

Electromobility in Mexico

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* This presentation includes information on the instruments, initiatives, projects and programs in operation of electromobility in Mexico, compiled by the National Commission for the Efficient Use of Energy (CONUEE). It does not represent an official position of CONUEE or the energy sector.



GOBIERNO DE
MÉXICO

RELACIONES EXTERIORES

SECRETARÍA DE RELACIONES EXTERIORES



Electricity generation in Mexico

By source:

- Non-renewable thermal energy: 68.83%
- Renewables (hydro, geothermal, solar, eolic, renewable thermal energy): 28.07%
- Nuclear: 3.09%

The transportation sector uses 47% of the total energy consumed by Mexico.



Electric vehicles

Venta de Vehículos Híbridos Enchufables (VHE) y Vehículos Eléctricos (VE)

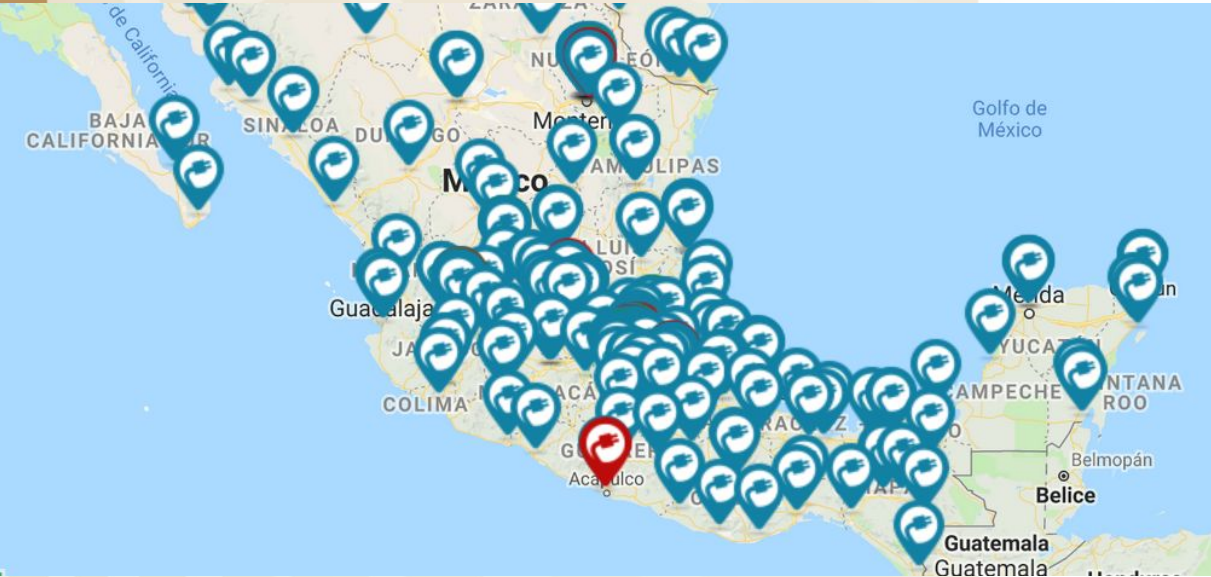


122,549 electric and hybrid vehicles were sold in Mexico from 2020 to 2022. The states with the biggest number of sales were: Mexico City, Mexico State, Nuevo León Jalisco and Puebla.

In 2023, 73,680 electric and hybrid vehicles were sold in Mexico. Mexico City stood out as the state with the highest number of sales, with 18,753.



Charging infrastructure



Mexico's charging infrastructure includes over 2,000 charging stations.

Infrastructure development is done through collaboration between the public and private sectors.

There are private charging networks for specific brands, such as Tesla, as well as

public charging networks, such as "ChargeNow", which was developed between Federal Energy Commission (CFE), BMW Group and Nissan.

There is a fast charging corridor, which connects the states of San Luis Potosí, Mexico City and Puebla, with an extension of 430 km.



Government Incentives for EV Use

- Discounts at toll booths on certain highways
- Exemption from paying the federal tax on new cars (ISAN).
- Income tax deduction based on the depreciation of electric vehicles.
- Up to 25% of income tax deduction for buying bicycles, electric bicycles and electric motorcycles.
- Free installation of energy consumption metres at private homes.
- 5 year exemption from paying the annual holding tax on cars, and 50% discount for 5 additional years.
- Import and export taxes exemption for heavy vehicles.
- 8,850 euro voucher for the purchase of an electric vehicle intended for taxi use in Mexico City.
 - 25,000 euro voucher for the purchase of an electric vehicle intended for the transport of goods.

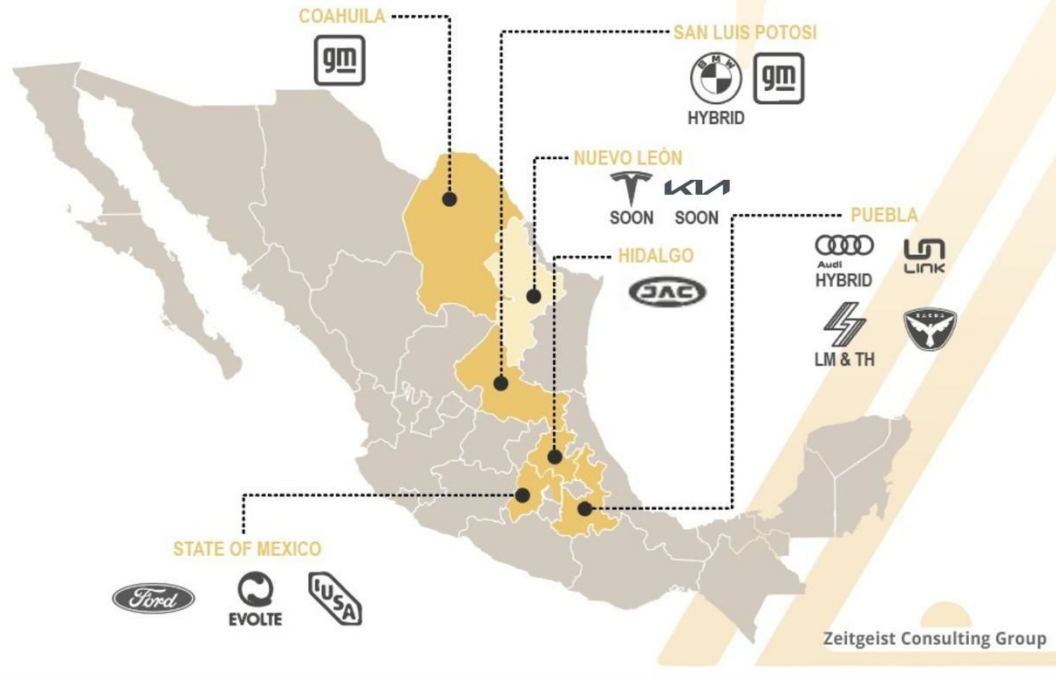


Government Incentives for EV Use

Partly due to these incentives, from 2020 to 2021 the sales of hybrid and electric vehicles in Mexico increased by 92.9%

In 2022, the assembly of electric vehicles in Mexico represented 2.4% of the total of light vehicles produced in the country. By 2023, it was 6%. This includes vehicles produced for the domestic market, as well as for the international market. Mexico is the fourth largest exporter of electric vehicles to the US market.

EV PRODUCTION ASSEMBLERS IN MEXICO



* BMW, Audi and VW have also announced that they will produce EVs in Mexico.



National Electromobility Strategy

Led by the Ministry of Environment and Natural Resources (SEMARNAT), it's the result of the collaboration between public and private institutions, civil society and international cooperation. It is currently under revision for approval.

It's main objective is to establish incentives and lay the foundations for allowing the development of electromobility in the country. It specifically aims at:

1. Promoting sustainability and inclusive development.
2. Positioning electromobility as a viable and sustainable alternative.
3. Reduce greenhouse gases and black carbon in the land vehicle transportation sector.



National Electromobility Strategy

Private companies have begun to change their vehicle fleets to electric models, such as DHL, Grupo Modelo, Bimbo and Coca Cola.

Industries that have adopted this transition include soft drinks, brewing, courier and baking.

By 2030, we expect that the top ten cities that contribute more to the generation of greenhouse gases and polluting particles in the country, will have at least one electric main public transport.



National Electromobility Strategy



We are strengthening regulations on energy efficiency in light and heavy vehicles, and developing skills training and specialized technical training to carry out maintenance and repair of electrical units.

We expect to position Mexico as one of the main EV manufacturers worldwide.



Current and developing electromobility projects



Various public and private electromobility projects are taking place in the country, mainly in states such as:

- Mexico City
- Mexico State
- Nuevo León
- Jalisco
- Puebla



Mexico City and Mexico State



- Subway (226 km. 91 million users in 2022)
- Tram
- Metrobus
- Suburban train
- Light Rail
- Electric taxis (400 financed by KfW and Nafin)
- Electric bicycles
- Electric bicycle taxis
- Electric scooters
- Electric and solar cableway (Mexicable)
- Pilot project of 11.5 tons 100% electric delivery trucks.



Nuevo León

- New 34 km line with 110, 12-metre electric busses, for the city of Monterrey.
- Development of a new Electric Bus Norm/Standard.

Jalisco

- 80 new electric vans and buses for public transport (financed by KfW and Nafin).
- Integration of electric buses into the inner city road (periférico).
- 38 new, 8.5-metre, electric buses.

Puebla

- 80 new charging stations to be added to the preexisting 86 in the State.

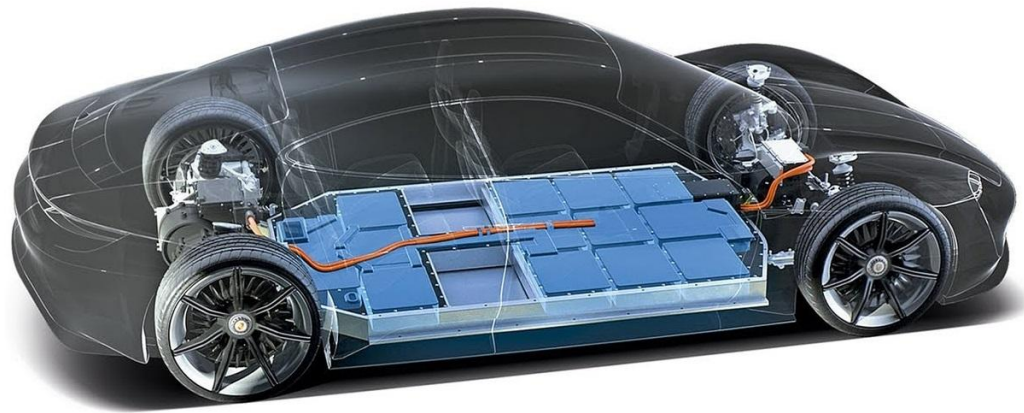


Development and commercial banking financing

- NAFIN – KFW Program: Sustainability Fund, including 100 million euros in financing for electromobility infrastructure, and 13 million for vehicle transition.
- Banobras – FONADIN (National Infrastructure Fund): Financing for electrical infrastructure and electric vehicles with preferential rates and conditions.
- BBVA – Green Bonus: Incentives for the purchase of private electric vehicles, with preferential rates and conditions.



Batteries



- Manufacturing of electric and hybrid vehicles requires high-capacity batteries made mainly with lithium, which must be treated as hazardous waste.
- Development of Official Mexican Regulation NOM-212-SCFI-2017 to define the maximum permissible limits of mercury and cadmium, the specifications, testing and labeling methods, as well as guidelines for sustainable battery management.
- General Law for the Prevention and Comprehensive Management of Solid Waste.



USA IRA ACT

- The USA IRA (Inflation Reduction) Act seeks to promote renewable energy investment with financial incentives, such as tax credits to promote component production in the USMCA area (US, Mexico and Canada).
- Economic model based analyses predict positive relocation effects for the three USMCA countries.
- This means that countries such as China, Malaysia and Vietnam would be directly affected by the IRA Act, and, to a lesser extent, the EU.



USA IRA Act

The IRA Act has 3 main provisions that benefit Mexico and Canada:

- **Final Assembly Location:** The law requires that final assembly of the vehicle takes place in North America, not just in the USA.
- **Critical Minerals Requirement:** From 2025, batteries cannot contain any critical minerals (cobalt, lithium, etc.) that were extracted or processed by China or Russia.
 - In addition, a percentage of those minerals must come from a country where the US has a free trade agreement or be recycled in North America.
- **Battery Components:** A certain percentage of battery components must be made in North America. Starting at 50% in 2023 and increasing to 100% in 2029.



2024 Outlook

- In 2023, hybrid and electric vehicles in Mexico surpass of the 6% mark in market penetration for the first time.
- There was a 41% increase of registered hybrid and electric vehicles as compared to 2022.
- In 2023, 73,680 electric and hybrid vehicles were sold in Mexico (44% more than in 2022).
- Important investment projects by major industry players such as Tesla and Jetour.
- Analysis by EY indicates that 43% of Mexican consumers plan to buy EV in the upcoming years.
- Leading companies, such as BYD, Evergo, JAC, SEV, Tesla, VEMO and Volvo, formed the Electro Mobility Association (EMA), in March of 2024.
- EMA represents more than 40,275 electric vehicles and more than 32,175 chargers installed in Mexico, and has as its initial goal to electrify the country's main cities.





2024
AÑO DE
Felipe Carrillo
PUERTO
BENEMÉRITO DEL PROLETARIADO,
REVOLUCIONARIO Y DEFENSOR
DEL MAYAB

¡Muchas gracias!