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Fuel Cost Maps for Latin America and the Caribbean

Infographics on the energy cost savings of switching to electric mobility for national budgets and consumers

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Contents

About these infographics

Heavy reliance on imported fossil fuels for road transport leaves many Latin American and Caribbean economies highly exposed to international price volatility and external supply shocks. This creates significant economic and energy security risks directly tied to their transport systems. Countries in the region have an enormous opportunity to reduce this dependence by transforming their transport systems; the widespread adoption of electric mobility presents a particularly promising path forward. The following infographics illustrate this potential by detailing country-specific spending on gasoline and diesel imports for road transport and by comparing the energy costs of privately owned internal combustion vehicles to that of electric vehicles. Our methodological approach is explained at the end of this webpage.

Please note

Recent geopolitical developments in the region, particularly in Venezuela and Cuba, introduce additional uncertainty to short-term fuel price dynamics. Constraints on Venezuelan oil production and exports could affect fuel availability and pricing in parts of the Caribbean and Central America, where several countries remain dependent on imported refined products or preferential supply arrangements. In the case of Cuba, disruptions in oil shipments from Venezuela have historically led to electricity shortages, increased reliance on costly emergency generation, and upward pressure on fuel costs. This, combined with the tightening of US economic sanctions, leaves the island particularly exposed to supply shocks. It is important to note that the price and imports data used in this report reflect market conditions prior to recent developments and do not capture their potential impact.

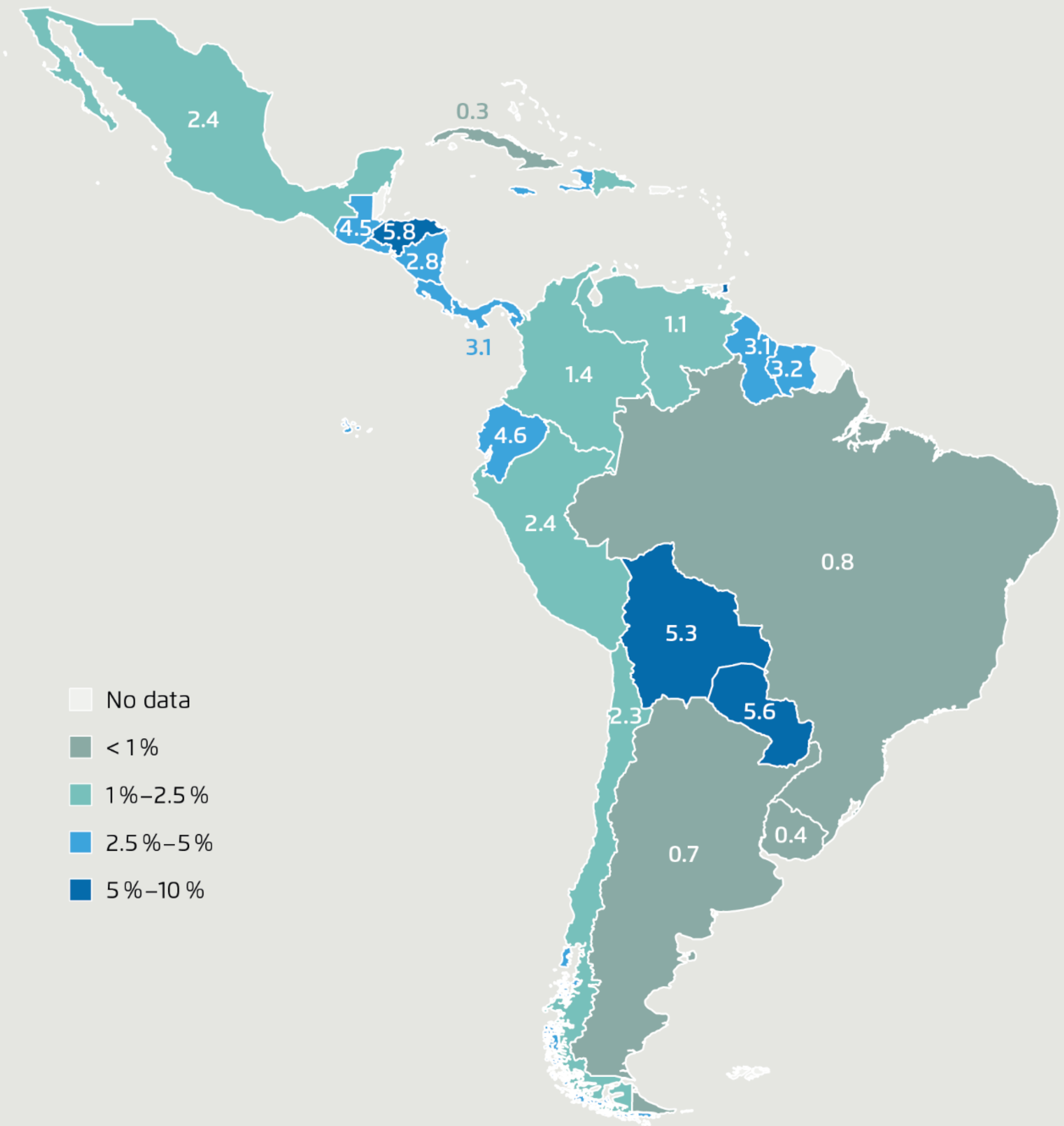
1 Import costs of road fuel as a share of GDP

The median country in Latin America and the Caribbean spends about 3% of its gross domestic product (GDP) on imported gasoline and diesel for road transport, nearly triple Europe's share and well above the median share globally. This level of spending is higher than what many governments in the region allocate to critical sectors such as education or health. For context, Mexico invested in 2022 approximately 3% of its GDP in health, while countries like El Salvador, Guatemala, Haiti, Panama, Paraguay, Suriname, and Trinidad and Tobago allocate less than 3.5% on education.[1]

[1] World Bank Group (2023)

How much Latin American and Caribbean (LAC) countries spend on fuel imports for road transport

Import costs for gasoline and diesel as a share of GDP (in % in 2022)

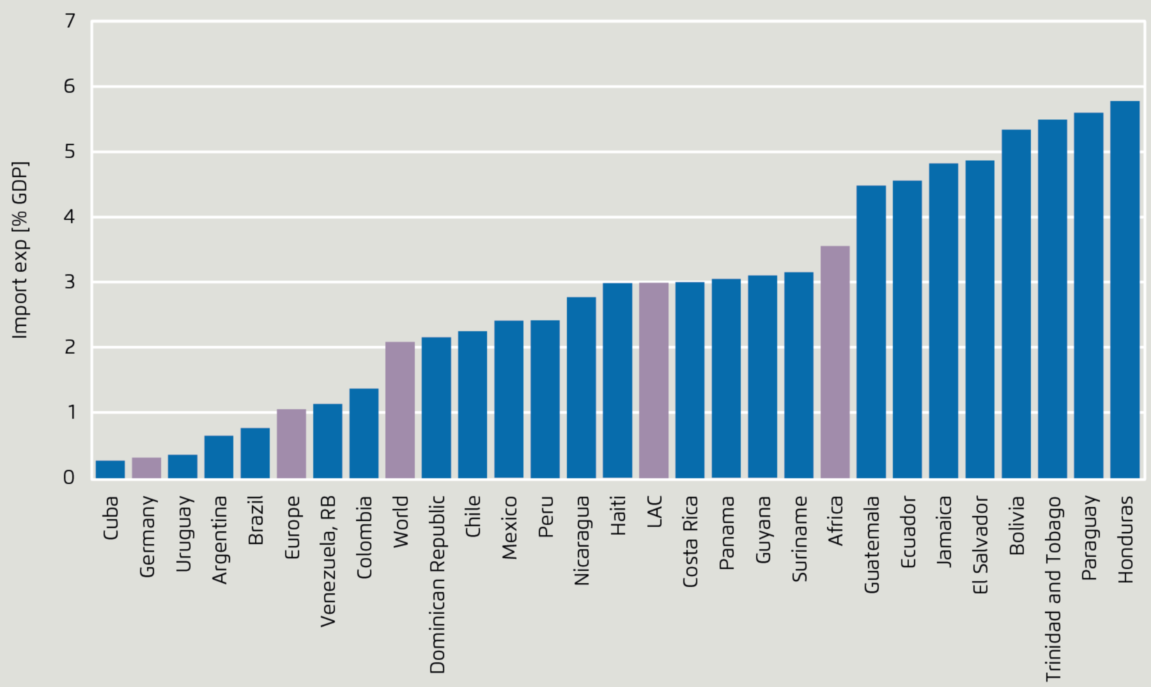


Agora Verkehrswende (2026) | Source: Authors' calculations based on IEA (2025), Index Mundi (continuous), World Bank (continuous). Reference year 2022.

Please note that maps used in this publication are for illustrative purposes only. Boundaries and names displayed follow the United Nation's definition territories under international law. Their use does not imply endorsement or acceptance.

Eight countries in the region spend more than 4% of GDP on imported gasoline and diesel for road transport. Honduras, Paraguay, and Trinidad and Tobago each allocate more than 5.5% of their GDP to these imports, followed closely by Bolivia (5.3%) and El Salvador (4.9%). These figures stand in stark contrast to countries like Cuba and Uruguay, where spending remains below one per-cent of GDP. The comparatively low share observed in Cuba is largely explained by structurally weak transport demand. The country has the lowest motorisation rate in the region (approx. 25 four-wheeled vehicles per 1,000 people)[2], alongside structural constraints on vehicle acquisition and persistent fuel shortages, which together limit total consumption. In other countries with relatively low exposure, including Argentina (0.66%) and Brazil (0.78%), domestic refining capacity and alternative fuels play a key role. Both countries have significant local production and refining, while Argentina has also promoted the use of natural gas in transport. Brazil, in particular, stands out for its large-scale use of ethanol through its flex-fuel vehicle fleet, which reduces gasoline demand.

Import costs for gasoline and diesel used in road transport as a share of GDP in LAC in comparison with other countries and regions in 2022



Agora Verkehrswende (2026) | Source: Authors' calculations based on IEA (2025), Index Mundi (continuous), World Bank (continuous). Reference year 2022.

[2] SLOCAT (2025)

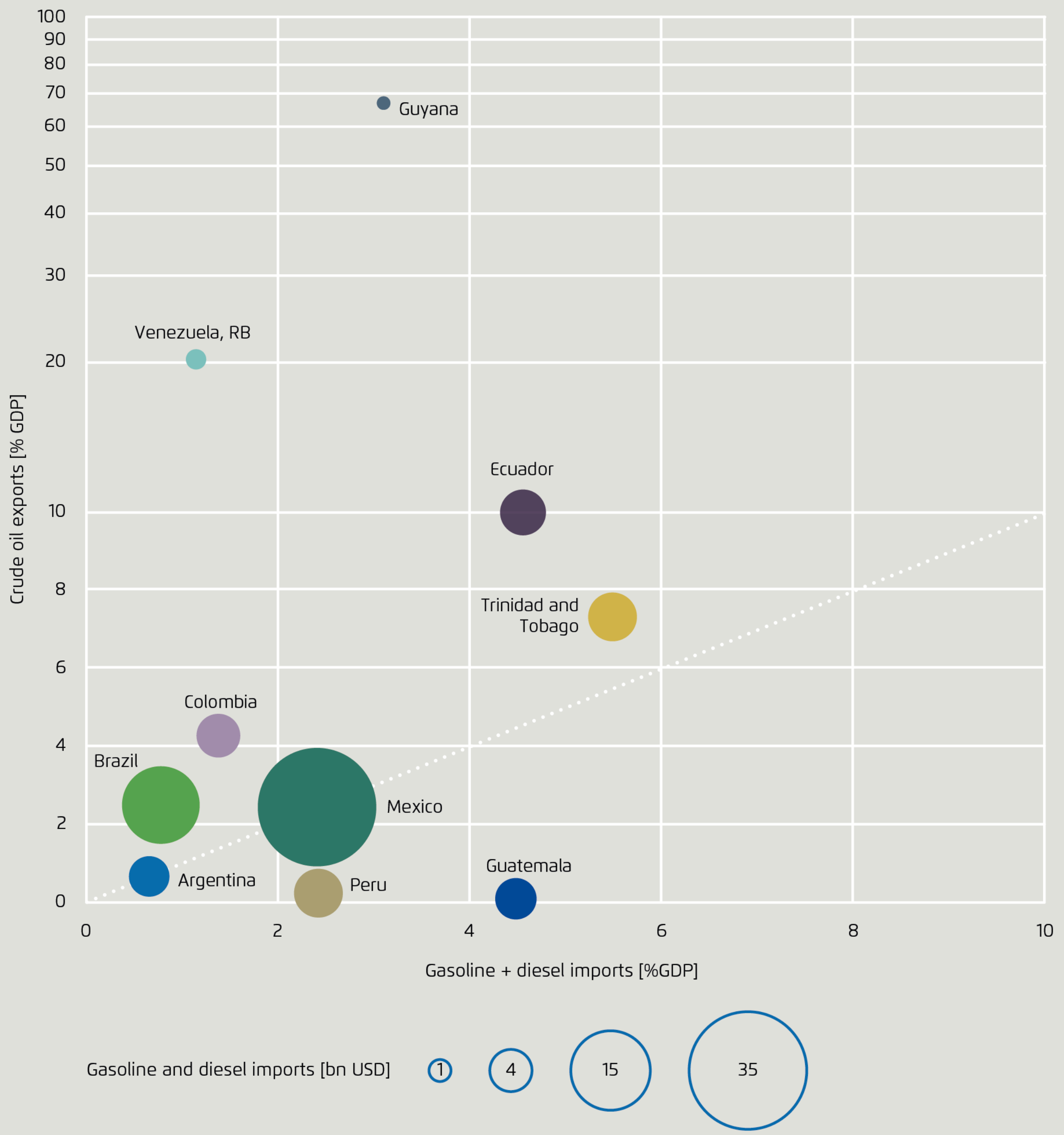
Latin American and the Caribbean countries with the highest fuel import cost burden (> 4 % GDP)
Import cost of gasoline and diesel used in road transport

Country	Relative expenditure (as GDP %)	Absolute annual expenditure (in USD billions)
Honduras	5.8 %	1.82 bn
Paraguay	5.6 %	2.35 bn
Trinidad and Tobago	5.5 %	1.57 bn
Plurinational State of Bolivia	5.3 %	2.35 bn
El Salvador	4.9 %	1.55 bn
Jamaica	4.8 %	0.82 bn
Ecuador	4.6 %	5.29 bn
Guatemala	4.5 %	4.29 bn

Agora Verkehrswende (2026) | Source: Authors' calculations based on IEA (2025), Index Mundi (continuous), World Bank (continuous). Reference year 2022.

High crude oil production capacity does not automatically translate into lower vulnerability to fuel import costs in the transport sector. Although some countries in the region produce and export crude oil, a lack of domestic refining capacity forces them to import refined fuels to meet the needs of their road transport systems. Countries like Honduras, Paraguay, Trinidad and Tobago, El Salvador, Jamaica, Guatemala, Guyana, and Panama each depend on imports for more than 75% of their total gasoline and diesel consumption. Additionally, the earnings from these exports often fail to offset the fiscal burden created by importing gasoline and diesel. The following graph compares crude oil export revenues with spending on imported road fuels, showing that even resource-rich countries, such as Brazil, México, Colombia, and Ecuador, can remain exposed to international price volatility and sup-ply disruptions, because imports remain necessary for serving transport demand. This comparison reinforces a key policy insight: reducing transport-sector vulnerability requires structural changes, such as electrification and the diversification of energy sources, rather than a sole reliance on crude oil production.

Crude oil export revenues compared to transport fuel import costs (% of GDP in 2022)



Agora Verkehrswende (2026) | Note: Bubble size represents the sum of gasoline and diesel imports in USD. Source: Authors' calculations based on IEA (2025), Index Mundi (continuous), World Bank (continuous). Reference year 2022.

In an effort to mitigate the impacts that rising oil prices represent for consumers, governments across the region often subsidise fuel purchases. Some countries allocate amounts that reach 6% of GDP, as in the case of Venezuela. In other cases, such support can account for more than 3%, as in Bolivia and Ecuador[3]. This spending is additional to the cost burden of fuel imports. While subsidies may provide short-term relief and social stability in contexts where attempts at reform have encountered public resistance, they also constrain macroeconomic flexibility. By diverting public resources to support fuel consumption, governments reduce the fiscal space available for

[3] Castellanos (2025)

long-term investments, including improvements to public transport, transport infrastructure, and essential social programmes. In this way, continued reliance on imported fossil fuels limits the region's capacity to pursue sustainable and inclusive development.

2 Comparing the energy costs of ICEVs and EVs

Energy costs per kilometre are significantly lower for electric vehicles (EV) than for internal combustion engine vehicles (ICEV) in most Latin American and Caribbean countries. Our analysis shows that across the region the median energy cost ratio between a gasoline ICE vehicle and a battery electric vehicle is around three to one. In other words, driving 100 kilometres in a conventional petrol car typically costs more than three times as much in terms of energy as travelling the same distance in an electric vehicle. This gap is mainly explained by the higher efficiency of electric drivetrains, which require substantially less energy to move a vehicle than internal combustion engines. Combined with generally favourable electricity prices in many countries, this creates a strong and consistent cost advantage for electric mobility across the region.

How much more expensive it is to power a combustion car than an electric car in Latin American and Caribbean (LAC) countries

Energy costs per km of an ICE compared to an EV

Agora Verkehrswende (2026) | Source: Authors' calculations based on GlobalPetrolPrices (2025), Cable.co.uk (2021).

Energy costs per km of a common gasoline-powered passenger car (e. g. 2011 Renault Sandero) expressed as a multitude of energy costs per km of an EV with comparable functionality (e. g. 2024 VW ID.3) based on national electricity rates and gasoline prices. Reference period: 2021–2025.

Please note that maps used in this publication are for illustrative purposes only. Boundaries and names displayed follow the United Nation's definition territories under international law. Their use does not imply endorsement or acceptance.

Low electricity prices are the most important factor explaining the countries with the largest cost advantage for electric vehicles. Seven of the ten countries with the cheapest electricity also appear among those ten with the greatest energy cost gap between ICE vehicles and EVs (Cuba, Suriname, Trinidad and Tobago, Paraguay, Argentina, Dominican Republic, and Ecuador). In these markets, electricity prices range from as low as 0.02 up to 0.16 USD per kilowatt-hour, creating low operating costs for electric vehicles, even after adjusting electricity costs upward to reflect a mix of residential and public charging. Across the region, electricity prices in the most expensive markets reach almost twenty times those in the lowest-cost countries. By contrast, gasoline prices, while relevant, show far less proportional variation. Excluding extreme subsidy cases such as Venezuela, the highest gasoline prices are typically only three to four times higher than those in lower-price markets.

Latin American and Caribbean countries with the highest energy cost difference between ICEVs and EVs

Country	ICEV gasoline costs per 100 km in USD	EV electricity costs per 100 km in USD	ICEV to EV energy cost ratio
Cuba	12.95	0.31	42:1
Suriname	11.32	0.92	12:1
Trinidad and Tobago	11.43	1.05	11:1
Paraguay	8.85	0.95	9:1
Argentina	11.86	1.65	7:1
Uruguay	20.03	3.60	6:1
Mexico	14.30	3.07	5:1
Belize	17.23	3.75	5:1
Dominican Republic	12.17	2.78	4:1
Ecuador	7.50	1.81	4:1

Among the ten **lowest** unit prices in LAC

Among the ten **highest** unit prices in LAC

Agora Verkehrswende (2026) | Source: Authors' calculations based on GlobalPetrolPrices (2025), Cable.co.uk (2021). Energy costs of a common gasoline-powered passenger car (e.g. 2011 Renault Sandero) compared to an EV with similar functionality (e.g. 2024 VW ID.3) based on national electricity rates and gasoli-ne prices. Reference period: 2021–2025.

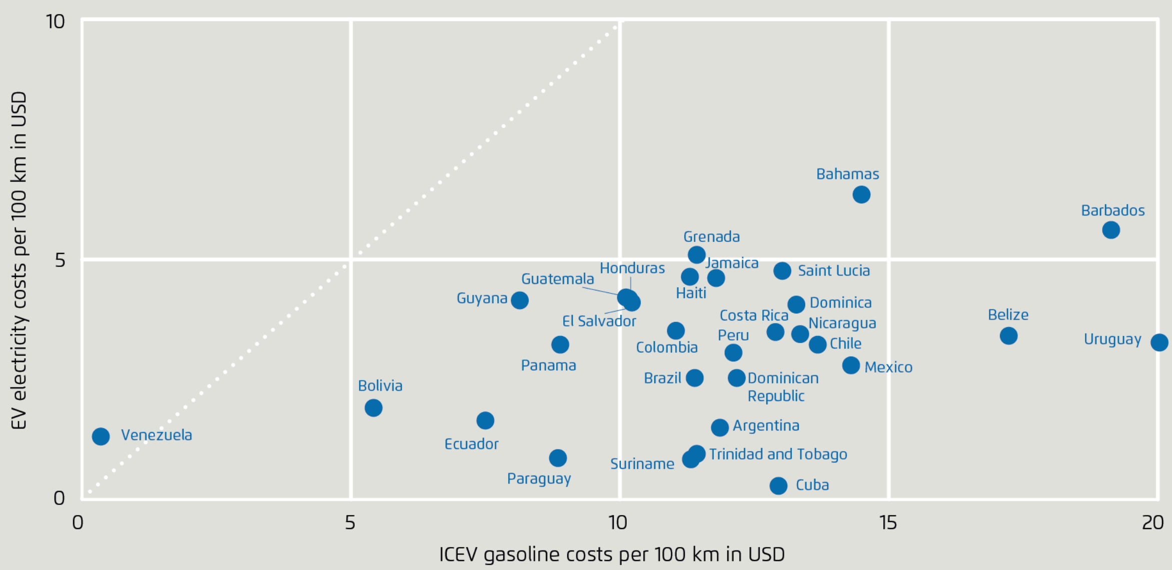
Cuba and Venezuela, the outliers of the region, show how different pricing regimes shape contrasting transport energy costs. Cuba shows by far the largest cost advantage for electric vehicles in the region because of exceptionally low electricity tariffs combined with relatively high gasoline prices. Electricity in Cuba is heavily subsidised and centrally regulated, with tariffs far below regional market levels, reflecting a long-standing policy to protect households and strategic sectors. At the same time, the country is grappling with severe fuel shortages and a widening energy crisis, owing in part to disruptions in oil supplies from former partners and limited domestic refining capacity.[4] In 2025, Cuba's fuel imports from traditional suppliers such as Mexico and Venezuela fell sharply, reducing the input available for power generation and transport and underscoring the fragility of its energy system.[5] These structural factors explain why the theoretical energy cost advantage for EVs is so large; however, they also point to significant barriers to electrification, including chronic shortages of vehicles and spare parts, very limited

[4] Ricardo Torres (2026)
[5] Gael Badra (2025)

charging infrastructure, frequent grid instability, and a pow-er system heavily dependent on imported fossil fuels.

In contrast to Cuba's case, Venezuela stands at the opposite extreme, as the only country where electric vehicles are currently more expensive to operate than internal combustion vehicles. This outcome is driven by one of the world's lowest gasoline prices, which are the result of extensive fuel subsidies and domestic oil production. Despite recent price adjustments, gasoline remains heavily subsidised and disconnected from international price formation. Electricity prices are also low, but the relative advantage of electric mobility disappears because the cost of gasoline is close to zero. Together, these two cases illustrate how government pricing policies and domestic energy endowments can shape the competitiveness of electric mobility, often more than technological or efficiency factors alone.

Comparison of EV and ICE energy costs in Latin American and the Caribbean countries



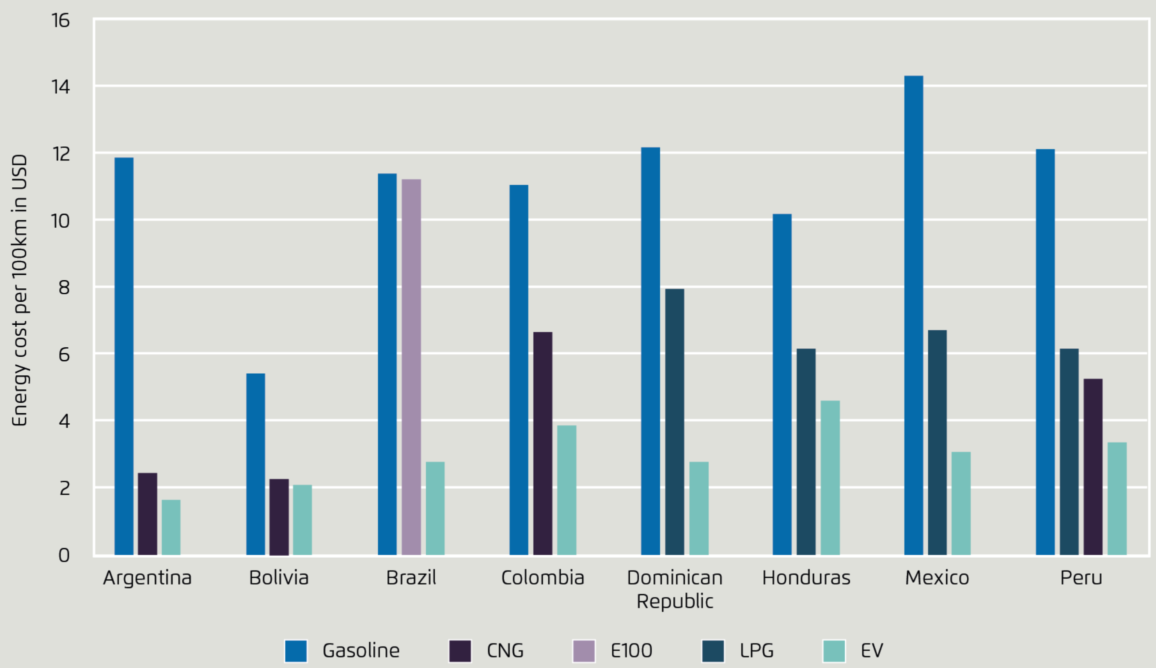
Agora Verkehrswende (2026) | Source: Authors' calculations based on GlobalPetrolPrices (2025), Cable.co.uk (2021). Energy costs of a common gasoline-powered passenger car (e. g. 2011 Renault Sandero) compared to an EV with similar functionality (e. g. 2024 VW ID.3) based on national electricity rates and gasoline prices. Reference period: 2021–2025.

Abundant renewable energy resources in the region, particularly hydropower, provide a structural cost advantage for EVs. With about 62% the Latin American and Caribbean region has the largest share of electricity generated from renewable sources in the world – over two times the global average. Hydropower alone accounted for almost 50% of the region's electricity generation mix in 2022.[6] In some countries, this advantage is notable: Paraguay generates electricity almost entirely from the Itaipú and Yacyretá binational hydroelectric dams, which produce abundant low-cost power.[7] This allows Paraguay to offer one of the lowest industrial electricity prices in the region at just $0.05 USD per kilowatt-hour. As a result, the country also exhibits one of the largest energy cost advantages for electric vehicles, illustrating how access to affordable renewable electricity can significantly strengthen the economic case for electrification across the region.

[6] Statista (2025)
[7] PVknowhow (2025)

Even when accounting for alternative transport fuels, EVs remain the most cost-effective option across the countries analysed. It is important to recognise that in several countries in the region, alternative fuels such as compressed natural gas (CNG), ethanol (E100), and liquefied petroleum gas (LPG) play an important role in the transport sector. In countries such as Argentina, Bolivia, and Peru, where CNG penetration ranges from eight to nearly 13% of the fleet, natural gas offers operating costs that are substantially lower than gasoline. A similar pattern emerges in Brazil, where ethanol accounts for over one quarter of the fleet and remains cost competitive with gasoline. LPG also provides moderate savings relative to gasoline in countries such as the Dominican Republic, Honduras, and Peru. However, in all cases analysed, electric vehicles still show the lowest energy cost per 100 kilometres. This suggests that, even in countries with well-established alternative fuel markets, electrification already represents the most economically attractive pathway for reducing transport energy costs. In this context, existing alternative fuel systems may provide short term cost relief, but they are unlikely to match the long-term cost and sustainability benefits of electrification.

Comparison of energy costs per 100 km of EV and alternative fuels* vehicles in selected countries



** Alternative fuels include compressed natural gas (CNG), liquefied petroleum gas (LPG), and ethanol (E100).*

Agora Verkehrswende (2026) | Source: Authors' calculations based on GlobalPetrolPrices (2025), Cable.co.uk (2021). Calculated based on real-world consumption estimates of common and comparable passenger car models (e. g. 2011 Renault Sandero, 2024 VW ID.3) together with national price references from the period 2023–2026.

3 Reducing costs by reducing fuel consumption in road transport

Lowering overall energy demand and substituting remaining demand with energy from renewable sources can significantly reduce dependence on imported fossil fuels in the transport sector and thus decrease associated cost burdens. This approach means combining demand-side measures, such as transport demand management, improved urban planning, promotion of active mobility, and a modal shift, with supply-side solutions that decarbonise the energy used in mobility. By reducing unnecessary travel, improving efficiency, and prioritising public and shared transport, countries can lower exposure to volatile fuel markets while improving system resilience and affordability.

Electrification, supported by the region's strong renewable energy base, represents the most scalable pathway to replace fossil fuels in most transport segments.[8] At the same time, sustainable fuels will remain essential for sectors that are harder to electrify, including aviation, maritime transport, and parts of long-distance freight. A diversified approach that reflects the different technological and economic realities across transport modes will therefore be key to achieving both energy security and climate objectives.

Ensuring that the transformation improves accessibility and affordability is critical for its long-term success. Policies should prioritise access to reliable, safe, and affordable mobility, especially for low- and middle-income households and underserved communities, so that decarbonisation does not come at the cost of social inclusion. In some countries in the region, around one-fifth of the rural population still lacks reliable access to all-weather roads,[9] and low-income households often designate a higher share of their income to transport and energy costs, [10] highlighting that improving accessibility and transport resilience must go hand in hand with decarbonisation.

Strong policy frameworks and regional cooperation are essential to enable transformation to a cheaper, cleaner, and resilient transport system. Governments can play a decisive role by aligning energy, transport, and industrial strategies; supporting infrastructure deployment; and creating stable regulatory environments that mobilise private investment. Collaboration across countries, through knowledge sharing, harmonised standards, and joint financing mechanisms, can accelerate the transformation while reducing costs. Ultimately, a coordinated approach that links energy security, economic development, and social inclusion can ensure that the transition away from imported fossil fuels strengthens both resilience and long-term development in Latin America and the Caribbean.

[8] Agora Verkehrswende (2026)
[9] Jeffrey D. Sachs *et al.* (2025)
[10] Oviedo, Meléndez Fuentes and Chong (2025)

Methodological approach

Geographical scope

The scope of the analysis was the Latin American and the Caribbean region, excluding non-sovereign territories and dependent territories (i.e. British Overseas Territories, the Dutch Caribbean and Carib-bean Netherlands, French Overseas Departments and Collectivities, and US Territories).

1. Fossil fuel import costs

This section outlines the methodology employed to calculate the financial burden of imported gasoline and diesel used in the transport sector, expressed as a percentage of national gross domestic product (GDP) for the reference year 2022.

Data sources

- Fuel import data: Import, export and consumption volumes for transport fuels and crude oil were sourced from the IEA's World Energy Statistics.[11] Our analysis focused on two main road transport fuels: motor gasoline and gas/diesel oil (excluding biofuels) and crude oil.
- Economic data: GDP figures in current US dollars were obtained from the World Bank's World Development Indicators database.[12]
- Fuel price data: Wholesale spot prices for gasoline and diesel were obtained from Index Mundi,[13] which aggregates data from primary commodity markets. US benchmark prices provide a consistent market-based value for international comparison. The following annual average 2022 spot prices were used:
    - Gasoline: $3.29 per gallon (LA RBOB Regular benchmark)
    - Diesel: $3.72 per gallon (NY Harbor ULSD benchmark)
    - Crude oil: $97.10 per barrel (Crude oil, average spot price of Brent, Dubai, and West Texas Intermediate, equally weighed)

Calculation

1. **Volume of fuel imports used in road transport:**
   For each country, the volume of fuel imports destined for road transport was estimated by applying the national road transport sector's share of fuel consumption to the total import volume. This approach accounts for the fact that imported fuels are distributed across various sectors (e.g. agriculture, industry, residential), adjusting the import cost burden accordingly.

2. **Costs for transport fuel imports and crude oil exports:**

[11] IEA (2025)
[12] World Bank (continuous)
[13] IndexMundi (continuous)

The estimated import volumes for gasoline and diesel were valued using their respective benchmark prices and summed to yield total annual import costs. The same procedure was used to value the crude oil export volumes per country.

3. **Comparison to GDP:**
Transport fuel import values and crude oil export values were placed in relation to each country's 2022 GDP and expressed as a percentage. This ratio serves as the key indicator for comparing the relative financial impact of imported transport fuels across different countries. One caveat pertains to data quality and comprehensiveness, both for GDP and fossil fuel imports. GDP numbers reflect best-guess estimates due to known coverage issues, including in particular non-coverage of informal sectors, which make up significant share of the economy in many countries. The comprehensiveness of fuel import databases differs between countries, as grey markets exist alongside official registries, particularly in landlocked countries. To an extent, both factors may balance each other out, as countries with less accurate import registries tend on average to also have less complete GDP data – and vice versa.

2. Energy-use costs

Calculation

1. **Electricity rates:**
To compare the energy costs of ICEVs relative to EVs, the national electricity rate and gasoline price was multiplied by the consumption required to drive one-hundred kilometres. Electricity rate data for 24 countries were obtained from GlobalPetrolPrices.com, which provides a two-year national average (2023–2025), broken down by business and residential rates.[14] As regulations differ for EV charging – with some countries showing higher rates for businesses than for household consumers – and in the absence of comprehensive data on charging tariffs, the average for each country between the respective business and residential rates were used. Given missing figures for six countries, 2021 data from a British price comparison portal (Cable.co.uk) were used.[15] All prices are given in nominal US dollars. Without knowledge of specific use profiles, a 10% premium was added to electricity rates to account for generally (although not ubiquitous) higher tariff for public charging.

2. **Gasoline prices:**
For conventional fuel prices we restricted the calculation to gasoline-powered vehicles, which make up the vast majority of passenger car fleets in the region. Gasoline prices for 30 countries were obtained from GlobalPetrolPrices.com, using 15 December 2025 as reference date.[16] No data were available for Antigua and Barbuda, Saint Kitts and Nevis, and Saint Vincent and the Grenadines. All prices are given in nominal US dollars.

[14] GlobalPetrolPrices.com (2025)
[15] Cable.co.uk (2021)
[16] GlobalPetrolPrices.com (2026b)

3. ICEV to EV Consumption:

To estimate energy costs, it was assumed an ideal-type consumption value per 100 kilometres, representative of vehicle uses in the region. Across LAC the average vehicle age is estimated at 12 to 15 years, equalling a production year between 2011 and 2014. [17] Data for the region's largest automotive markets confirm this.[18] Market intelligence data on passenger cars common in the fleets of some of the continent's largest automotive markets are also available.[19] Across LAC, bans on the import of used vehicles are common. Hence for the comparison with EVs we chose only new vehicles that were still in production at the time of publication. All data was cross-checked for coherence and plausibility.

In consequence, the following pool of common passenger cars with comparable functionality was determined:

ICEV pool consumption:[20]

- Nissan Sentra VI 2.0 – international equivalent to Tsuru model popular in LAC countries, particularly Mexico
  2006–2012, 135 hp, 6.9 l/100km extra urban, 8.4 l/100km urban – pre-WLTP
- Nissan Versa Note 1.6
  2013–2017,109 hp, 6.5 l/100km extra urban, 8.7 l/100km urban – pre-WLTP
- Renault Sandero 1.6i
  2007–2011, 90 hp, 5.6 l/100km extra urban, 9.8l/100km urban – pre-WLTP
- Toyota Corolla XI
  2012–2015, 132 hp, 4.9 l/100km extra urban, 8.0 l/100km urban – pre WLTP
- Toyota Hilux VII
  2011–2015, 144 hp, 6.6 l/100km extra urban, 8.6 l/100km urban – pre-WLTP
- VW Jetta VI 2.0
  2010–2014, 115 hp, 6.9 l/100km extra urban, 9.8 l/100km urban – pre-WLTP (EPA standard)

EV pool consumption:[21]

- BYD Atto 3[22]
  since 2025, 204 hp, 17.8 kWh/100km combined – EVDB Real Range (calculated real-world consumption)
- BYD Dolphin[23]
  since 2025, 204 hp, 17.2 kWh/100km combined – EVDC Real Range (calculated real-world consumption)
- Chery eQ7
  since 2024, 211 hp, 13.6 kWh/100km combined – CLTC (Chinese standard)
- JAC E10X[24]
  since 2021, 11.3 kWh/100km combined – N/A

[17] Alianza Automotriz (2025) GiPA (2025)
[18] AFAC Autopartes Argentinas (2025), Toledo (2025)
[19] IDF, MEMA Aftermarket Supplier (2023)
[20] All vehicle consumption data if not otherwise specified from Auto-Data.net (2025)
[21] Ibid.
[22] BYD (2025a)
[23] BYD (2025b)
[24] Licarco (2024)

- VW ID.3
  since 2024, 15.2 kWh/100km combined – WLTP
- VW ID.5
  since 2024, 16.3 kWh/100km combined – WLTP

A correction factor to account for the difference in type approval and real-world consumption was added based on a literature review while also taking into account local factors, including the share of urban traffic, climatic conditions, use profiles, and ethanol blend.[25] In consequence, a correction factor of 30% for ICEVs (+2.3l/100km) and 15% for EVs (+2.3 kWh/100km) was added to type approval values, thus leading to the following assumed consumption values:

- ICEV: 10 l/100km
- EV: 17.5 kWh/100km

4. Role of alternative fuels:

Alternative fuels play a major role in some Latin American countries and are often promoted as cleaner alternatives to gasoline or diesel. For this reason, alternative fuels were also included in this analysis to compare costs to gasoline-powered and battery-electric cars. Alternative fuels here include compressed natural gas (CNG), liquefied petroleum gas (LPG), and ethanol (E100). Diesel was not taken into account as it plays no role as transition technology due to a lack of significant GHG emission reductions or cost benefits.
Seven countries were identified having a significant share of alternative fuel consumption:

- **Compressed natural gas (CNG):** Argentina, Bolivia, Colombia, and Peru have a significant natural gas vehicle (NGV) fleet, generally running on CNG, ranging from 4.7% (Colombia) to 12.9% (Peru). Brazil has a lower share of NGVs in the fleet (2%), but has the second largest fleet in the region (1.8 million), following Argentina.[26] The share of passenger cars in the overall NGV fleet is however not always clearly stated in the data.
- **Ethanol (E100):** Argentina, Brazil, Paraguay, Peru, and Uruguay have a significant share of biofuels in road fuel consumption, ranging from 5.2% (Peru) to 25.7% (Brazil) as of 2018 (latest comprehensively available continent-wide data).[27] However, Brazil is the only country with standalone ethanol-products widely available (here, hydrous ethanol: E100). In the other listed countries, a high blend quota for most gasoline-grades (i.e. Paraguay E30 standard for gasoline grades below RON 97) explain their high share in consumption.
- **Liquefied petroleum gas (LPG):** Peru (7.8%), the Dominican Republic (4.2%), and Honduras (2.7%) are the only countries with a significant share of LPG-fitted vehicles in

[25] Uwe Tietge *et al*. (2015), CR Advocacy (2016), European Commission (2024), TNO (2023), UN DESA (2025), World Bank (2025), PuraCars (2025)
[26] Calculated based on national and international data:
Asociación Automotriz del Perú (2023), Oxford Institute for Energy Studies (2019), El Deber (2025), Ministerio de Transportes y Comunicaciones Perú (2025a)
[27] CEPAL (2026)

their fleet.[28] Mexico has a low share of LPG vehicles in its fleet (0.7%); however, it is by far the largest consumer of Autogas LPG in absolute terms (1,455 kt in 2022).[29]

5. **Alternative fuels energy cost calculation:**
   Fuel consumption for alternative vehicles was calculated as follow:
   - Consumption for NGL is assumed at 5.00 kg/100 km, informed by manufacturer data as well as calculated heating value relative to gasoline vehicles for the same distance. [30]
   - Based on a comparison of heating values and informed by literature using in-country vehicle measurements, fuel consumption in Brazil for E100 compared to standard gasoline (with an ethanol blend of 25–30%) is estimated at 30% higher per kilometre. [31]
   - In the literature, fuel consumption for LPG (in litres) is estimated 10–20% higher per kilometre than gasoline.[32] For the purpose of this analysis, we assume an additional fuel consumption of 15% per kilometre.

Alternative fuels prices were obtained from GlobalPetrolPrices.com[33] when available; otherwise, national sources were consulted.[34] All prices are expressed in nominal US dollars. National price data originally reported in local currencies were converted to US dollars, which may affect comparability in countries with significant exchange rate volatility or where informal currency markets are prevalent.[35] In some cases, price data for gasoline and alternative fuels such as LPG or E100 were not available for exactly the same date, which may introduce minor variations due to short-term price fluctuations. For ethanol (E100), long-term analyses by Brazilian authorities indicate that ethanol prices tend to remain broadly close to gasoline prices.[36]

[28] Note the different base year of 2022 for the LPG fleet, while total vehicle fleet base year varies (2022–2025), potentially causing a slight underestimation of the LPG fleet, assuming strong fleet growth between base years. WLPGA, Argus Media (2023), Ministerio de Transportes y Comunicaciones Perú (2025b), DGII (2022), US International Trade Administration (2024)
[29] WLPGA, Argus Media (2023), Instituto Nacional de Estadística y Geografía Mexico (2024)
[30] ADAC (2007), IEA-AMF (no date)
[31] IEA-AMF (no date), Filho *et al.* (2022)
[32] Koay, Sah and bin Othman (2019), ADAC (2025)
[33] (GlobalPetrolPrices.com, 2026a), (GlobalPetrolPrices.com, 2026c)
[34] (Combustibles en Argentina, 2026), (Estado Plurinacional de Bolivia, 2026), (Gasolina Agora, 2026), (Gobierno de Colombia, 2026), (Asociación Gas Natural, no date), (TV Azteca Noticias, 2026)
[35] (InforEuro, 2026)
[36] (Ministério da Agricultura e Pecuária, 2026)

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