LatAm Electric Mobility
Where are we and what can the energy industry expect?

by Arthur Deakin, co-director of AMI’s energy practice

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LatAm must move towards cleaner forms of transportation

35% of LatAm CO₂ emissions come from the transportation sector.

22% is the global average.

LatAm’s electric vehicle (EV) market is still fairly new

23,000 EV sales in 2021

Almost 2x the units sold in 2020

...but it is projected to grow significantly.

LatAm 2030 scenario

+1M in EV sales  5.4 M electric vehicles in operation

Expected EV sales in 2030, by vehicle type

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>2030 Sales</th>
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<tbody>
<tr>
<td>BEVs</td>
<td>123,700</td>
</tr>
<tr>
<td>HEVs</td>
<td>488,900</td>
</tr>
<tr>
<td>PHEVs</td>
<td>405,200</td>
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BEV = Battery Electric Vehicles  HEV = Hybrid Electric Vehicles  PHEV = Plug-in Hybrids
How LatAm EV sales compare to those in other markets:

EV sales ARE growing in some LatAm markets, but much more modestly than in Europe, for example:

2 to 4% estimated EV sales* in Mexico and Brazil

40 to 50% estimate EV sales* in UK, France and Germany

*EV sales as a % of total light passenger vehicle sales.

“By 2025, developed markets will have a more mature EV ecosystem that will allow for Vehicle2Grid (V2G), fleet optimization and software development, while developing markets will see the persistence of ICE and flex vehicles.”

2021 EV sales, specific LatAm markets (total units)

Costa Rica 1,000
Colombia 3,000
Brazil 14,000
Mexico 4,600
Chile 856
Peru 91
Argentina 55

Arthur Deakin
Energy Practice Leader
Americas Market Intelligence
Development of EV charging infrastructure (EVCI) globally\(^7\)

<table>
<thead>
<tr>
<th># of public charging stations, 2021</th>
<th># of public charging stations, 2040(f)</th>
</tr>
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<tbody>
<tr>
<td>1.2 MN</td>
<td>44 MN</td>
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- Slow public
- Fast public

MN=million

f= forecasted

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<tr>
<th>EVCI public charging infrastructure in the six main LatAm markets(^8)</th>
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<tbody>
<tr>
<td>Brazil</td>
</tr>
<tr>
<td>1,250</td>
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<table>
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<tr>
<th>LatAm EVCI market value(^9)</th>
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<tr>
<td>US$ 359 mn EVCI market 2021</td>
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<tr>
<td>US$ 683 mn projected value in 2028</td>
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</table>

9.6% CAGR 2021-2028

US$1.4 tn\(^10\)
Cumulative investment in EVCI through 2040 (BNEF’s Net Zero Scenario)

60% of capital will go to fast chargers

AMI estimates that most investment will go to public fast chargers in urban areas

LatAm has an 81% urbanization rate

High poverty in LatAm means less residential (private) chargers

Buses and 2-3 wheelers are leading electrification in LatAm

www.americasmi.com
LatAm EV sales suggest a trend towards European charging infrastructure

Top EV brands in Brazil, Mexico and Colombia

Brazil
Mexico
Colombia

7289 units
3088 units
828 units
685 units
639 units

91% of LatAm EV sales in 2021 were from European automakers

LatAm EV mobility challenges over the next few years

Range anxiety (caused by limited EV charging infrastructure) and cheaper flex vehicles could hold back adoption in Latin America

Heavy vehicles lack battery technology while passenger vehicles are still too expensive

Chargers lack uniformity throughout the region (but AMI observes a gravitation towards European standards)

“Although the headlines across the region emphasize the exponential growth of EVs in Latin America, the truth of the matter is that adoption is happening at a snail’s pace when compared to developed markets. This does not mean that the region is void of opportunities, but rather, that investors need to be more selective about where they develop charging infrastructure or sell EVs. Understanding the market dynamics, the projected growth rates and the volatile competitive environment will allow companies to be better positioned for success.”
Next Step

Contact us directly to explore in detail how our market intelligence of the energy sector could help with your strategic decisions in Latin America.

A study designed and executed to fit your strategic needs could:

- Help you understand the opportunities with electric vehicles (and EVCI) over the next decade in Latin America — and how to maximize them for your company
- Benchmark your market performance vis-à-vis competitors to ensure you can successfully compete in the region
- Conduct market sizing studies to measure the addressable market of emerging technologies (e.g., battery storage, green hydrogen, distributed generation)
- Identify oil and gas opportunities in Latin America as companies seek to secure their energy supply in a time of energy transition
- Conduct due diligence on potential local partners, acquisition targets and suppliers to help with your company’s expansion efforts
- Provide intelligence about different forms of risk — political, reputational, security, economic and others — that your company could face in different LatAm markets

And much more.

We have conducted more than 100 energy market studies in the 38 countries of Latin America and the Caribbean over the course of two decades. Our team has the experience to find the solutions you need to expand your business in the region.

Click for more information
Sources


2. AMI Analysis, BNEF, IEA, Local Sources. Latin America numbers include only the main EV markets in the region: Costa Rica, Colombia, Brazil, Mexico, Chile, Peru and Argentina


4. AMI Analysis, BNEF, IEA. Latin America numbers include only the main EV markets in the region: Costa Rica, Colombia, Brazil, Mexico, Chile, Peru and Argentina

5. AMI Analysis, BNEF, IEA. Latin America numbers include only the main EV markets in the region: Costa Rica, Colombia, Brazil, Mexico, Chile, Peru and Argentina

6. AMI Analysis, BNEF, IEA. Latin America numbers include only the main EV markets in the region: Costa Rica, Colombia, Brazil, Mexico, Chile, Peru and Argentina

7. AMI Analysis and interviews, BNEF, IEA, Local Sources

8. AMI Analysis, Local Sources


10. AMI Analysis and interviews, BNEF, IEA, Local Sources

11. AMI Analysis and interviews, local sources. Numbers were estimated based on top 10 sales of BEV and PHEV for Mexico and Colombia, and top 15 sales for Brazil

About AMI

AMI is a leading provider of energy intelligence and analytics in Latin America. Using proprietary data and our world-class network of 400 subcontractors in over 30 LAC markets, we help EV infrastructure providers and manufacturers successfully compete in the region. Whether it is determining what country to develop a charging network, or understanding the growth potential of EVs, AMI has a 20+ year track-record of helping clients make strategic market-facing decisions in the region.

Get in touch with AMI for more information.