles in the European Union has grown significantly, representing close to 9 million units, there is still a long way to go to reach the transport electrification targets set for the coming decades.

2.3. United States

Until the end of 2024, it was estimated that approximately 4.1 million electric vehicles were on the road in the United States, which represents about 1.4% of the country's total vehicle fleet, composed of more than 292 million vehicles.

In 2024, around 1.7 million electric vehicles were sold in the country, an increase of 21% compared to the 1.4 million sold in 2023.

Electric vehicle sales accounted for approximately 10.2% of total new car sales during that year.

Although the adoption of electric vehicles in the United States has grown steadily in recent years, it still represents a small fraction of the total number of vehicles on the road and can be slowed both by the imposition of tariffs of up to 100% for electric cars manufactured in China, which has been in force since September 2024, and by the policies established by President Donald Trump that among other aspects include:

- Elimination of subsidies and incentives for electric vehicles.
- Freezing of funds for charging infrastructure.
- Restrictions on state policies on limiting carbon emissions.

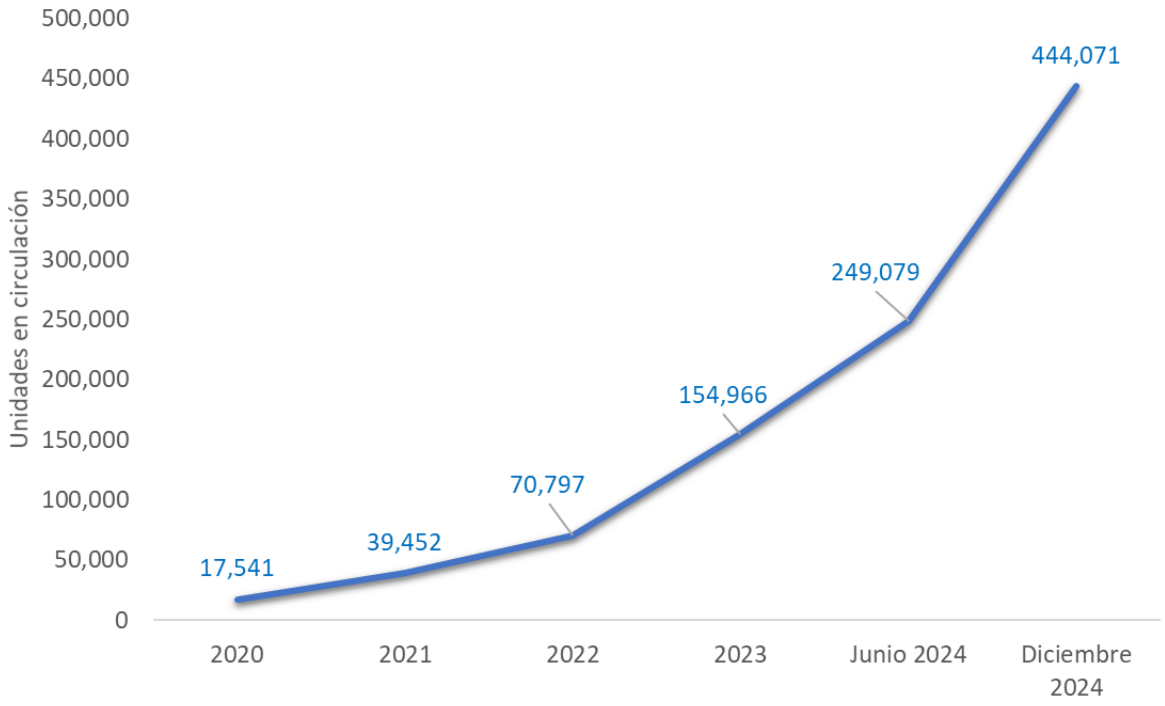
As the US reduces its push towards electromobility, countries like China continue to lead the global EV market, accounting for more than 75% of global sales in 2024.

3. Electromobility in Latin America and the Caribbean

3.1. Electric light vehicle fleet in Latin America and the Caribbean

Of the 249,079 light electric vehicles (PHEV and BEV) that circulated in the LAC region until June 2024, this figure increased until December of that year to 444,071 units, that is, in the second half of the year, 78% more units were integrated into said vehicle fleet, which implies an annual increase of 187%, this represents in absolute terms, almost triple in just one year. With the figure for the year 2024, the region represents almost 0.7% of the world's electric vehicle fleet and 0.3% of the total light vehicle fleet in LAC. See Figure 1.

Figure 1. Evolution of the electrified light vehicle fleet 2020 – 2024.

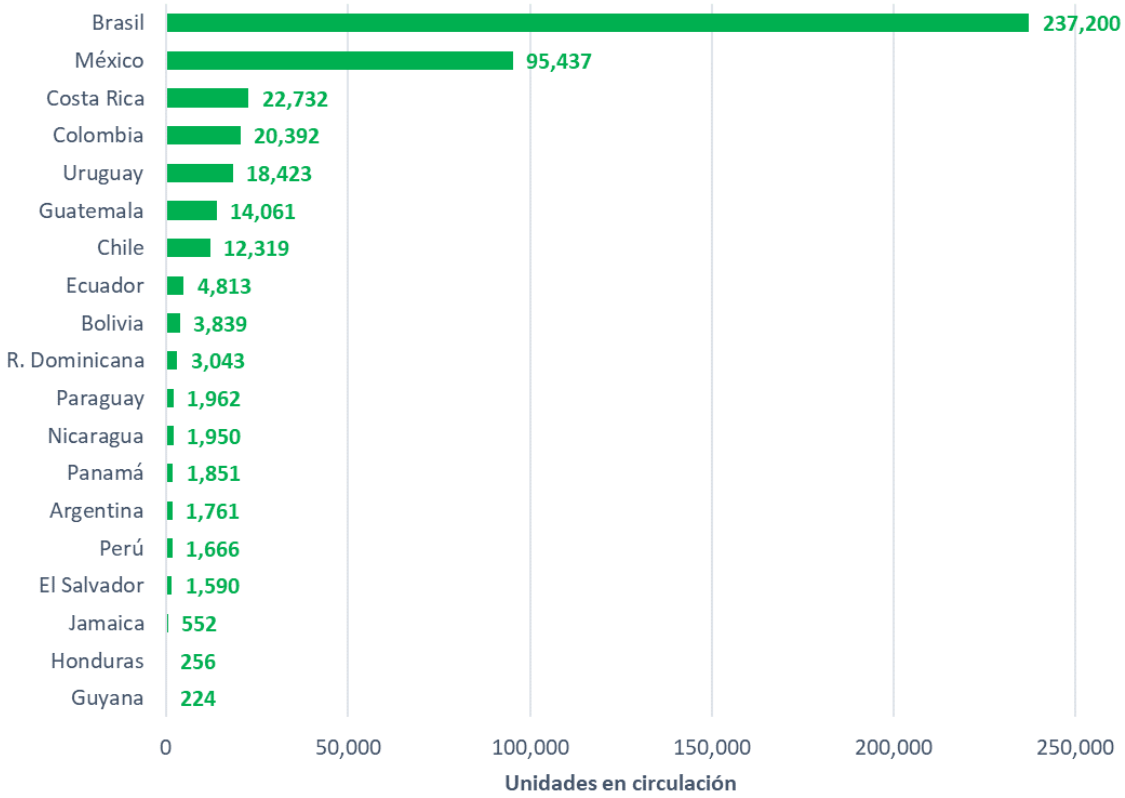


Source: own elaboration based on information from national statistics.

3.2. Ranking of LAC countries by the size of their light electric vehicle fleet.

As of December 2024, Brazil stands out as the LAC country, with the largest number of light electric vehicles, reaching 237,200 units, which represents more than 50% of the total number of this type of vehicles circulating in LAC at that date. It is followed by Mexico, with 95,437 units, and then Costa Rica, Colombia, and Uruguay, with quantities close to 20,000 units. See Figure 2.

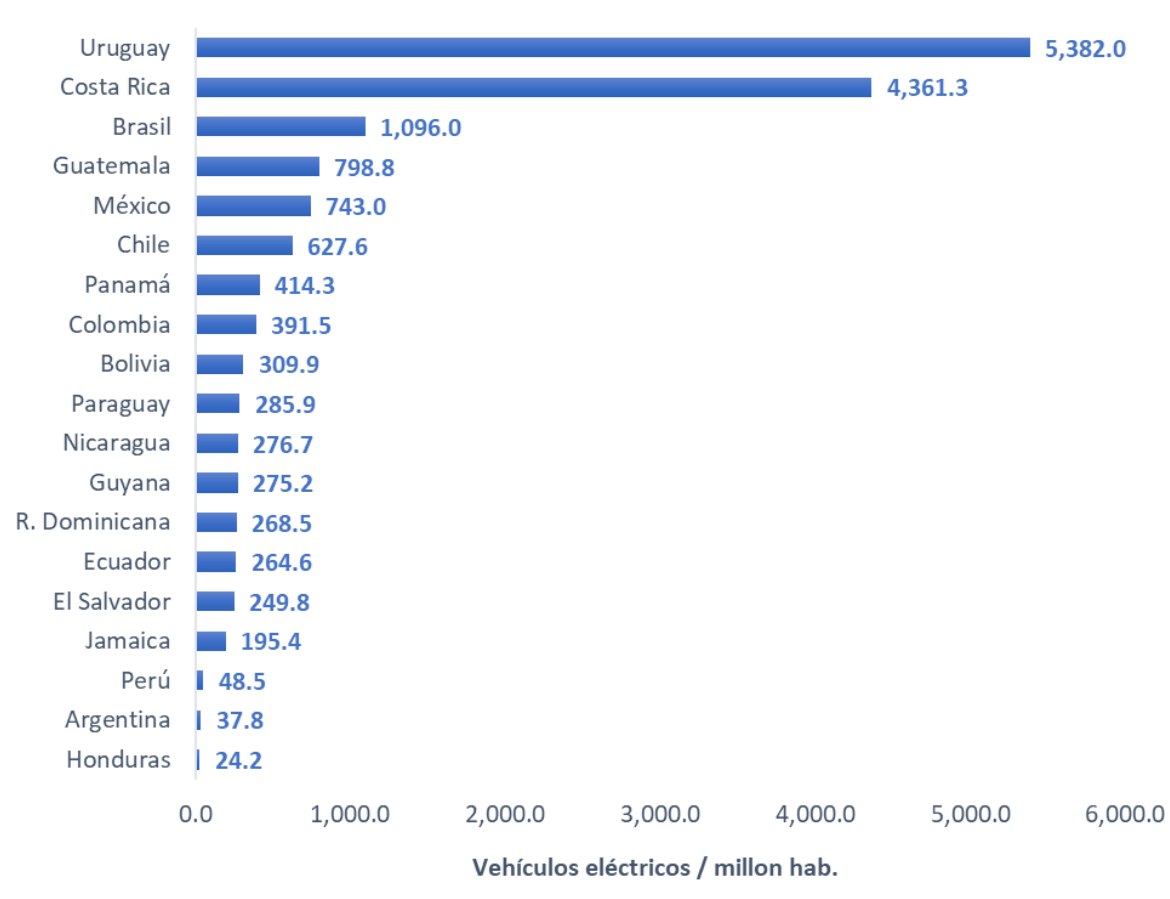
Figure 2. Ranking of the countries with the highest number of light electric vehicles as of December 2024.



Source: own elaboration based on information from national statistics.

In terms of population, the countries with the highest number of light electric vehicles per capita as of December 2024 are Uruguay and Costa Rica, Brazil, Guatemala and Mexico. See Figure 3.

Figure 3. Ranking of the countries with the highest relative number of light electric vehicles, with respect to their population as of December 2024.

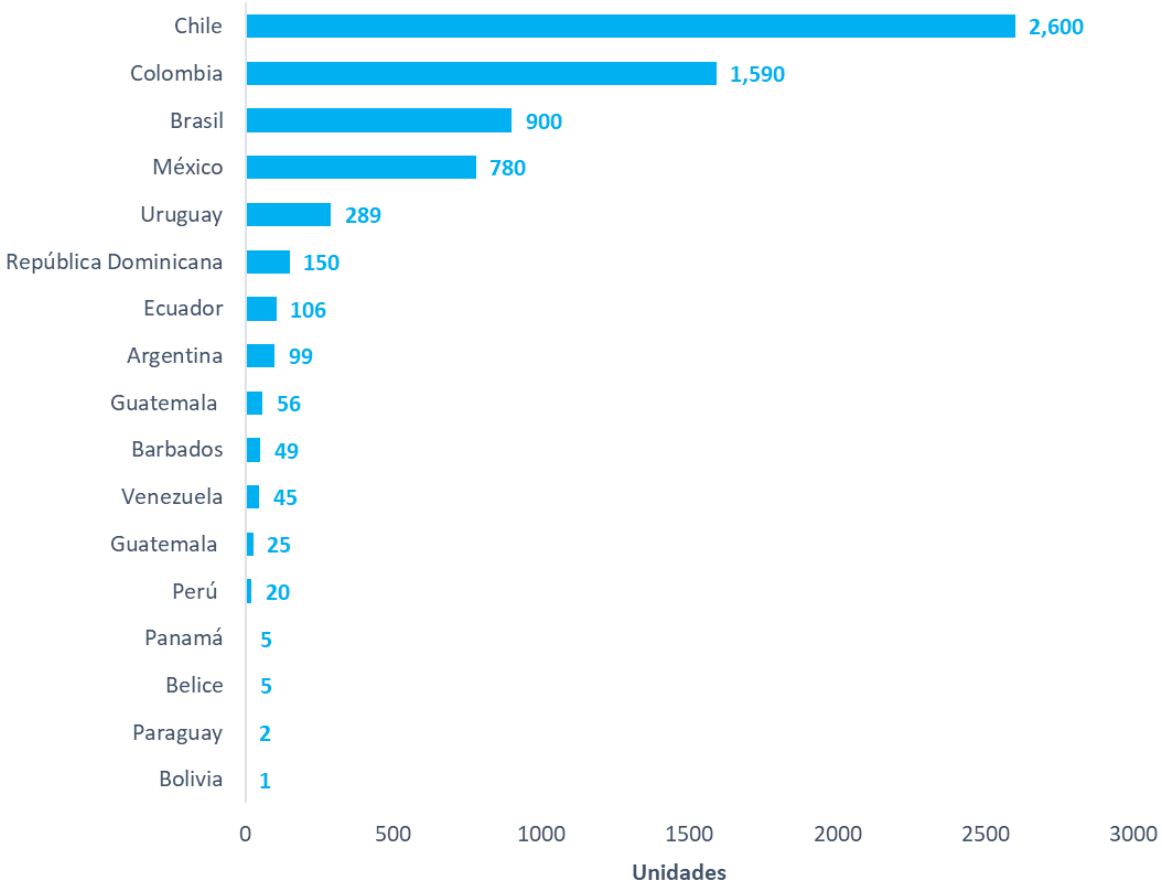


Source: own elaboration based on information from national statistics.

3.3. Ranking of the LAC countries with the highest number of electric buses as of December 2024.

The development of electromobility in LAC also involves public transport systems. The ranking of the countries with the highest number of electric buses is led by Chile and Colombia, with Brazil, Mexico and Uruguay in the next three positions. The LAC region, as of December 2024, has an electric bus fleet of around 6,700 units, which means a 32% increase compared to the end of 2023.

Figure 4. Ranking of the LAC countries with the highest number of electric buses as of December 2024.

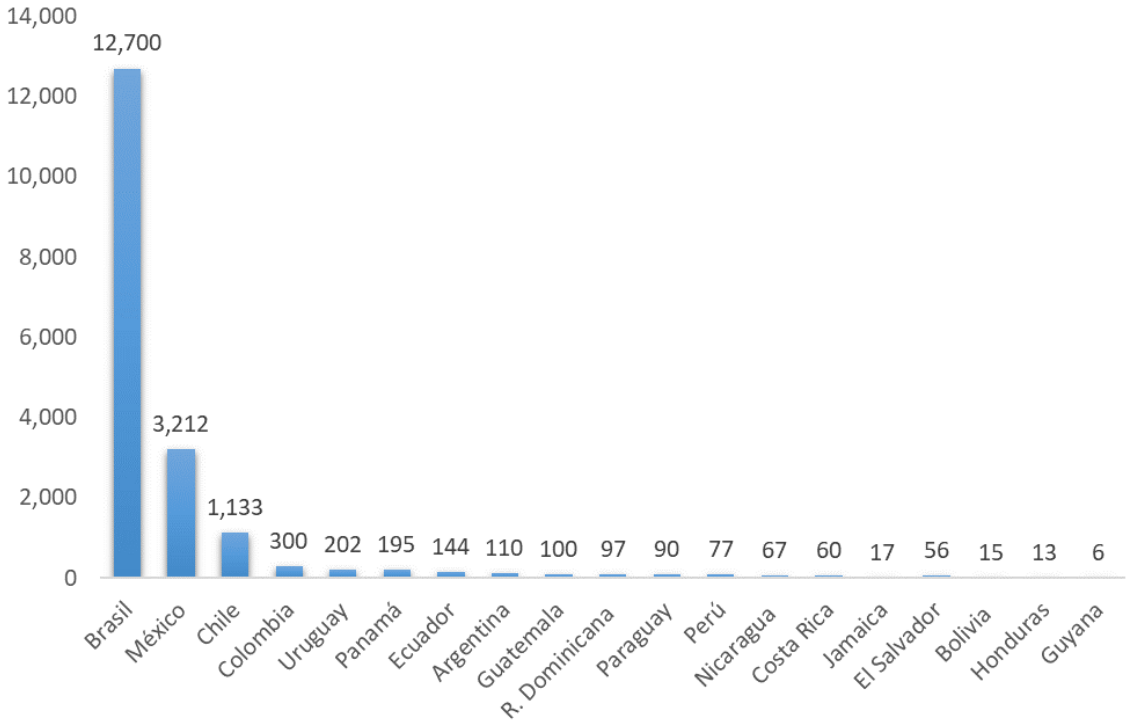


Source: own elaboration based on information from national statistics.

3.4. Public charging stations in LAC as of December 2024.

With the increase in the electric vehicle fleet, there is a need to increase the number of public charging stations. As of December 2024, the LAC region had 18,594 charging stations, 92% of which are concentrated in Brazil, Mexico and Chile, while the other 24 countries together have 8% of the regional total.

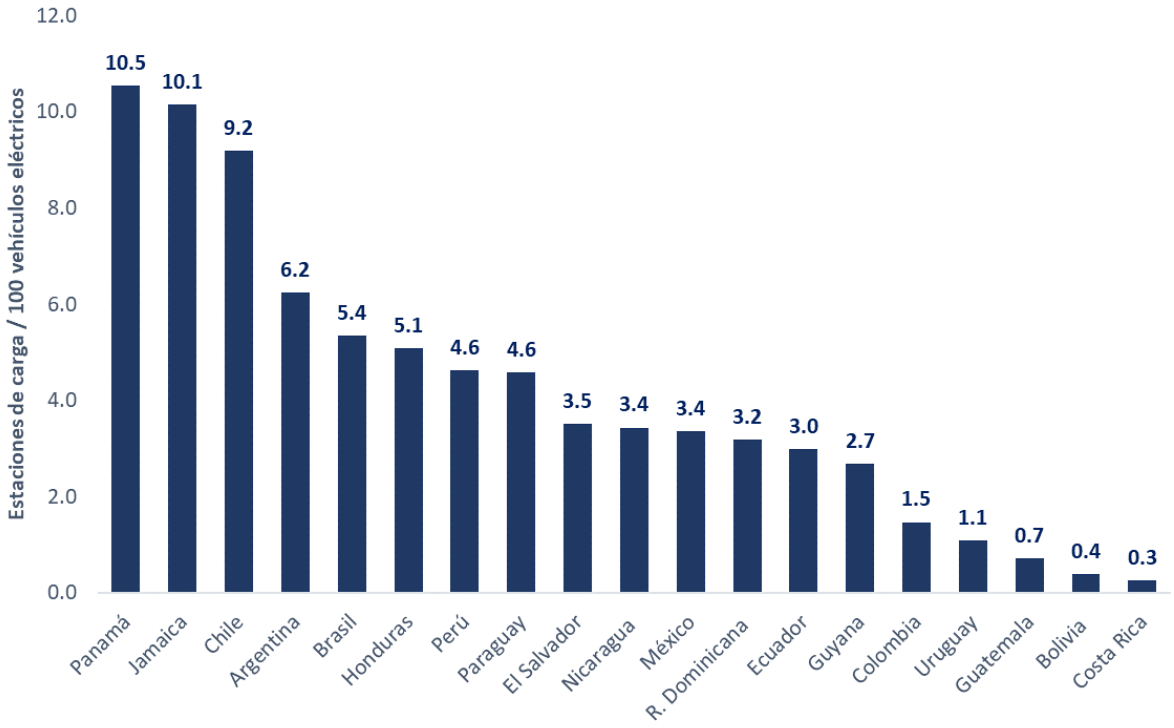
Figure 5. Ranking of the countries with the highest number of charging stations as of December 2024.



Source: own elaboration based on information from national statistics.

Regarding the relative number of charging stations with respect to the number of electric vehicles in circulation, the 5 countries that stand out the most are Panama, Jamaica, Chile, Argentina and Brazil, while some countries with an important electric vehicle fleet, such as Colombia, Uruguay and Costa Rica, are in the last places, for having a relatively small number of charging stations.

Figure 6. Countries with the highest number of charging stations per 100 electric vehicles as of December 2024.



Source: own elaboration based on information from national statistics.

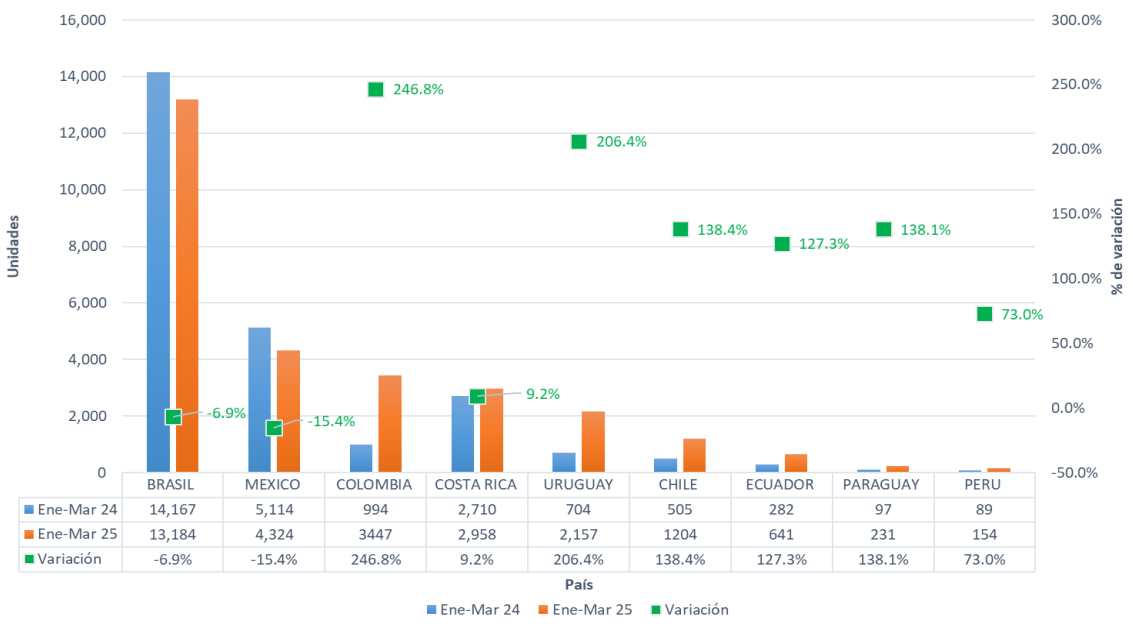
It should be noted that today more than 80% of users of light electric vehicles globally regularly charge their vehicles at home and preferably at night, although the corporate charge is also increasing, that is, in the workplace of users of these vehicles.

4. OVERVIEW OF ELECTRIFIED VEHICLE SALES IN SOME COUNTRIES OF THE REGION DURING THE FIRST QUARTER OF 2025.

4.1. Sales of 100% electric vehicles (BEV)

As can be seen in figure 7, like the year 2024, Brazil and Mexico lead the sales of 100% electric cars during the first quarter of 2025, although with slightly less sales in both cases. All other countries reported a positive growth rate, with Colombia standing out with the highest rate of the group, where sales almost quadrupled compared to the first quarter of the previous year, followed by Uruguay where sales tripled.

Figure 7. BEV vehicle sales during the first quarter of 2025 and compared to the first quarter of 2024.

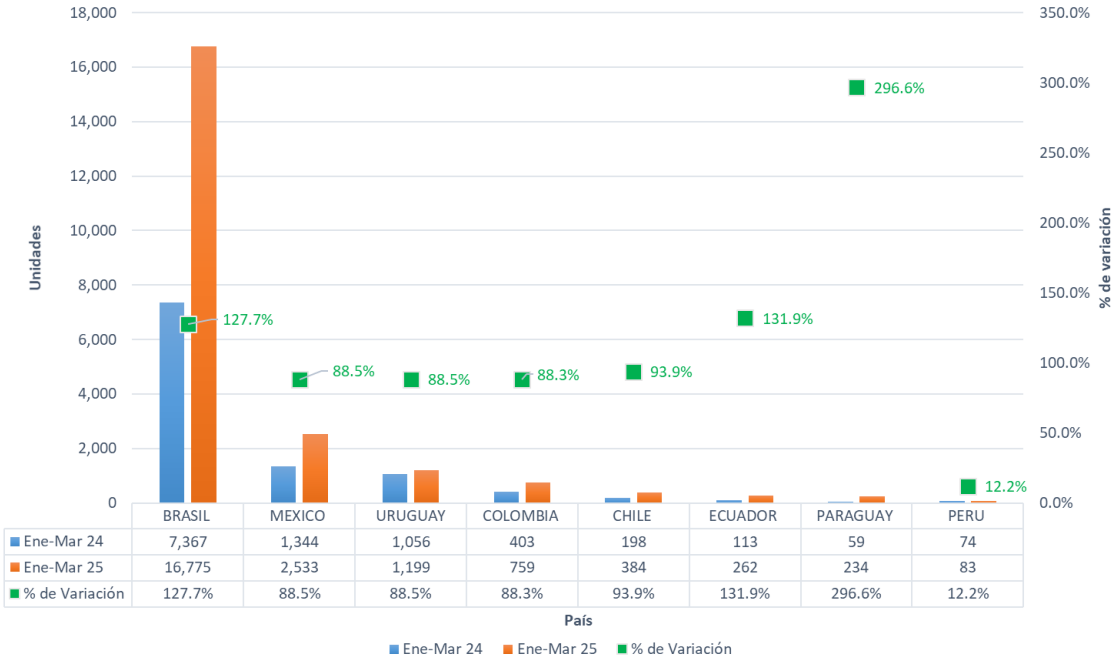


Source: own elaboration with information provided by ALADDA and the Automotive Trade Association of Uruguay —ACAU

4.2. Plug-in Hybrid Vehicle (PHEV) Sales

As for plug-in hybrid vehicles, as for BEVS, Brazil and Mexico reported the highest sales volume during the first quarter of 2025. All the countries reported show positive growth rates compared to the first quarter of 2024, standing out as the highest in Paraguay where sales quadruple comparatively between these two periods.

Figure 8. PHEV vehicle sales during the first quarter of 2025 and comparison with the first quarter of 2024.



Source: own elaboration with information provided by ALADDA and the Automotive Trade Association of Uruguay —ACAU[2]

[2]"In the case of Uruguay, the sales figures refer to all types of hybrid vehicles, not just PHEVs.

5. CONCLUSIONS

While in the US and the European Union electromobility shows some degree of slowing down in its development, in China it is advancing at an accelerated pace, consolidating itself as the largest producer and exporter of electric cars in the world. This has a direct impact on countries with emerging economies such as those in LAC, where most of the imported and marketed electric cars are of Chinese origin. Without a doubt, this issue represents a challenge for the governments in our region. Moreover, it is a further element in the new global geopolitical landscape.

The considerable increase in the size of the light electric vehicle fleet in the LAC region, between the first semester and the end of the year 2024 and the fact that it has tripled compared to the end of 2023, is a clear sign that the transition of the transport sector towards electromobility is advancing by leaps and bounds and has no prospect of stopping despite the existing gaps such as higher relative cost of vehicles, the still insufficient recharging infrastructure and autonomy limitations. All aspects that, in any case, are being progressively resolved.

Although to a lesser extent, compared to the light electric vehicle fleet, electromobility in public passenger transport also increased during the second half of 2024.

Regarding charging infrastructure, the most notable increase occurred in two countries: Brazil, which went from having 1,876 public charging stations in 2023 to 12,700 by the end of 2024, and Mexico, which went from having 1,340 charging stations in 2023 to 3,212 by December 2024, concentrating these two countries about 86% of the total number of charging stations in LAC.

We will continue to monitor the behavior of this market and will present a new update before the end of the year.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