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Global two- and three-wheeler market monitor, 2025

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SUMMARY

This Global Market Monitor analyzes the development of the electric vehicle market for two-wheeler and three-wheeler vehicles in 2025, covering data from 90 countries in six regions.[1] Definitions and details about the data sources, methodology, and assumptions that underlie the analysis are in the Appendix.

MARKET OVERVIEW: TWO-WHEELERS AND ELECTRIC TWO-WHEELERS

Two-wheelers (2Ws) are a common mode of transport in many countries around the world. Their low operational costs and versatility make them highly suitable for daily mobility as well as for passenger and commercial use in both urban and rural areas, especially where public transport is limited or hard to access.

In 2025, global sales of new 2Ws reached 65 million units, a 5% increase compared with 2024. Figure 1 presents global 2W sales (left) and electric two-wheeler (e2W) sales (right) in 2024 and 2025 by country. India and China accounted for more than 50% of 2W sales worldwide over this period. India is the largest 2W market globally, with nearly 21 million units sold in 2025, followed by China with approximately 13 million units. The remaining 2W sales were largely concentrated in Southeast Asia, South Asia, and Latin America, including Indonesia (with 6.5 million 2Ws sold in 2025), Vietnam (3.4 million), the Philippines (2.3 million), Brazil (2.2 million), and Mexico (2.1 million).

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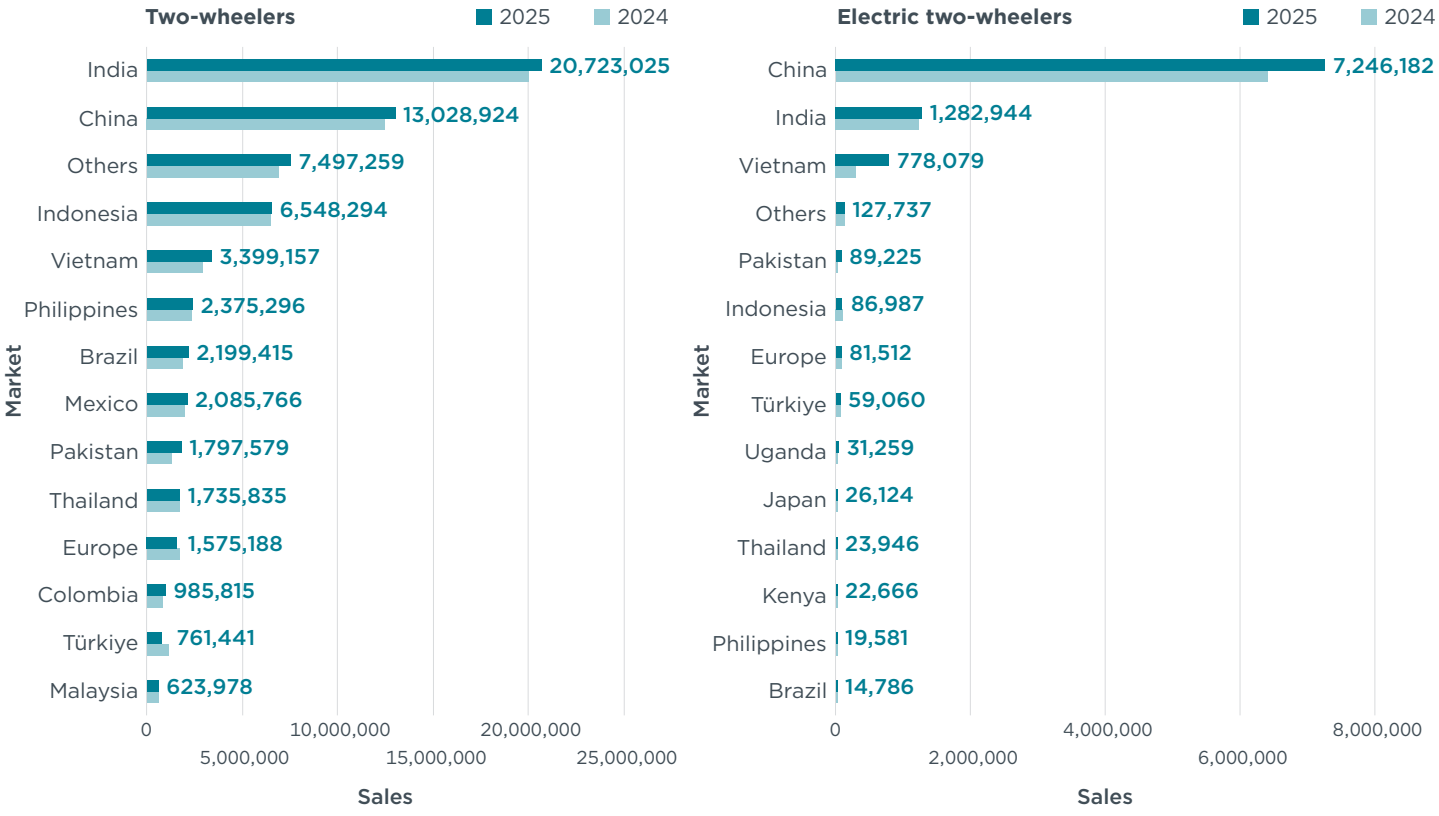
1 Two-wheelers refer to motorcycles and scooters with a top speed of at least 25 km/hr that fall into the L1, L2, L3, and L5 vehicle categories. These categories consist of micromobility options such as electric-assisted bicycles and low-speed electric scooters. Three-wheelers refer to tricycles, trikes, and motorcycles with a side car that fall under the UNECE L2, L4, or L5 classifications. In India, three-wheelers include e-carts, e-rickshaws, and L3, L5M, and L5N vehicles.

Acknowledgments: We thank Dale Hall, Sunitha Anup, Aditya Mahalana, and Gaurav Dubey for their helpful reviews.

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Figure 1

Global two-wheeler (left) and electric two-wheeler (right) sales, 2024–2025



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E2W sales rose from 8.4 million units in 2024 to 9.9 million units in 2025—an increase of 17%, more than 3 times the growth rate of the overall 2W market. As shown in Figure 1 (right), the e2W market was significantly more concentrated than the broader 2W market, with China and India accounting for more than 85% of global e2W sales.

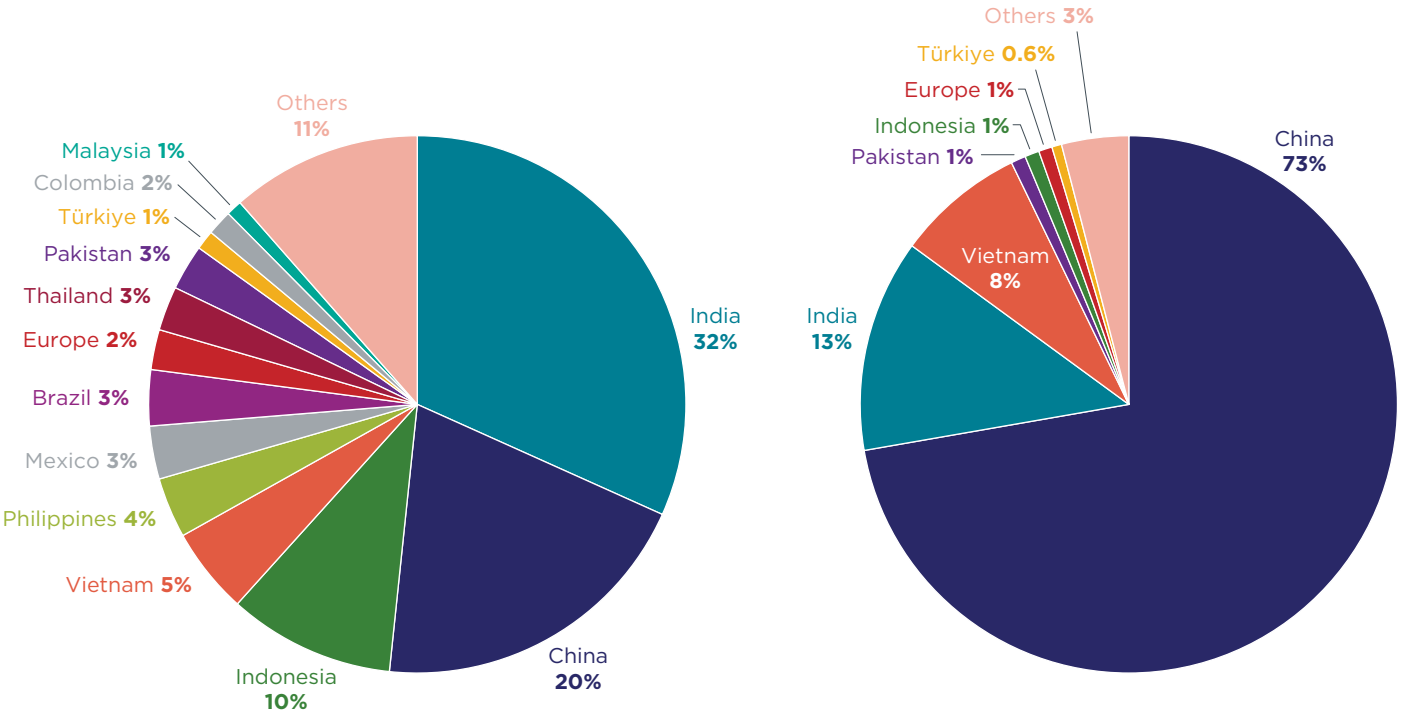
As in 2024, China was the largest e2W market in 2025, with more than 7.2 million units sold, followed by India with approximately 1.3 million units. In Vietnam, the fourth-largest 2W market, approximately 780,000 e2Ws were sold in 2025, nearly triple the country's sales in 2024. E2W sales in other markets, such as Pakistan, Indonesia, Europe,[2] and Türkiye, remained relatively modest, with each accounting for 1% or less of total 2W sales. Indonesia, the Philippines, Brazil, Mexico, and Thailand were among the largest 2W markets, but the level of 2W electrification in these countries was relatively low, highlighting the substantial potential for future e2W market growth.

Figure 2 presents the breakdown of 2W and e2W sales in 2025 by market. Approximately 85% of global 2W sales were concentrated in 10 markets: India, China, Indonesia, Vietnam, the Philippines, Brazil, Mexico, Thailand, Pakistan, and Europe. India accounted for the largest share of the 2W market, at 32%, followed by China (20%) and Indonesia (10%), while the remaining seven markets each held shares ranging from 1% to 5%.

2 In this monitor, Europe includes the European Union, European Free Trade Association, and the United Kingdom.

Figure 2

Market share of two-wheelers (left) and electric two-wheelers (right) by market, 2025



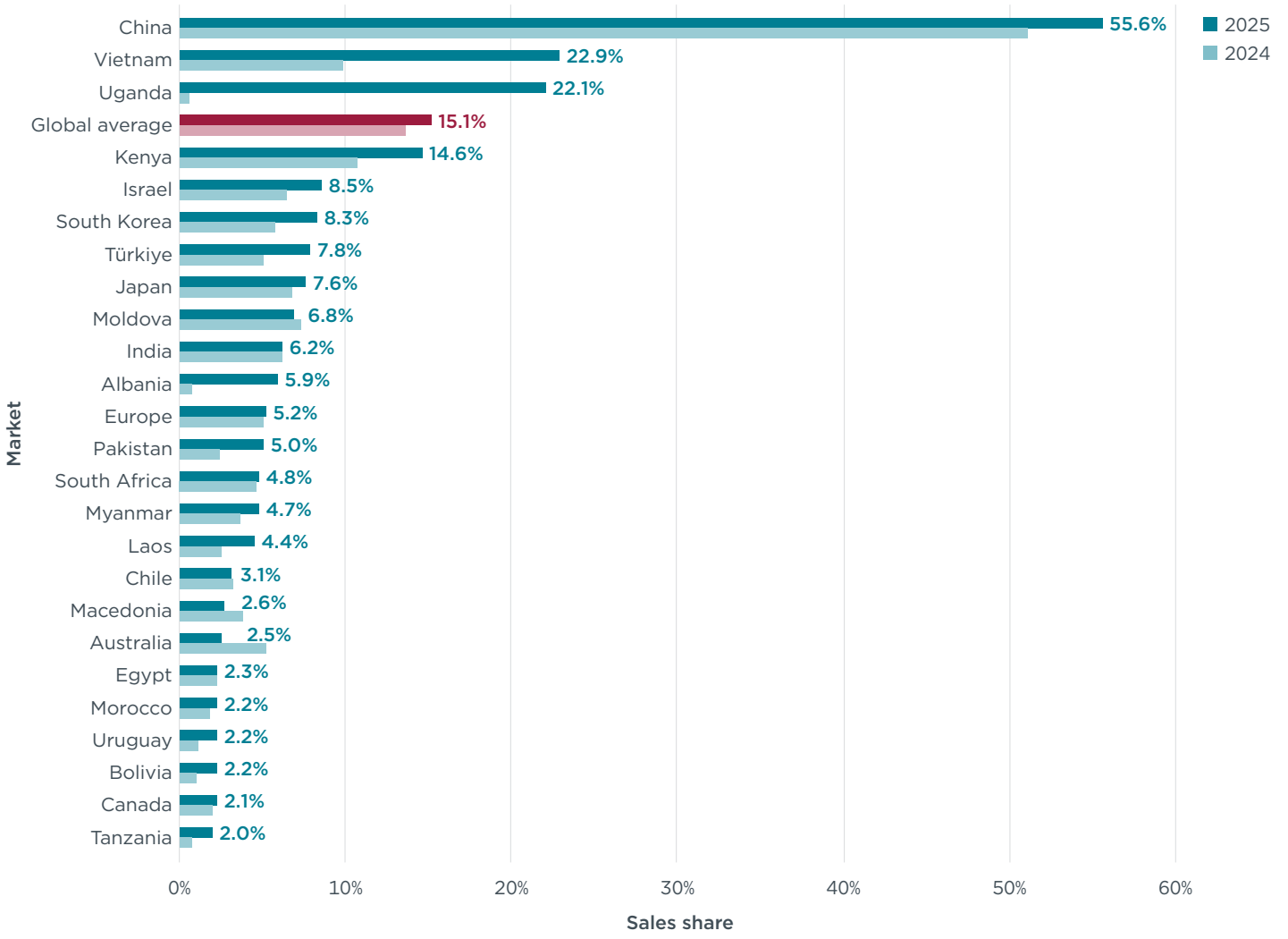
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The e2W market was more concentrated, with 96% of sales occurring in three markets: China (with a 73% share), India (13%), and Vietnam (8%). E2W adoption remained limited in several other large 2W markets, including Indonesia, the Philippines, Mexico, and Brazil.

E2W SALES SHARE COMPARISON: 2024 VS. 2025

E2W sales accounted for 15% of total 2W sales in 2025, up from 13% in 2024. Many countries experienced rapid growth in e2W sales shares. Figure 3 shows the sales share of e2Ws by market in 2024 and 2025.

Figure 3
Electric two-wheeler sales share by market, 2024–2025



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At 56%, China recorded the highest e2W sales share globally in 2025, up from 51% in 2024. Vietnam reached an e2W sales share of 23%, up from approximately 10% in 2024, a surge that was partly driven by city-level regulations, including plans to implement low-emission zones (LEZs) in Hanoi and Ho Chi Minh City that would restrict gasoline 2Ws from city centers.[3] As noted above, India was the second-largest e2W market by sales volume in 2025, although e2Ws accounted for a moderate share (6.2%) of total new 2W sales.

Globally, the sale of e2Ws also grew in emerging markets such as Pakistan, Uganda, and Kenya. In Pakistan, overall 2W sales grew by 40% and e2W sales by nearly 200% between 2024 and 2025, driven by subsidies and local manufacturing incentives.[4] E2W sales reached nearly 90,000 units, representing 5% of total 2W sales in 2025, up from 2% in 2024.

3 "Vietnam's Love Affair with Gas Bikes Is Colliding with a New Electric Reality," *AP News*, October 20, 2025, https://apnews.com/article/vietnam-evs-motorbikes-yamaha-vinfast-4ab76826787a806392655b843c374f3a.

4 Press Information Department, "Government of Pakistan Officially Launches National Electric Vehicle (NEV) Policy 2025–30," press release, June 19, 2025, https://pid.gov.pk/site/press_detail/29435.

Uganda recorded a 22% e2W sales share in 2025, a significant jump from less than 1% in 2024. E2W sales reached approximately 31,000 units in 2025, compared with just 700 units in 2024. The growth of local electric vehicle (EV) manufacturing start-ups in the country was a key driver of e2W adoption in 2025.[5]

In Kenya, the e2W sales share increased to 15% in 2025, up from 10% in 2024, with total sales nearly tripling year-over-year to around 23,000. Value-added tax exemptions[6] and the electrification of motorcycle taxis and ride-hailing fleets drove e2W sales in the country.[7] Meanwhile, other countries such as Israel (9%), South Korea (8%), and Japan (8%) also saw increases in sales shares, although at a smaller scale.

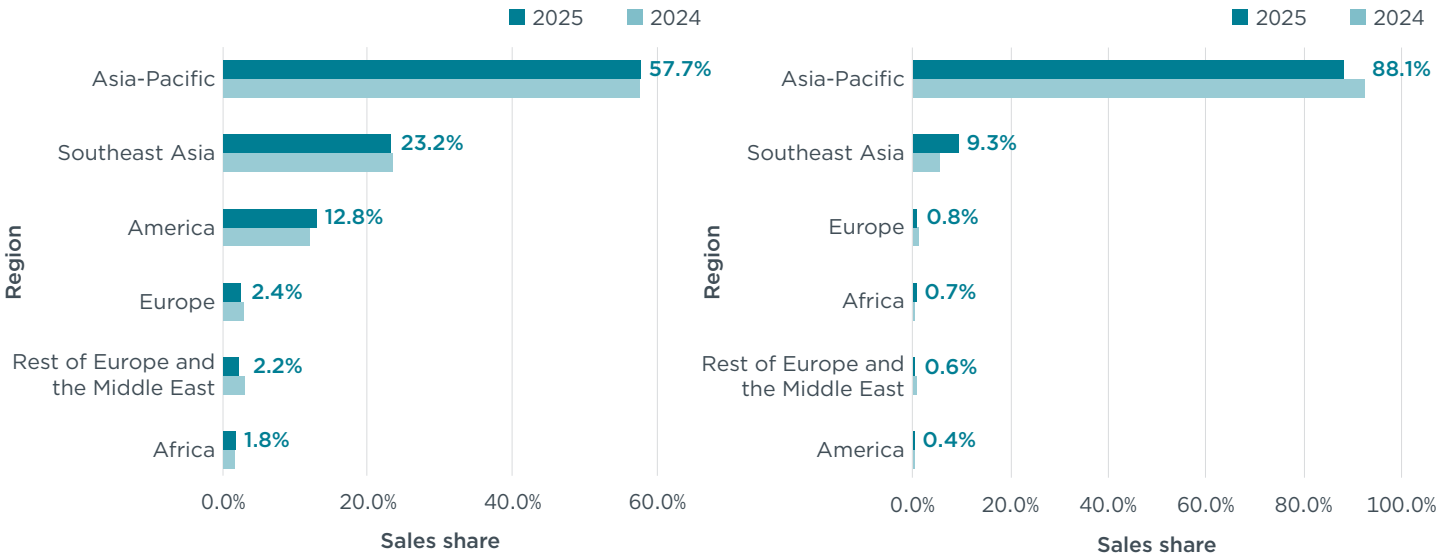
REGIONAL ANALYSIS: TWO-WHEELER AND ELECTRIC TWO-WHEELER MARKETS

This section details sales shares and fleet characteristics of the 2W and e2W market in six regions: Asia-Pacific, Southeast Asia, Europe (referring to the European Union, European Free Trade Association, and the UK), the rest of Europe and the Middle East, the Americas, and Africa. Due to limited data, not all countries in each region were included in the analysis; further details are provided in the Appendix.

Figure 4 presents the distribution of global 2W and e2W sales across the six regions. In 2025, 57.7% of global 2W sales occurred in the Asia-Pacific region, followed by Southeast Asia with 23.2% and the Americas with 12.8%, while the remaining regions together accounted for only about 6.4% of 2W sales. The Asia-Pacific region accounted for 88% of global e2W sales, followed by Southeast Asia with approximately 9.3%, a significant increase from the region's 5% share in 2024. All other regions together contributed less than 3% of e2W sales.

Figure 4

Two-wheeler (left) and electric two-wheeler (right) sales shares by region, 2024–2025



5 "Spiro's Production in Uganda to Begin in June," *Mobility Rising*, March 31, 2025, https://www.mobility-rising.com/p/spiro-s-production-in-uganda-to-begin-in-june.

6 Allan Olingo, "Kenya Unveils Tax Breaks for EV Parts and Charging Stations to Speed Up Shift to Electrics," *Newstimes*, February 4, 2026, https://www.newstimes.com/news/world/article/kenya-unveils-tax-breaks-for-ev-parts-and-21332725.php.

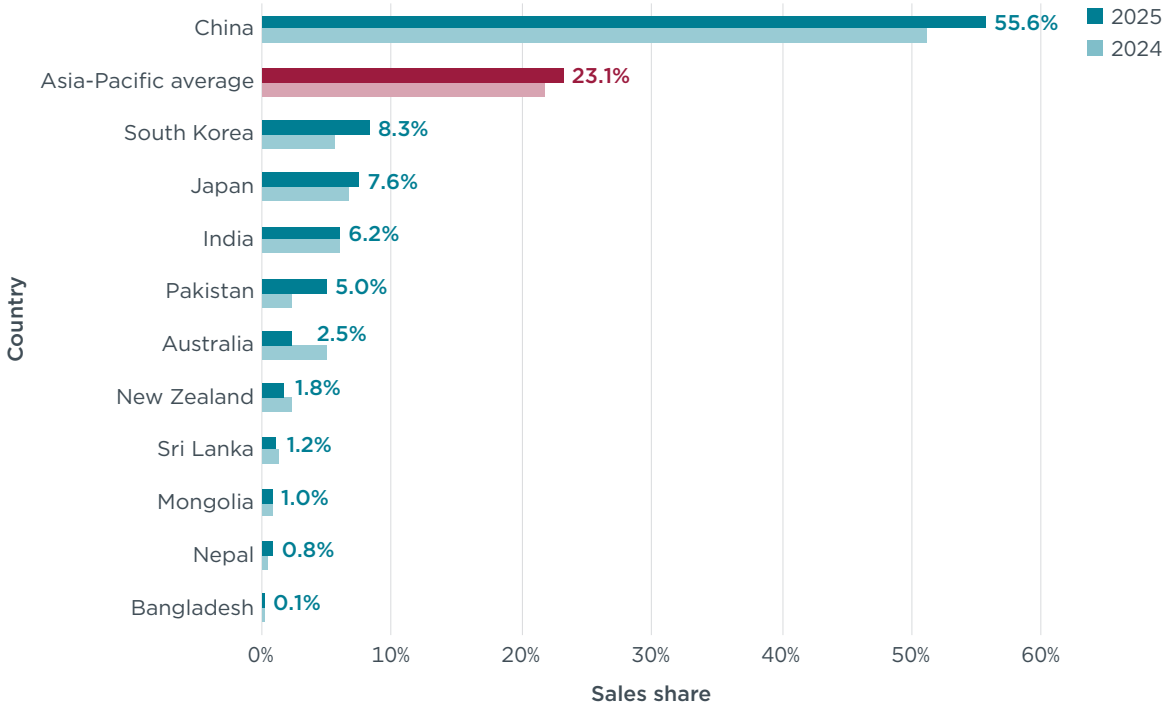
7 "Why Kenya's Boda Boda Drivers are Going Electric," *Global Energy Alliance for People and Planet Blog*, September 8, 2025, https://energyalliance.org/kenya-boda-boda-drivers-electric-motorcycles/.

Asia-Pacific

The Asia-Pacific region is a major hub for e2Ws. Figure 5 shows the e2W market share by country in the region. On average, e2Ws accounted for around 23% of total 2W sales among Asia-Pacific countries. Most countries recorded an increase in e2W adoption between 2024 and 2025, with the exception of Australia and New Zealand.

Figure 5

Electric two-wheeler sales share in the Asia-Pacific region, 2024–2025



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China recorded the highest e2W share, reaching 55.6% in 2025, up from 51.1% in 2024. This was followed by South Korea and Japan, each around 8%, and India with approximately 6%. China sold approximately 13 million 2Ws in 2025, including around 7.2 million e2Ws.

India remained the largest 2W market in the region, with nearly 21 million new 2Ws sold—accounting for more than 70% of India's total new vehicle registrations—of which 1.3 million were electric. This vehicle segment is central to the government's electrification efforts,[8] with incentive schemes and growing domestic EV production spurring sales growth.[9]

E2W sales in Pakistan nearly tripled between 2024 and 2025. Although the market remained at an early stage of development, the scale of Pakistan's 2W fleet and its continued growth demonstrate potential for electrifying the country's sizable 2W fleet.

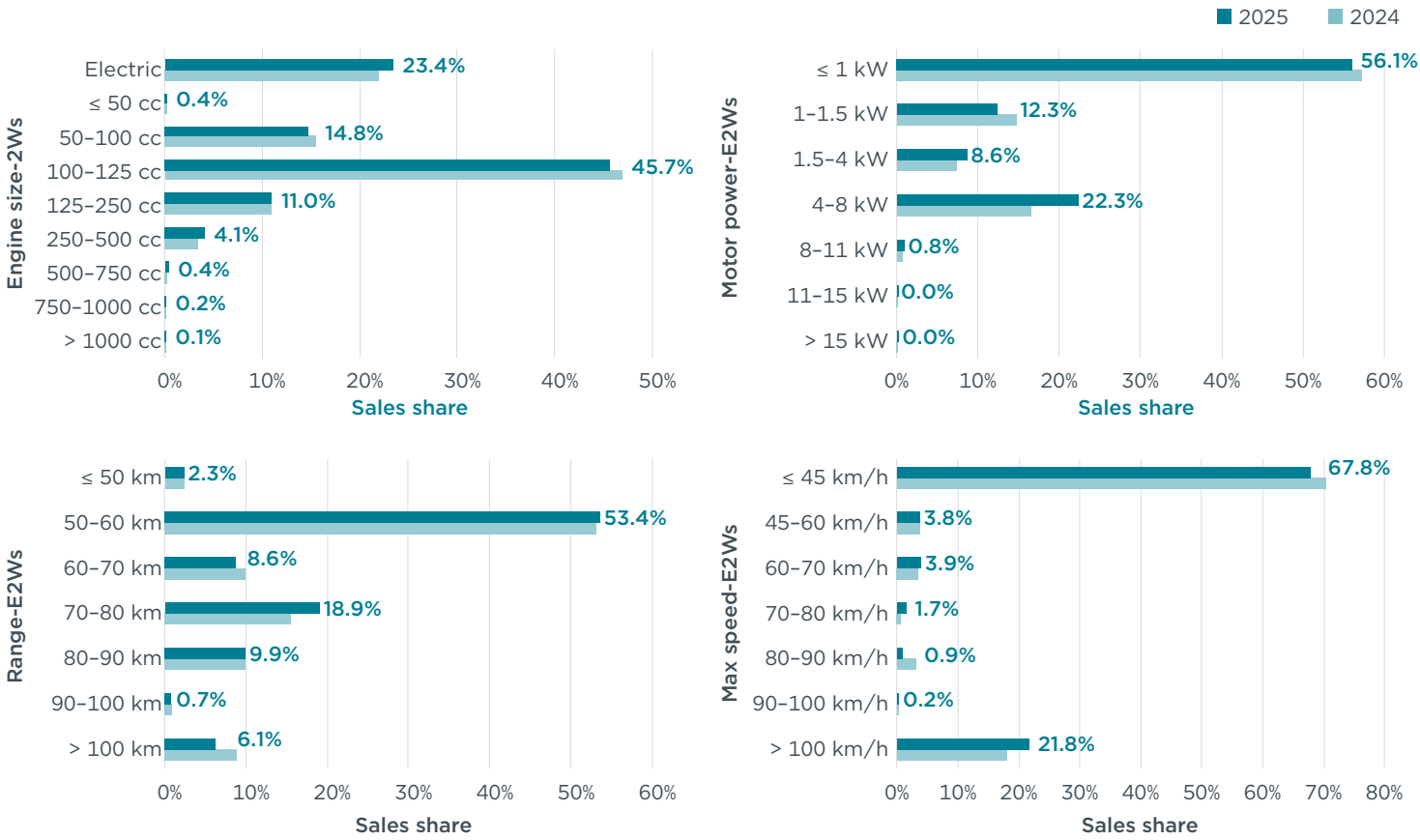
Figure 6 presents the distribution of the 2W market by engine size and the distribution of the e2W market by electric motor power, range, and maximum speed. Many of the e2Ws sold in the region featured smaller motor power. Lower operating costs and the rise of removable batteries have led to the rapid development of battery swapping

8 Pradeep Srivastava et al., *Forecasting Penetration of Electric Two-Wheelers in India: A Bottom-Up Analysis* (NITI Aayog; TIFAC, June 2022), https://www.niti.gov.in/sites/default/files/2022-06/ForecastingPenetration-ofElectric2W_28-06.pdf.

9 Ashutosh M, "India's Electric Two-Wheeler Market: Rise, Reset and What Comes Next," *Micromobility*, January 9, 2026, https://micromobility.io/news/indias-electric-two-wheeler-market-rise-reset-and-what-comes-next.

stations for e2Ws.[10] Two-wheelers with engine sizes between 100 cc and 125 cc accounted for 46% of total sales in 2025. This was followed by vehicles in the 50–100 cc and 125–250 cc categories, with market shares of 15% and 11%, respectively.

Figure 6
Fleet characteristics of 2Ws and e2Ws in Asia-Pacific, 2024–2025



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Two-wheelers with larger engines remained relatively uncommon in the region. One exception was India, where motorcycles with higher engine capacity are becoming increasingly popular. Although motorcycles with engine sizes below 150 cc have traditionally dominated the Indian 2W market, this segment's market share declined from 85.4% in fiscal year (FY) 2017–2018 to 64.4% in FY 2024–2025, while the share of motorcycles with engine sizes above 150 cc increased over the same period.[11]

In 2025, approximately 56% of e2Ws were equipped with motors smaller than 1 kW; 22% had motor power in the 4–8 kW range, and 12% fell within the 1–1.5 kW range. In terms of driving range, more than half of the e2W fleet had a range of 50–60 km, followed by vehicles with a range of 70–80 km, which accounted for 19% of the e2W market in 2025. Most e2Ws in the region had a maximum speed below 45 km/h, representing 68% of the market in 2025, whereas higher-speed models (i.e., those with maximum speeds above 100 km/h) accounted for approximately 22%.

Southeast Asia

Two-wheelers are a dominant mode of transport across many Southeast Asian countries, including Vietnam, Indonesia, the Philippines, and Thailand. In Vietnam, 2Ws

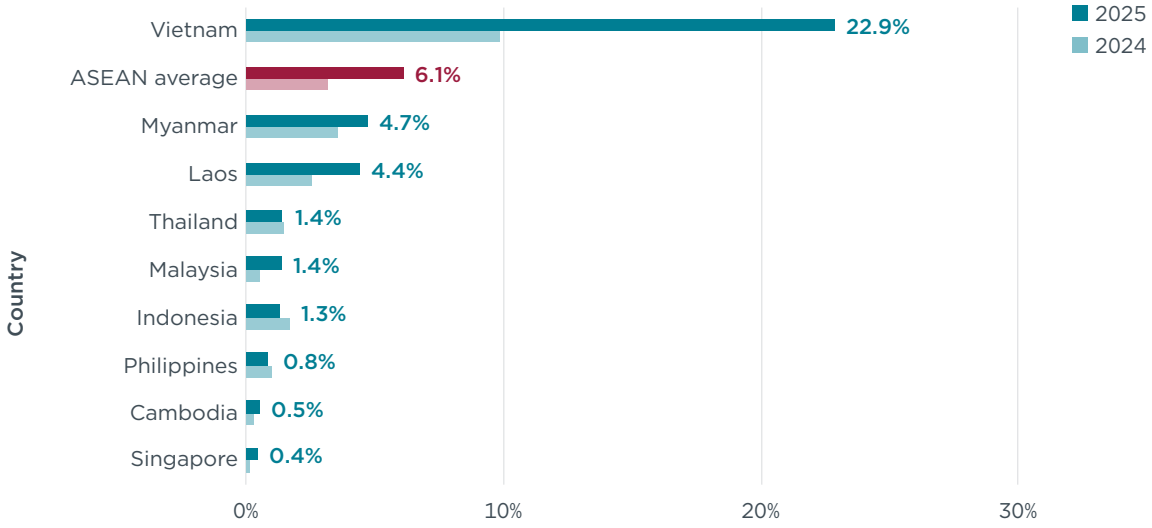
10 International Energy Agency, "Trends in Other Light-Duty Electric Vehicles," in *Global EV Outlook 2025*, 2025, https://www.iea.org/reports/global-ev-outlook-2025/trends-in-other-light-duty-electric-vehicles.

11 Surendhar M, "Sales of Higher-CC Bikes Accelerate as Buyers in India Seek to Level Up," *GaadiWaadi*, February 19, 2026, https://gaadiwaadi.com/sales-of-higher-cc-bikes-accelerate-as-buyers-in-india-seek-to-level-up/.

make up approximately 90% of total registered vehicles and are responsible for more than 80% of total travel demand nationwide.[12] As a region, Southeast Asia has become one of the fast-growing markets for 2Ws, with combined regional 2W sales exceeding China's 2W sales. Driving this growth are legacy manufacturers—the majority of which are Japan-based automakers—which have expanded their market portfolio in recent years, building local facilities in the region.[13]

In 2025, e2Ws accounted for approximately 6% of total 2W sales in the region (Figure 7). In Vietnam, e2W sales in 2025 nearly tripled from the previous year, with sales exceeding 700,000, 23% of total 2W sales. The implementation of LEZs in major cities (e.g., Hanoi and Ho Chi Minh City) as well as manufacturer efforts to promote purchase incentives and accelerate e2W adoption have propelled this growth.[14] In Indonesia and the Philippines, 2Ws represented 50% and 60% of total new vehicle registrations in 2025, respectively, underscoring their key role in road transportation for both passenger and commercial use.[15] However, e2W sales remained low in both countries, accounting for about 1% of total sales. In Indonesia, e2W sales declined between 2024 and 2025, likely due to the expiration of a subsidy program in December 2024.

Figure 7
Electric two-wheeler sales share by country in Southeast Asia, 2024–2025



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In many of these markets, Japanese manufacturers continued to dominate conventional 2W sales, led by Honda and Yamaha.[16] However, the e2W market in several Southeast Asian countries was increasingly led by domestic manufacturers. In Vietnam, local manufacturers such as Vinfast, Pega, and Anbico accounted for more than 60% of e2W sales.[17] Other countries also saw a growing presence of domestic manufacturers, such as Alva, Polytron, Electrum, and Maka Motors in Indonesia.

12 Huong Le et al., *Fuel Consumption Baseline Analysis for Two-Wheelers in Vietnam, 2017–2021* (International Council on Clean Transportation, February 2025), https://theicct.org/publication/fuel-consumption-baseline-analysis-2w-vietnam-2017-2023-feb25/.

13 International Energy Agency, "Trends in Other Light-Duty Electric Vehicles."

14 Thanh Nhan, "Các Hãng Xe Máy Điện Tăng Tốc Kích Cầu" [Electric motorcycle brands accelerate demand stimulation], *VnExpress*, July 28, 2025, https://vnexpress.net/cac-hang-xe-may-dien-tang-toc-kich-cau-4919757.html.

15 On Indonesia, see Aditya Mahalana, *Electric Vehicle Market in Indonesia* (International Council on Clean Transportation, 2025), https://theicct.org/publication/electric-vehicle-market-in-indonesia-dec25/; on the Philippines, see "Annual Reports," Land Transport Office, accessed June 1, 2026, https://lto.gov.ph/.

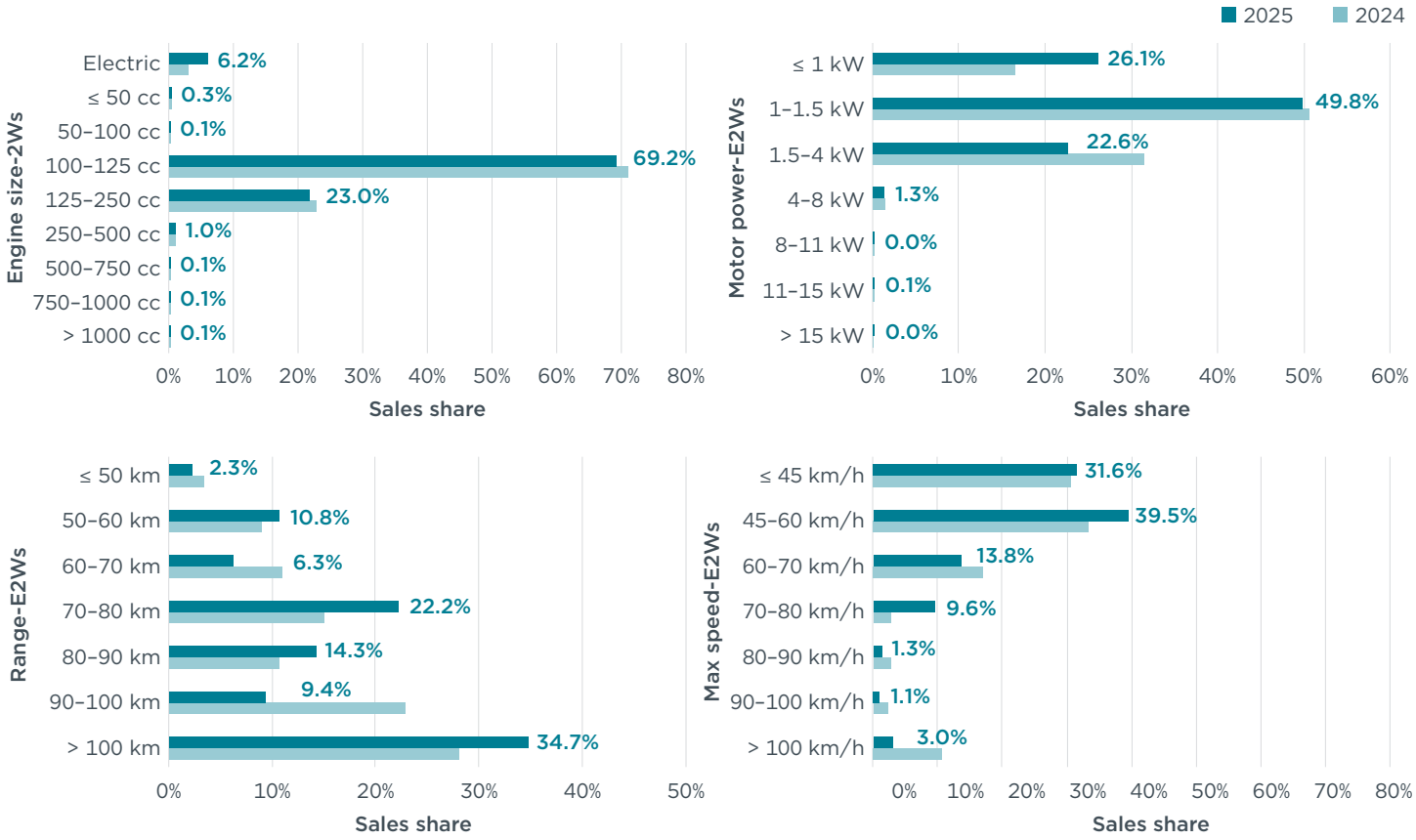
16 Aditya Mahalana, *Electric Vehicle Market*.

17 Le et al., *Fuel Consumption Baseline Analysis*.

Figure 8 presents the fleet characteristics of 2Ws and e2Ws in Southeast Asia for 2024–2025, covering engine size, electric motor power, driving range, and maximum speed. Vehicles with smaller engines made up most of Southeast Asia's 2W fleet. Vehicles with engine sizes of 100–125 cc accounted for approximately 69% of total 2W sales in 2025, followed by the 125–250 cc segment at 23%, while vehicles above 250 cc collectively accounted for less than 2% of total sales.

These findings reflect a strong preference for smaller, more affordable motorcycles and scooters. Moreover, in some countries, this preference may be driven by progressive taxation based on engine displacement. For example, Indonesia exempts 2Ws under 250 cc from the luxury tax but levies a tax of 60% on 2Ws with 250–500 cc engines and 95% on 2Ws above 500 cc.[18] Similarly, in Vietnam, 2Ws with engine sizes below 125 cc are exempt from the luxury tax, whereas a 20% tax is imposed on 2Ws with engine sizes above 125 cc.[19]

Figure 8
Fleet characteristics of 2Ws and e2Ws in Southeast Asia, 2024–2025



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Approximately 50% of e2Ws sold in Southeast Asia in 2025 had motor power in the 1–1.5 kW range, followed by vehicles with a motor power below 1 kW (26%) and those

18 Indonesia Ministry of Finance, Peraturan Menteri Keuangan Nomor 141/PMK.010/2021 Tahun 2021 tentang Penetapan Jenis Kendaraan Bermotor yang Dikenai Pajak Penjualan atas Barang Mewah dan Tata Cara Pengenaan, Pemberian dan Penatausahaan Pembebasan, dan Pengembalian Pajak Penjualan atas Barang Mewah [Minister of Finance regulation number 141/PMK.010/2021 of 2021 concerning the determination of types of motor vehicles subject to sales tax on luxury goods and procedures for the imposition, granting and administration of exemptions, and refunds of sales tax on luxury goods], October 16, 2021, https://peraturan.bpk.go.id/Details/181941/pmk-no-141pmk0102021.

19 The National Assembly of Vietnam, Law No. 66/2025/QH15 Luật Thuế Tiêu Thụ Đặc Biệt [Law on special consumption tax], issued June 14, 2025, https://thuvienphapluat.vn/van-ban/Thue-Phi-Le-Phi/Luat-thue-tieu-thu-dac-biet-2025-so-66-2025-QH15-621225.aspx.

in the 1.5–4 kW category (23%). E2Ws with motor power above 4 kW accounted for less than 2% of the market, indicating that the e2W fleet closely mirrors the low-displacement profile of the broader 2W market.

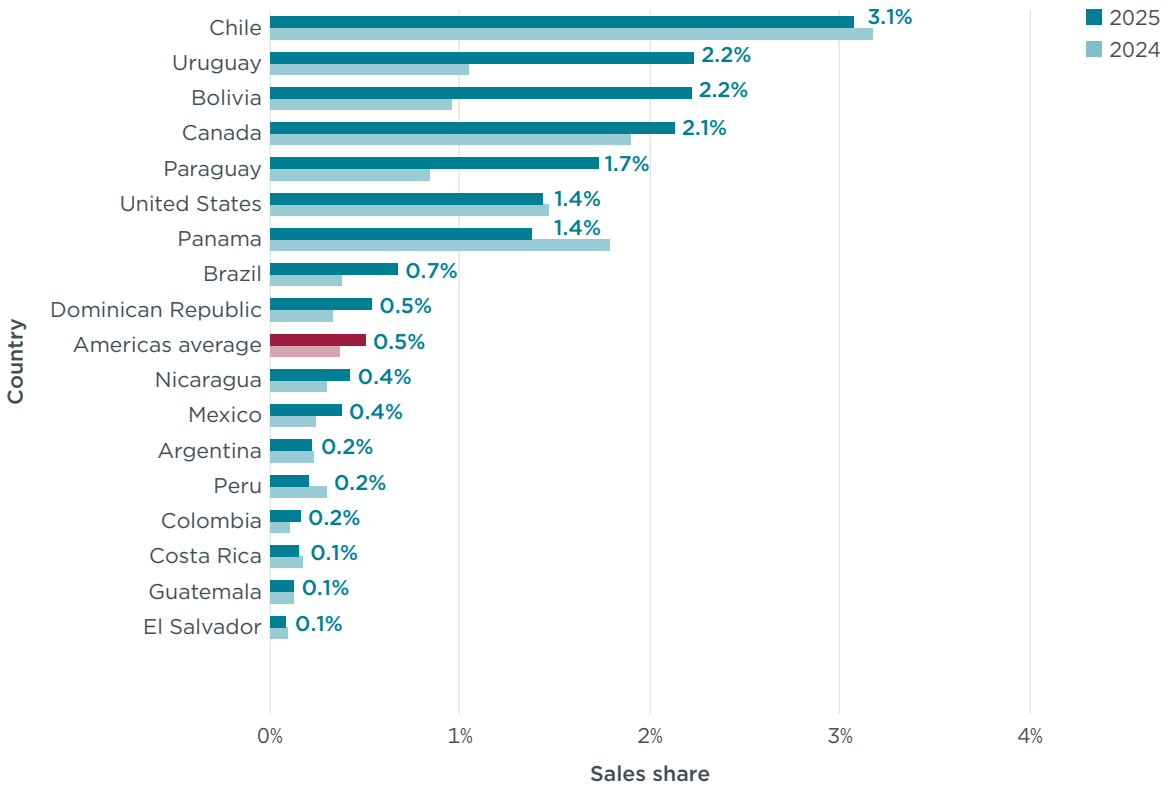
Regarding driving range, the largest share of e2Ws sold in Southeast Asia in 2025 had ranges exceeding 100 km (35%), reflecting growing consumer demand for longer-distance capability. This was followed by vehicles in the 70–80 km range (22%), the 80–90 km range (14%), and those with a range of 60 km or less (13%). In terms of maximum speed, the Southeast Asian e2W market was largely oriented toward lower-speed vehicles, with approximately 72% of e2Ws sold with ranges of 60 km/h or below. Higher-speed e2Ws capable of exceeding 80 km/h remained marginal, collectively representing less than 6% of the market.

Americas

Among the six regions analyzed, the Americas ranked third in total 2W market size, following Asia-Pacific and Southeast Asia. In 2025, 2W sales in the region reached approximately 8.4 million units, accounting for 12.8% of global 2W sales. However, the Americas had the smallest e2W market among all regions, with approximately 42,000 e2Ws sold in 2025, representing only 0.4% of global e2W sales.

Figure 9 illustrates the e2W sales share by country across the Americas, highlighting that the broader Latin American market remains at an early stage of electrification. On average, e2Ws accounted for only 0.5% of total 2W sales in the region. This low penetration is consistent with the limited policy support for e2W adoption, including the absence of demand- and supply-side fiscal incentives and targeted regulatory measures in most markets.

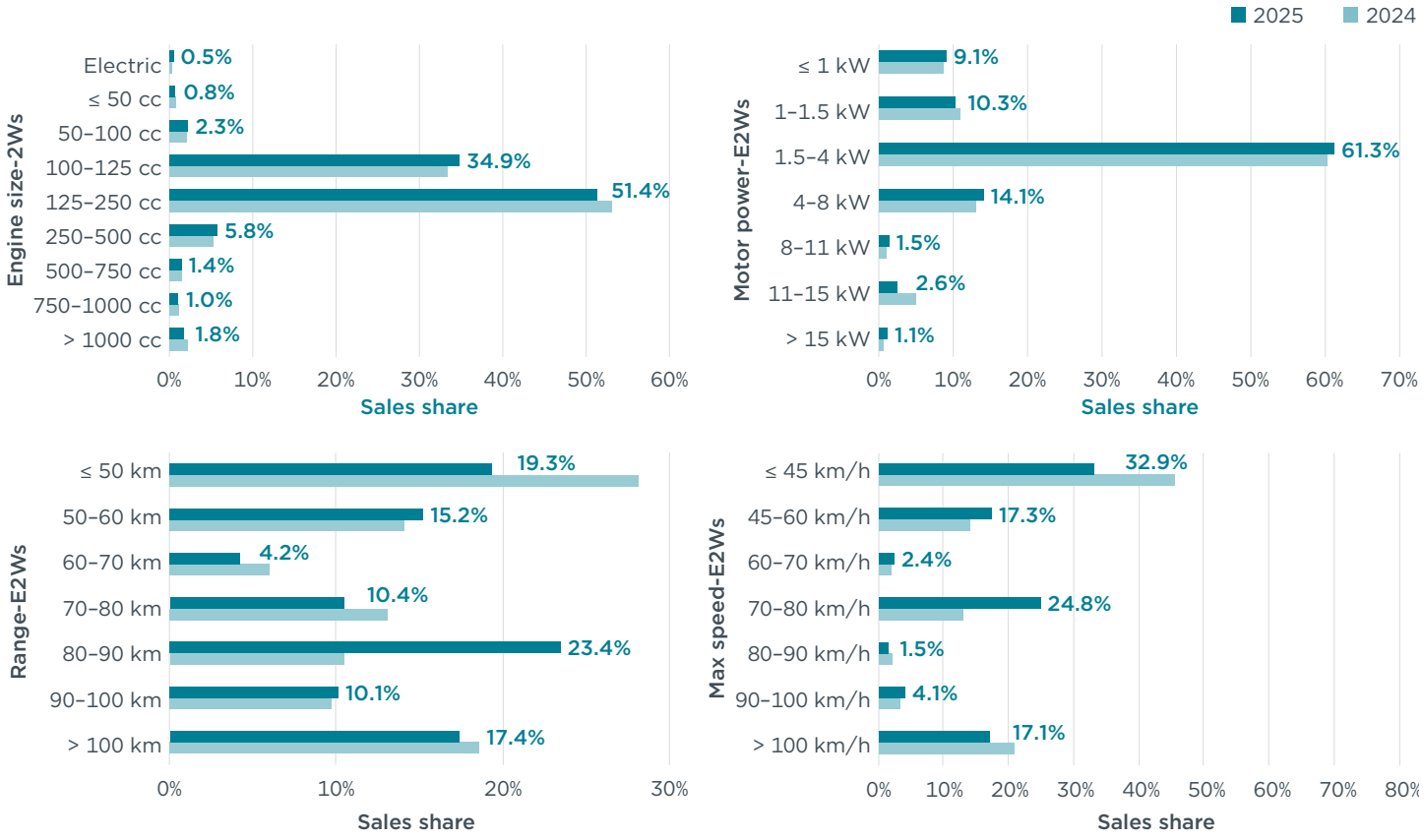
Figure 9
Electric two-wheeler sales share by country in the Americas, 2024–2025



Chile and Uruguay recorded the highest e2W market shares in the region; however, penetration remained modest, at 3.1% and 2.2% in 2025, respectively. Brazil and Mexico—two of the largest 2W markets globally by volume—had e2W shares of only 0.7% and 0.4%, respectively. The majority of 2Ws sold in Brazil were completely knocked-down (CKD) vehicles, that is, vehicles assembled in a special economic zone with reduced tariffs; CKD vehicles were concentrated among Japanese automakers such as Honda and Yamaha, which do not sell e2Ws.[20] In Mexico, many of the e2Ws sold were private scooters, which are not required to be registered.

As shown in Figure 10, 2Ws with engine displacement between 125 cc and 250 cc accounted for the majority (51.4%) of sales in 2025. This was followed by the 100–125 cc segment, which represented 35% of the market, indicating a strong market concentration in mid-range engine segments.

Figure 10
Fleet characteristics of 2Ws and e2Ws in the Americas, 2024–2025



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E2Ws with motor power between 1.5 kW and 4 kW were most prevalent, accounting for 61% of the market in 2025. In terms of range, e2Ws with driving ranges of 80–90 km and below 50 km were the most common, representing 23% and 19% of the market in 2025, respectively. Regarding performance characteristics, approximately one third of e2Ws had a maximum speed below 45 km/h. This was followed by vehicles with maximum speeds between 70 and 80 km/h, which accounted for 25% of the market.

20 FENABRAVE, *Resumo Mensal Dezembro de 2025* [Monthly summary, December 2025], dataset, January 2026, https://www.fenabrave.org.br/portal/files/2025_12_02.pdf; Jonathan Rodrigues, "A Conversation About the Manaus Free Trade Zone," *Gurgel Rodrigues Milanese Advogados* (September 27, 2023), https://grm.com.br/a-conversation-about-the-manaus-free-trade-zone/.

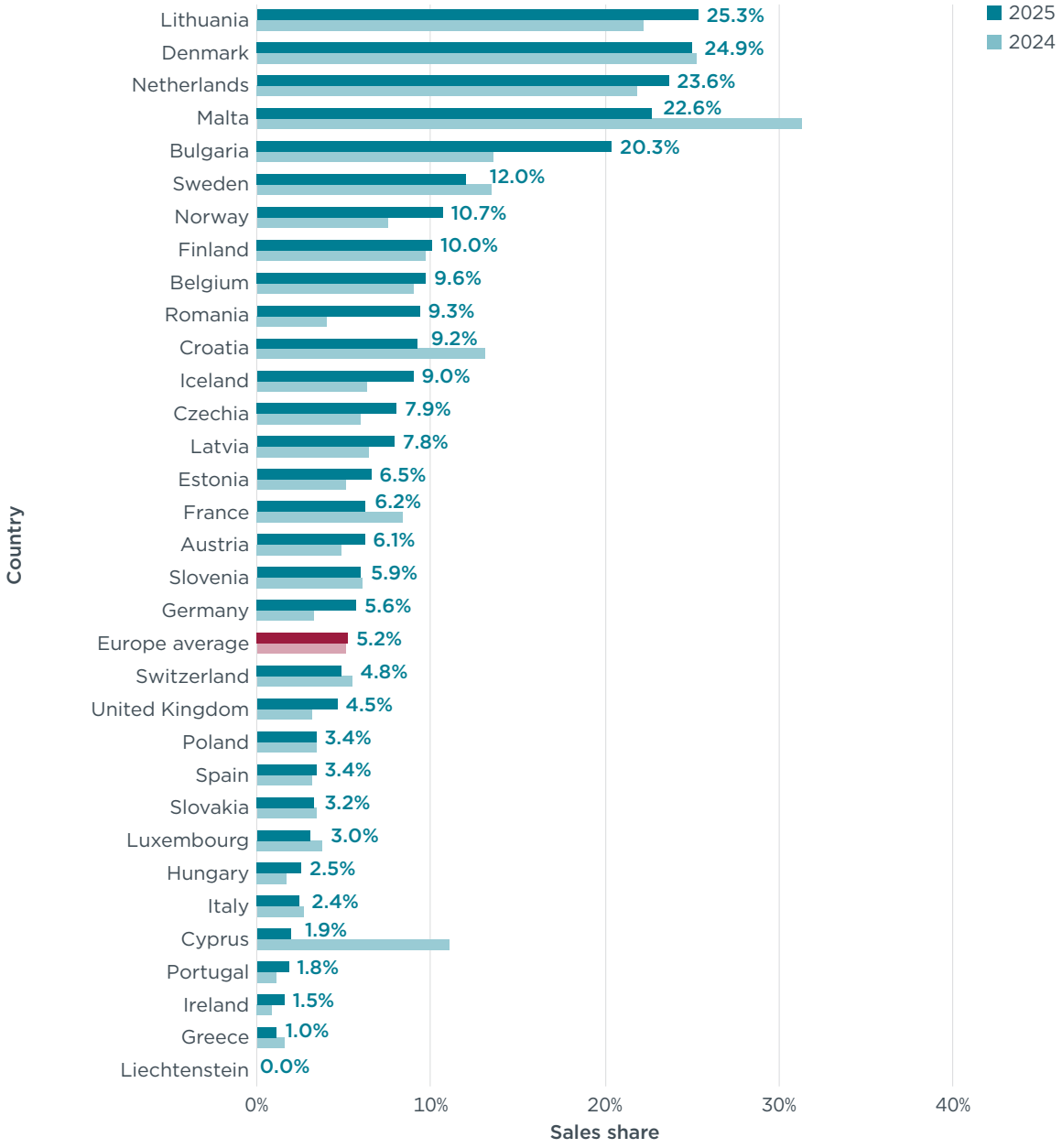
Europe

The 2W and e2W markets in Europe were relatively small compared with those in the Asia-Pacific and Southeast Asia regions. In 2025, 2W sales in Europe accounted for approximately 2.4% of global sales (around 1.6 million units), while e2W sales represented about 0.8% of the global market (approximately 82,000 units), indicating both a limited market scale and relatively low levels of electrification.

Figure 11 describes the e2W sales share by country in Europe in 2024 and 2025. The average e2W sales share in Europe remained stable at around 5%. E2W adoption varied by country, with Lithuania, Denmark, the Netherlands, Malta, and Bulgaria reporting the highest e2W shares in the region, each in the range of 20%–25%. Sweden, Norway, Finland, and Belgium followed with shares of around 10%. By contrast, larger 2W markets—including Italy, France, Germany, and Spain—continued to exhibit comparatively low e2W shares, each with annual sales of just over 200,000 units.

Figure 11

Electric two-wheeler sales share by country in Europe, 2024–2025



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In Europe, policy support for e2Ws varied across countries and cities. Although some national governments offered e2W incentives—like Italy's Ecobonus offering up to €4,000 (with scrappage)[21] or the UK's plug-in motorcycle grant offering up to £500[22]—these were generally less consistent than incentives targeting electric passenger vehicles. There is no EU-level policy framework specifically focused on e2Ws.[23]

At the local level, several European cities have incorporated e2Ws into broader urban transport and emission reduction strategies, including low- and zero-emission zones. For example, the Greater Paris Metropolitan Area introduced supplementary financial support measures as part of its LEZ policy to encourage the replacement of older 2Ws with electric vehicles.[24] Austria also implemented a funding program supporting the transition to e2Ws, including e-mopeds and e-motorcycles, through non-repayable grants of up to €1,800 for high-power motorcycles and €600 for e-mopeds, with these grants typically covering around 50% of vehicle costs in 2025. However, the program was terminated earlier than planned due to budget exhaustion.[25]

The fleet characteristics of 2Ws and e2Ws in Europe are presented in Figure 12. Overall, the European 2W fleet was characterized by relatively higher engine sizes compared with other regions. Nearly half of 2Ws had engine sizes above 250 cc, followed by vehicles in the 100–125 cc segment, which accounted for 29% of the market in 2025. By contrast, vehicles with engine sizes below 100 cc represented less than 10% of total 2W sales in 2025.

21 Ministero delle Imprese e del Made in Italy, "Ecobonus: Motocicli e Ciclomotori" (Ecobonus: Motorcycles and mopeds), accessed July 1, 2026, https://ecobonus.mimit.gov.it/motocicli-e-ciclomotori.

22 Dan Sherwood, "Electric Motorcycle Industry Responds to Plug-in Grant Extension," *Motorcycle News*, March 17, 2025, https://www.motorcyclenews.com/news/2025/march/electric-motorcycle-industry-respond-to-plug-in-grant-extension/.

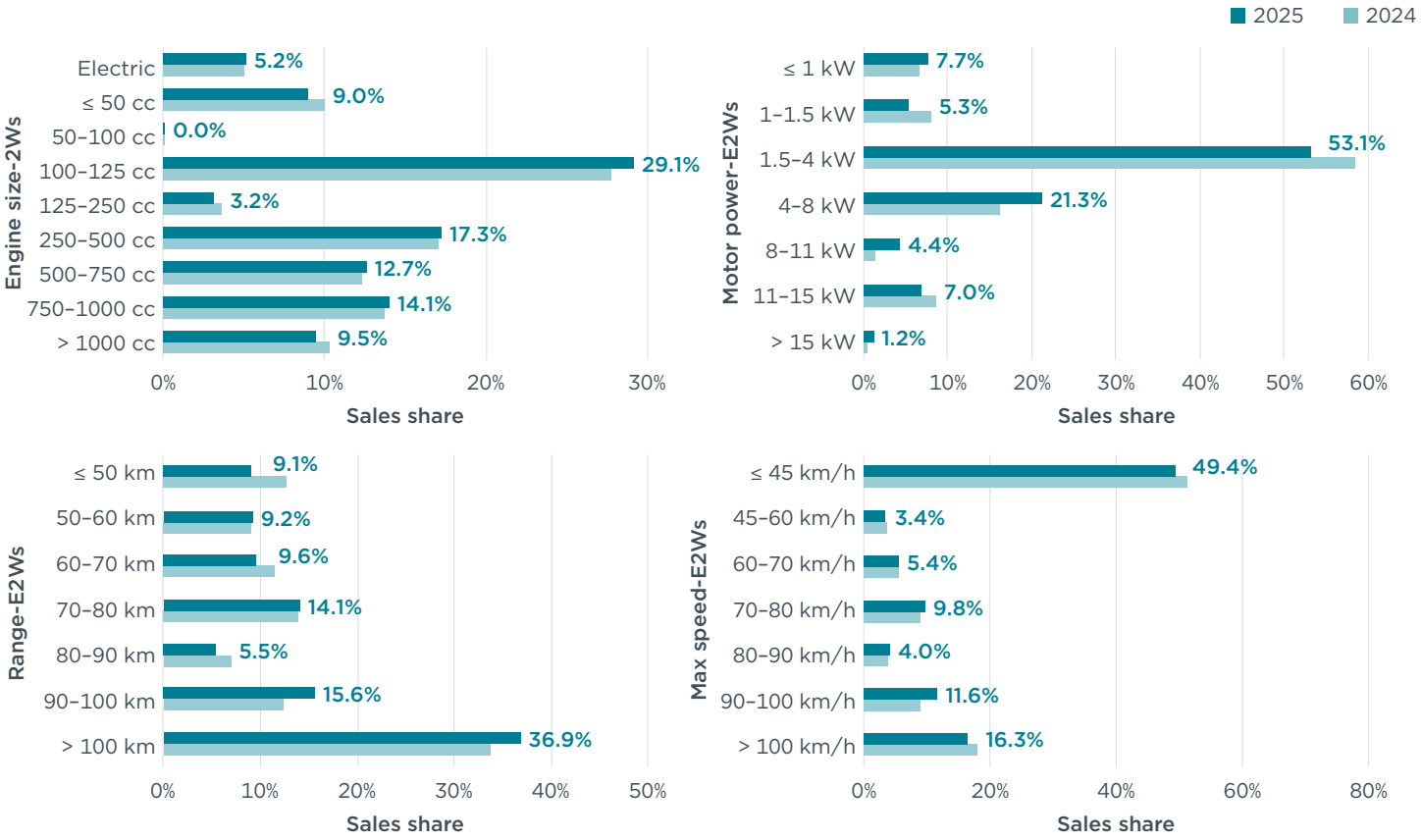
23 "European Electric Scooter and Motorcycles Market 2025," *MotorCyclesData*, January 5, 2026, https://www.motorcyclesdata.com/2026/01/05/european-electric-scooter-and-motorcycles-market/.

24 Sandra Wappelhorst et al., *Low- and Zero-Emission Zones and Social Equity: Supporting the Urban Transition to Zero-Emission Vehicles and Alternative Transport Modes* (International Council on Clean Transportation, 2023), https://theicct.org/publication/low-and-zero-emission-zones-and-social-equity-oct23/.

25 Umweltförderung.at, "E-Zweiräder Private 2025 – Fahrzeuge & Ladeinfrastruktur" [Private e-two-wheelers in 2025: Vehicles and charging infrastructure], accessed May 10, 2026, https://www.umweltfoerderung.at/privatpersonen/e-zweiraeder-private-2025-eride/fahrzeuge-ladeinfrastruktur.

Figure 12

Fleet characteristics of 2Ws and e2Ws in Europe, 2024–2025



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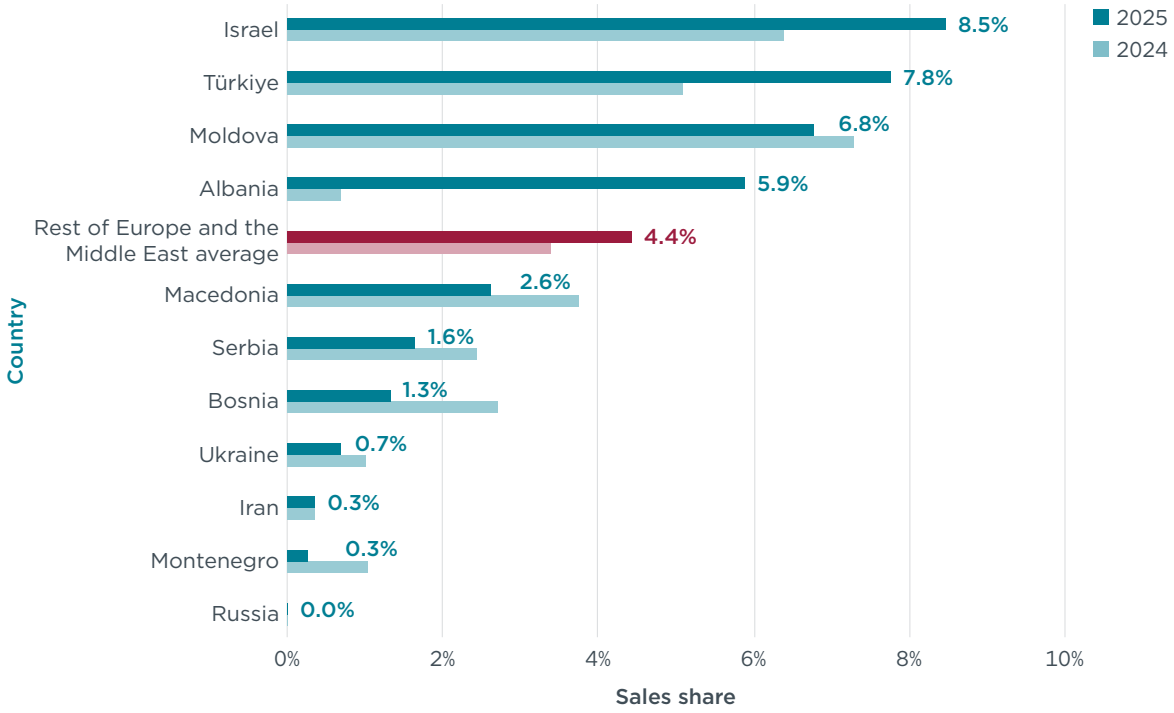
More than half of the e2Ws sold in Europe in 2025 were equipped with motor power in the range of 1.5–4 kW. This was followed by vehicles in the 4–8 kW category (21%) and those below 1 kW (8%). E2Ws with motor power above 11 kW accounted for approximately 12% of the market. Regarding vehicle range, e2Ws with driving range above 100 km represented the largest share of the market (37%), followed by vehicles with ranges of 90–100 km (16%) and 70–80 km (14%). In terms of maximum speed, approximately half of e2Ws in Europe had a maximum speed below 45 km/h, followed by e2Ws with a maximum speed greater than 100 km/h (16%).

Rest of Europe and the Middle East

In 2025, total 2W sales in the rest of Europe and the Middle East reached approximately 1.4 million units, of which 4.4% were e2Ws, representing a 1-percentage-point increase compared with 2024. Figure 13 presents regional e2W sales shares by market.

Figure 13

Electric 2W sales share by country in the rest of Europe and the Middle East, 2024–2025



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Türkiye and Iran dominated the regional 2W market, accounting for over 90% of total sales. In terms of total sales volume, Türkiye was the largest market for both 2Ws and e2Ws in the region. The e2W sales share in Türkiye increased year-over-year, from 5.1% in 2024 to 7.8% in 2025, placing second in the region behind Israel. At the national level, measures such as a reduced special consumption tax for EVs have improved cost competitiveness relative to internal combustion engine (ICE) vehicles.[26] At the local level, cities such as Istanbul and Izmir have provided additional incentives, including preferential access and licensing benefits for battery electric vehicles. By contrast, Iran, the second-largest 2W market, showed minimal electrification, with e2Ws accounting for only 0.3% of its total 2W sales in both 2024 and 2025.

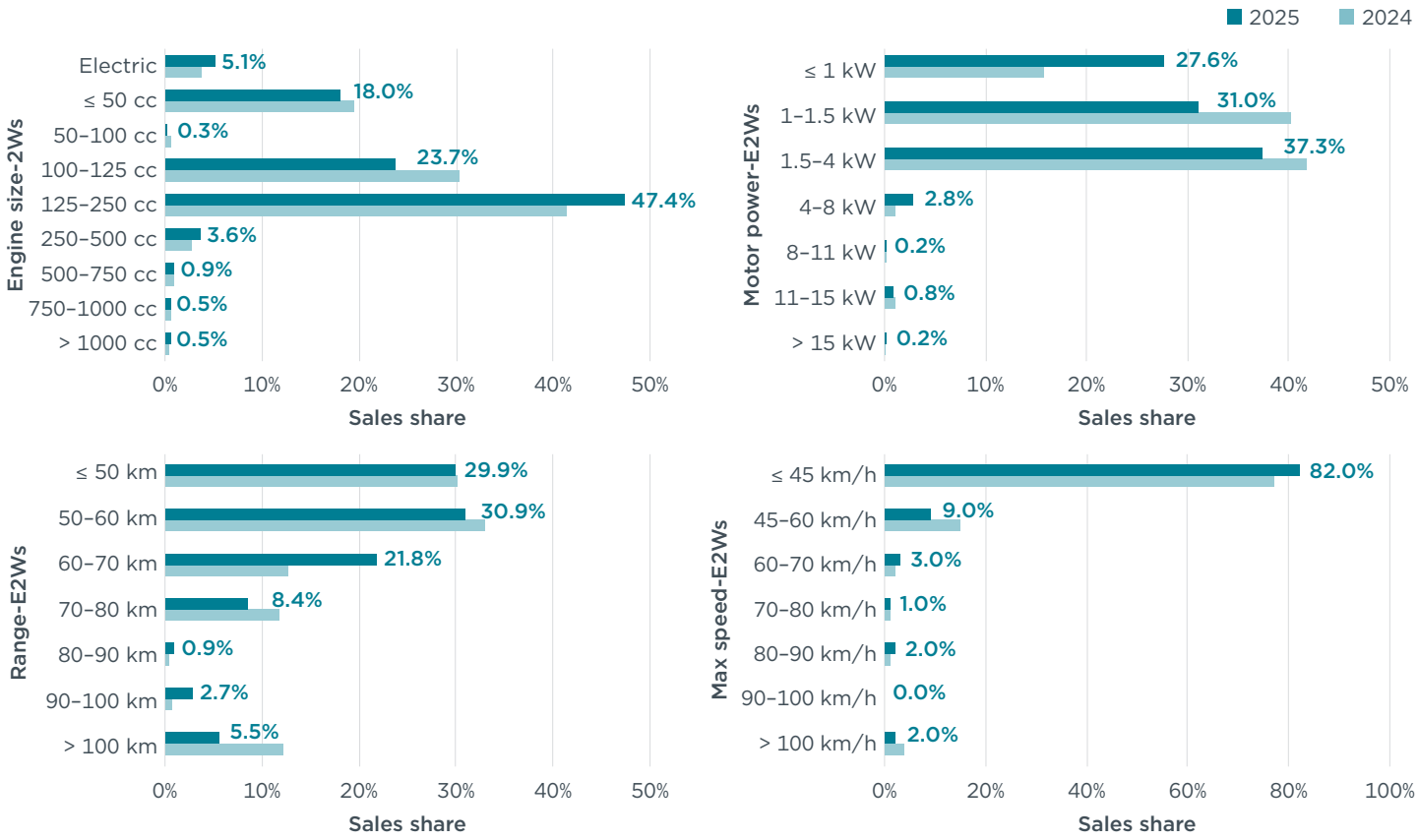
Although Israel's 2W market was relatively small—with annual sales of around 20,000 units—it exhibited the highest level of electrification in the region, with e2Ws reaching an 8.5% market share in 2025. On the other hand, Russia recorded annual sales of around 36,000 units in both 2024 and 2025, making it a mid-sized market in the region, but no e2W sales were recorded during this period. Overall, policies to promote e2Ws across the region remained limited and heterogeneous.

Figure 14 outlines fleet characteristics for 2Ws and e2Ws in the region. Nearly half of the 2W fleet was concentrated in the 125–250 cc engine segment, followed by vehicles with 100–125 cc engines (23.7% of 2W sales) and those below 50 cc (18.0%). For e2Ws, vehicles with motor power between 1.5 kW and 4 kW led the market, representing 37% of total sales in 2025. This was followed by the 1–1.5 kW segment (31.0%) and below 1 kW segment (27.6%). Together, these three categories comprised 96% of the e2W market, indicating a strong concentration of low- to mid-power vehicles.

26 European Alternative Fuels Observatory, "Turkey: Incentives and Legislations," accessed July 1, 2026, https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/turkey/incentives-legislations.

Figure 14

Fleet characteristics of 2Ws and e2Ws in the rest of Europe and the Middle East, 2024–2025



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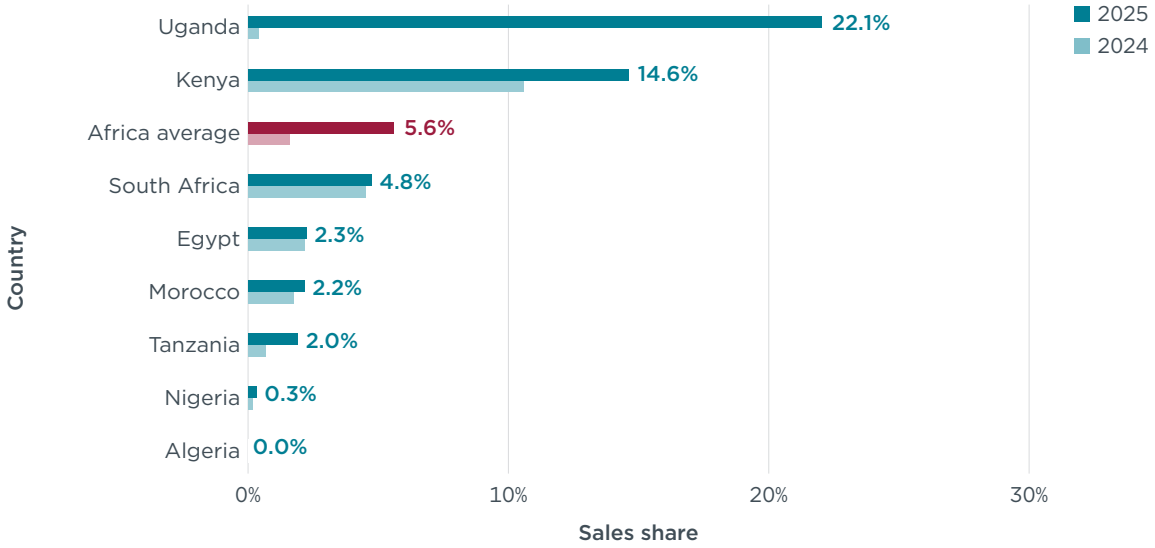
In terms of performance, approximately 60% of e2Ws had a driving range below 60 km, while an additional 22% fell within the 60–70 km range. Consistent with these characteristics, more than 80% of e2Ws in the region had a maximum speed below 45 km/h, reflecting their primary use in low-speed, urban mobility applications.

Africa

Total new 2W sales in Africa reached approximately 1.2 million units in 2025, a 15% increase from 1 million in 2024. E2W sales almost quadrupled to nearly 65,000 units, accounting for 5.6% of total 2W sales in 2025, an increase from 1.6% in 2024. Figure 15 shows the e2W sales share by country in selected African markets.

Figure 15

Electric two-wheeler sales share by country in Africa, 2024–2025



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Although a mid-sized 2W market, Uganda recorded the most dramatic e2W growth in the region, with sales surging from just 700 units in 2024 to over 31,000 units in 2025. This explosive growth was propelled by Spiro—Africa's largest EV company, which began selling vehicles in Uganda in 2025—and the emergence of electric ride-hailing services, including Uber.[27]

Kenya's e2W sales share was 14.6% in 2025, an increase from 10.4% in 2024. The continuation of tax incentives and the electrification of the taxi fleet were the key drivers of e2W uptake in this market.[28]

Egypt and Nigeria dominated the African 2W market, together accounting for over half of the region's total sales. In Egypt, the second-largest 2W market in the region, approximately 212,000 units were sold in 2025, amounting to a 2.3% e2W sales share, up from 2.2% in 2024. The launch of affordable domestically produced e2W models such as the Kader has supported growth in the e2W market.[29]

On the other hand, Nigeria, the largest 2W market in the region with approximately 452,000 units sold in 2025, showed only nascent electrification, with e2Ws accounting for 0.3% of 2W sales in 2025, a marginal increase from 0.2% in 2024. Although the government offered reduced tariffs for EV imports and exempted EVs from VAT and import adjustment tax, e2W sales remained low.[30] In late 2025, the Electric Vehicle Transition and Green Mobility Bill[31]—which aims to promote the development of the local EV manufacturing industry, including the production of e2Ws—passed its second reading in the Nigerian Senate. If enacted, the bill could spur EV adoption by creating a supportive policy environment for local EV manufacturing and imports.[32]

27 Mobility Rising, "Spiro's Production"; "Uber Rolls Out Electric Motorcycle Service in Uganda," *Mobility Rising*, November 5, 2025, https://www.mobility-rising.com/p/uber-rolls-out-electric-motorcycle-service-in-uganda-f270.

28 Olingo, "Kenya Unveils Tax Breaks"; *Global Energy Alliance*, "Drivers are Going Electric."

29 Adedayo Ojo, "Africa's E-Mobility Boom Is Happening on Two Wheels," *TechCabal Insights*, March 9, 2026, https://insights.techcabal.com/africas-e-mobility-boom-2-wheelers/.

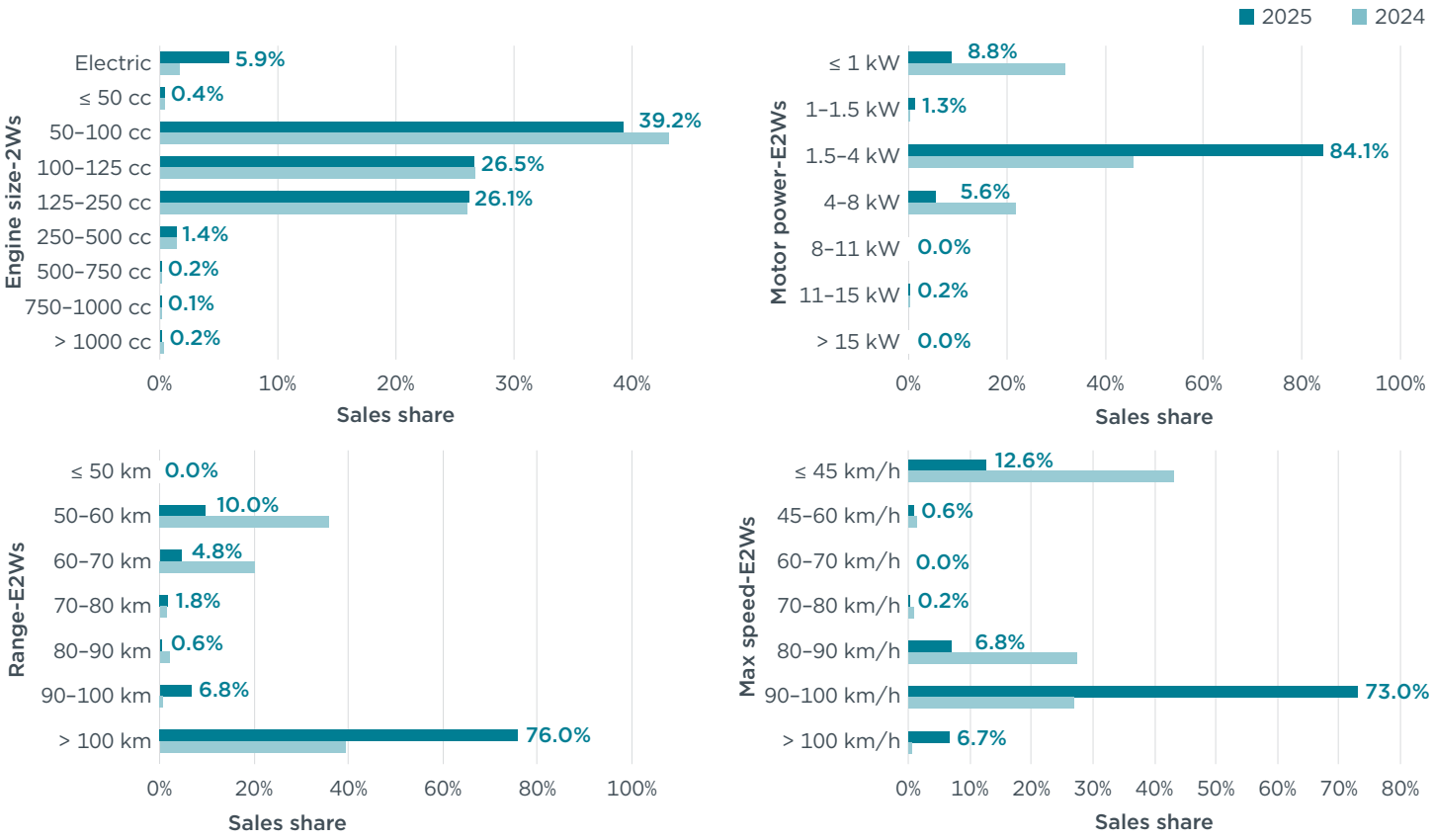
30 Thabo Nkosi, "Nigeria EV Import Rules 2025: What Buyers and Dealers Must Know," *EV24.africa*, July 22, 2025, https://www.ev24.africa/nigeria-ev-import-rules-2025-what-buyers-and-dealers-must-know/.

31 Electric Vehicle Transition and Green Mobility Act 2025, National Assembly of Nigeria, 2025, https://ir.nilds.gov.ng/bitstream/handle/123456789/1832/ELECTRIC%20VEHICLE%20TRANSITION%20AND%20GREEN%20MOBILITY%20ACT%202025%20%28New%20Bill%29%29.pdf?sequence=1&isAllowed=y.

32 Anna Zetkulic et al., "Nigeria's Year in the Driver's Seat for Electric Vehicles," *RMI*, April 7, 2026, https://rmi.org/resources/nigerias-year-in-the-drivers-seat-for-electric-vehicles/.

Figure 16 shows the key characteristics of 2Ws and e2Ws in the region. The 2W market was largely concentrated among smaller engine segments, with the 50–100 cc category accounting for the largest share at 39% of total sales in 2025, followed by the 100–125 cc and 125–250 cc segments, representing 27% and 26% of sales, respectively.

Figure 16
Fleet characteristics of 2Ws and e2Ws in Africa, 2024–2025



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For e2Ws (5.6% of the total 2W market), the market was heavily dominated by mid-power vehicles. Models with a motor power between 1.5 kW and 4 kW accounted for the vast majority, representing 84.1% of sales in 2025. Lower-power segments, including those below 1 kW and those between 1 and 1.5 kW, contributed 9% and 1%, respectively, while higher-power categories such as 4–8 kW e2Ws made up around 6%.

In terms of performance, most e2Ws offered relatively long driving ranges, with about 76.0% of e2Ws sold exceeding 100 km on a single charge. Shorter-range categories had smaller shares, including 50–60 km (10.0%), 90–100 km (6.8%), and 60–70 km (4.8%). This was consistent with their speed capabilities, as the majority of e2Ws—around 73.0%—had a maximum speed between 90 and 100 km/h. Lower-speed models below 45 km/h accounted for 12.6% of the market, while the higher-speed (above 100 km/h) and mid-range (80–90 km/h) segments each represented about 6.8%, reflecting a market that increasingly supports higher-performance use cases beyond low-speed urban travel.

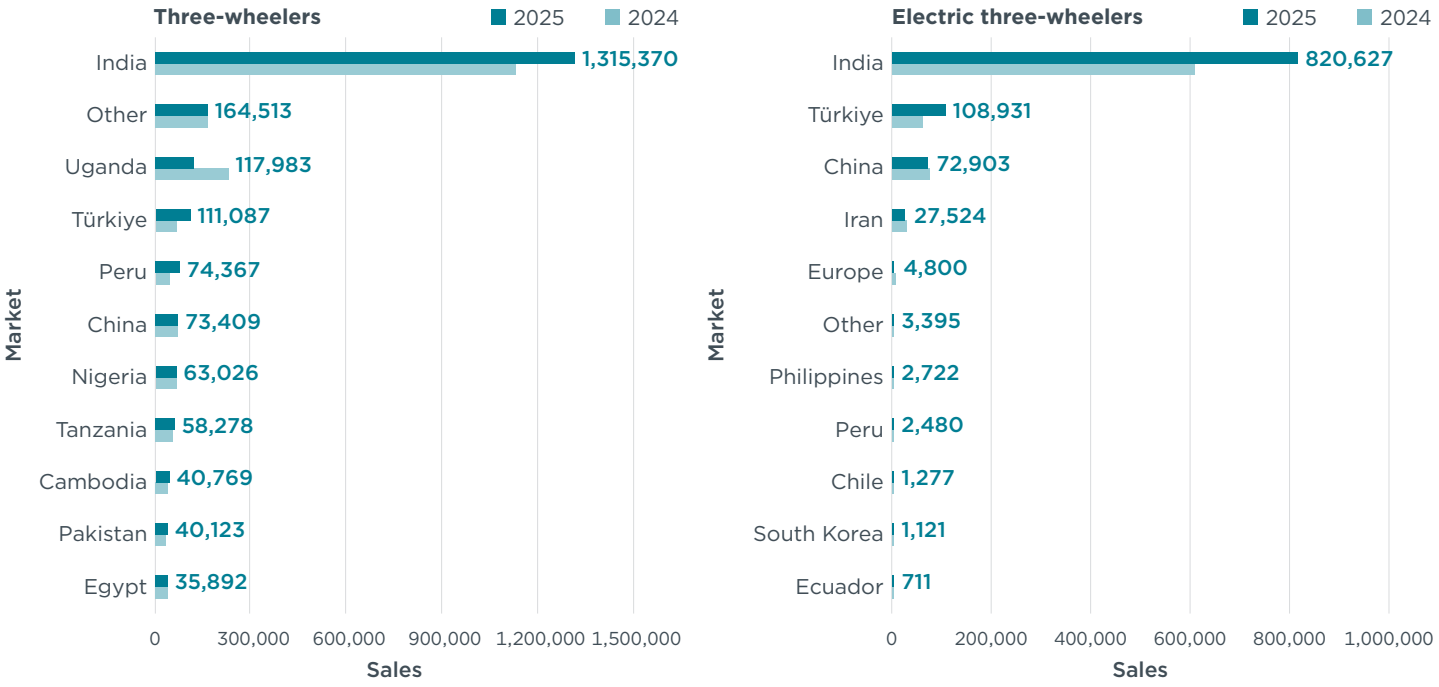
MARKET OVERVIEW: THREE-WHEELERS AND ELECTRIC THREE-WHEELERS

In many countries, three-wheelers (3Ws) serve as a vital short-distance passenger and cargo transport option, particularly in cities with limited public transit infrastructure. Global 3W sales reached 2.1 million vehicles in 2025, a 9% increase from 1.9 million vehicles in 2024. The 3W market remained highly concentrated, with India accounting for about 63% of global sales, followed by Uganda (6%) and Türkiye (5%).

Electric three-wheelers (e3Ws) drove growth within this segment. In 2025, e3W sales increased by 33%; meanwhile, ICE 3W sales decreased by 7%. E3Ws accounted for 50% of total 3W sales, up from 41% in 2024. Figure 17 shows the global 3W and e3W sales by country in 2024 and 2025. Global e3W sales reached approximately 1 million units in 2025, up 32% from 780,000 units in 2024, significantly outpacing overall market growth. This rapid expansion reflects growing production spurred by policy measures and incentives to accelerate the electrification of public and commercial transportation.

Figure 17

Global three-wheeler (left) and electric three-wheeler (right) sales, 2024–2025



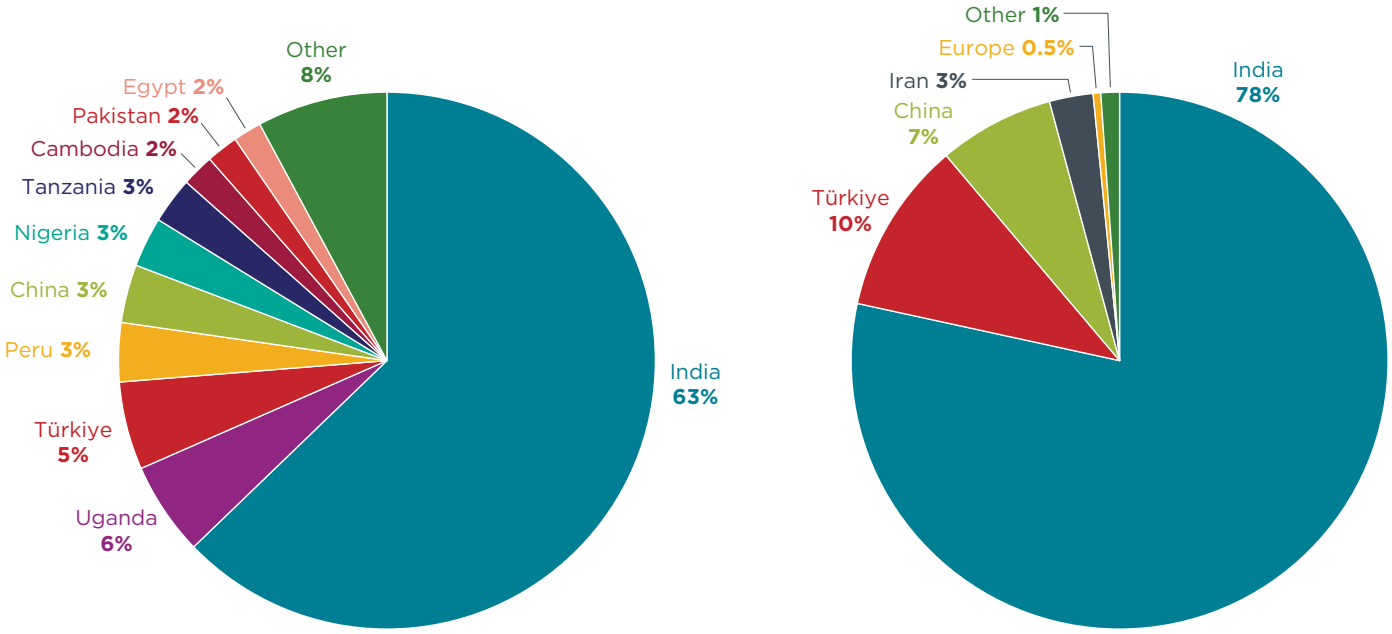
E3W sales were highly concentrated among a small number of markets. India dominated by a wide margin, with about 820,627 units sold in 2025, accounting for over 60% of its total 3W sales that year. Outside of India, sales volumes were significantly smaller. Türkiye ranked a distant second, with approximately 108,900 e3Ws sold, followed by China (73,000) and Iran (27,500); in all three markets, e3Ws accounted for nearly all (98%–100%) new 3Ws sold. Peru, the fourth-largest 3W market, recorded relatively low e3W sales, of a few thousand units. Similarly, Europe and the Americas, where 3Ws are only a small part of the transport landscape, each recorded no more than a few thousand e3W sales. Similarly, sales of e3Ws remained limited in countries in Southeast Asia, such as the Philippines and Cambodia.

DISTRIBUTION OF THE GLOBAL THREE-WHEELER MARKET

The distribution of 2025 3W and e3W sales by country is presented in Figure 18. Over 90% of global 3W sales were concentrated in 10 markets: India (which alone accounted for 63% of sales), Uganda, Türkiye, Peru, China, Nigeria, Tanzania, Cambodia, Pakistan, and Egypt. The global e3W market was more concentrated: India dominated with a 78% share, followed by Türkiye at 10% and China at 7%.

Figure 18

Market share of three-wheelers (left) and electric three-wheelers (right) by country, 2025



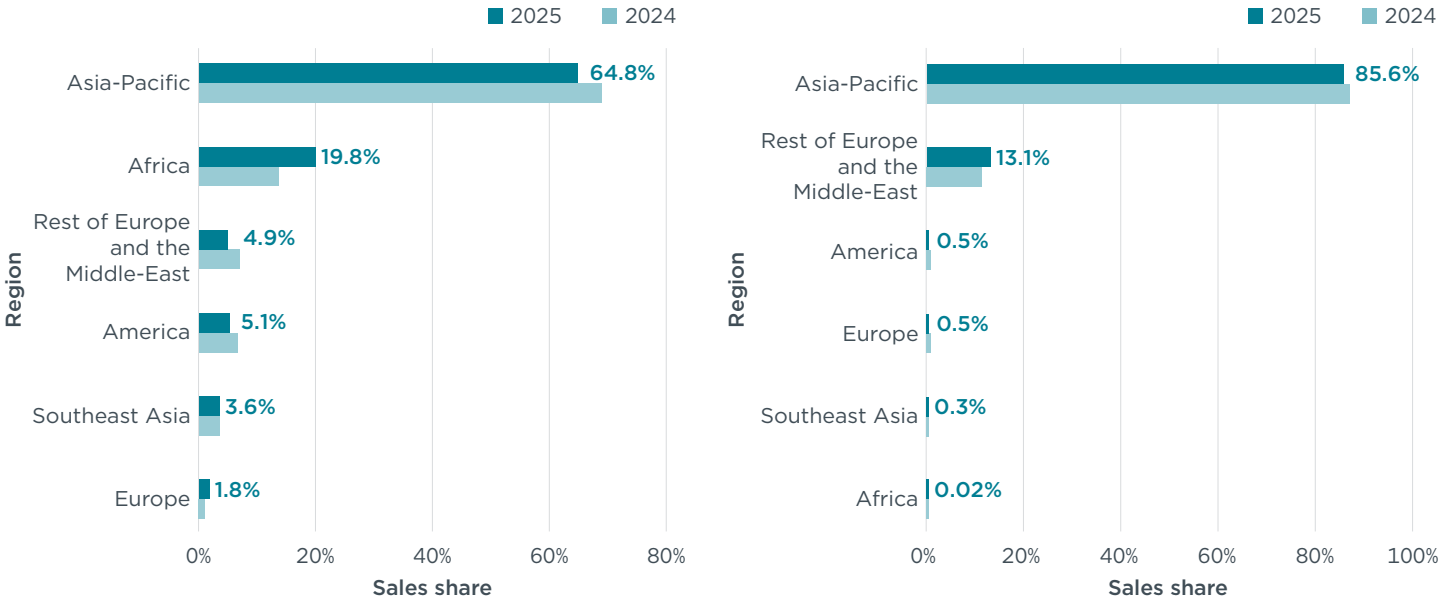
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Figure 19 presents the market share of 3Ws and e3Ws across regions. Asia-Pacific led in both the overall 3W market (64.8%) and the e3W segment (85.6%), driven primarily by sales in India. The rest of Europe and the Middle East emerged as the fastest growing e3W market, with a 13.1% share of global sales, exceeding the region's overall 3W market share of 4.9% in 2025. Türkiye's e3W sales—driven by tax benefits and expanding domestic e3W production—contributed substantially to this growth.

By contrast, other regions with high 3W sales overall had low e3W sales in 2025. Africa, which was responsible for 20% of global 3W sales, accounted for less than 0.1% of e3W sales. Similarly, e3W sales in Southeast Asia remained low, at just 0.3% of total 3W sales. Although some countries in the region, such as Indonesia and the Philippines, have begun to extend their EV frameworks to this segment, incentives and policy measures have remained focused on other segments and public fleets. The Americas and Europe had marginal market shares in both the 3W and e3W segments, reflecting the niche role of 3Ws in urban transport systems in these regions.

Figure 19

Sales share by region for three-wheelers (left) and electric three-wheelers (right), 2024–2025



POLICY OVERVIEW: ELECTRIFICATION OF TWO-WHEELERS AND THREE-WHEELERS

Two- and three-wheelers account for a large share of on-road vehicle fleets and play a key role in the mobility systems of many countries. As a result, these vehicle segments have become a common entry point for national strategies targeting road transport electrification. This section outlines national targets for 2W electrification across the globe, while the next section examines policy measures and incentives implemented to achieve these targets.

Governments have increasingly set explicit (although usually non-binding) electrification targets for 2Ws as part of formal policy frameworks. Consequently, policymakers have implemented a range of regulatory measures and incentive schemes—including tax exemptions for EV imports, investments in battery swapping and charging infrastructure, and pilot projects—to electrify both private and public transport fleets. Although electrification in many countries remains at an early stage, these initiatives are beginning to gain traction, alongside growing interest in EV adoption to address urban transport challenges. Table 1 summarizes electrification targets across different countries announced through 2025.

Table 1
Electrification target examples

Country	Target	Policies[a]
India	• By 2027: 95% electrified sales of new 2Ws and 3Ws, private cars, taxis, light goods vehicles, and buses (including all-electric, plug in-hybrid, and hybrid vehicles) • By 2030: 1 million e2Ws and 500,000 e3Ws	• PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) • Delhi EV Policy 2.0
Indonesia	• By 2030: 13 million electric motorcycles on the road • By 2050: 100% e2W sales	• Indonesia 2050 EV LDV Sales Target • Indonesia EV Charge.IN Plan
Vietnam	• By 2030: 22% of the total 2W fleet is electric • By 2040: Stop the production, assembly, and import of all internal combustion engine vehicles in the country	• Planned LEZs in large cities (Hanoi and Ho Chi Minh City)
Kenya	• By 2027: 30% electric share among new motorcycle sales • By 2050: 100% all-electric motorcycles on the road	• 2023–2027 National Climate Change Action Plan (NCCAP) III • 2022–2050 Long-Term Low-Emission Development Strategy (LT-LEDS)
Pakistan	• By 2030: 30% EV share of new motorcycle and bus sales	• Pakistan New Energy Vehicles Policy 2025–2030
Philippines	• By 2030: 50% electric share among non-household motorcycles • By 2040: 60% electric share among total motorcycle fleet	• Philippines Comprehensive Roadmap for the Electric Vehicle Industry 2023
Thailand	• By 2030: 30% of total motor vehicle production (675,000 motorcycles)	• EV 3.5 Policy Package

[a] India: "PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE)," Ministry of Heavy Industries, accessed July 2, 2026, https://pmedrive.heavyindustries.gov.in/; Government of NCT of Delhi, *Delhi Electric Vehicle Policy 2026 (2026–2030)*, July 1, 2026, https://transport.delhi.gov.in/transport/delhi-ev-policy-2026-0.

Indonesia: Ministry of Energy and Mineral Resources, "Ini Target Pemerintah untuk Populasi Kendaraan Listrik di Tahun 2030" [Here are the government's targets for the electric vehicle fleet by 2030], press release, May 23, 2024, https://www.esdm.go.id/id/media-center/arsip-berita/ini-target-pemerintah-untuk-populasi-kendaraan-listrik-di-tahun-2030; Ministry of Energy and Mineral Resources, "Indonesian Government Supports EV Charging," press release, February 1, 2021, https://www.esdm.go.id/en/media-center/news-archives/indonesian-govt-supports-ev-charging-application.

Vietnam: Prime Minister of Vietnam, Quyết Định Phê Duyệt Chương Trình Hành Động Về Chuyển Đổi Năng Lượng Xanh, Giảm Phát Thải Khí Các-Bon Và Khí Mê-Tan Của Ngành Giao Thông Vận Tải [Decision 876/QĐ-TTg on approving the action program for the transition to green energy and mitigation of carbon dioxide and methane emissions from transportation], July 22, 2022, https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Quyet-dinh876-QD-TTg-2022-chuyen-doi-nang-luong-xanh-giam-khi-cac-bon-nganh-giao-thong-523057.aspx; Government of Vietnam and People's Committee of Ho Chi Minh City, Quyết Định Về Phê Duyệt Kế Hoạch Hành Động Về Kiểm Soát Ô Nhiễm Và Quản Lý Chất Lượng Môi Trường Không Khí Giai Đoạn 2026 - 2030, Tầm Nhìn Đến Năm 2045 Trên Địa Bàn Thành Phố Hồ Chí Minh [On the approval of the Action Plan on Pollution Control and air environment quality management in the period 2026–2030, vision to 2045 in Ho Chi Minh City], April 2, 2026, https://luatvietnam.vn/tai-nguyen/quyet-dinh-1980-qd-ubnd-tphcm-2026-duyet-ke-hoach-kiem-soat-o-nhiem-va-quan-ly-chat-luong-khong-khi-430759-d2.html; Government of Vietnam and People's Committee of Hanoi City, Công Văn 3203/UBND-NNMT Hà Nội 2026 Triển Khai Đề Án Vùng Phát Thải Thấp Vành Đai 1 [Official dispatch 3203/UBND-NNMT Hanoi 2026 implementing the low emission area project belt 1], July 2, 2026, https://luatvietnam.vn/giao-thong/cong-van-3203-ubnd-nnmt-ha-noi-2026-trien-khai-de-an-vung-phat-thai-thap-vanh-dai-1-439440-d2.html.

Kenya: Government of Kenya, *National Climate Change Action Plan (NCCAP) III 2023–2027* (January 1, 2023), https://www.fao.org/faolex/results/details/en/c/LEX-FAOC229355/?__cf_chl_f_tk=6A_aG6vWSebjuQMIrYgPlWfHzrI8.TgRrt32BLNjf_c-1782981545-1.0.1.1-axEV8Qa1LorWtU0OXYWhu_Avc0A5EPbk0MwIM.9e0qk; NDC Partnership, "Kenya Unveils Comprehensive Legal Framework to Accelerate Climate Action," press release, September 4, 2023, https://ndcpartnership.org/news/kenya-unveils-comprehensive-legal-framework-accelerate-climate-action.

Pakistan: Ministry of Industries and Production, *Pakistan National Electric Vehicles Policy 2025–2030* (2025), https://moip.gov.pk/SiteImage/Misc/files/NEV%20Policy%20Final%2013_8_25(2).pdf.

Philippines: Department of Energy, *Comprehensive Roadmap for the Electric Vehicle Industry (CREVI) 2023* (May 5, 2023), https://doe.gov.ph/site/eumb/articles/2557412--comprehensive-roadmap-for-the-electric-vehicle-industry-duplicate-2?redirect=%2Fsite%2Feumb%2Farticles%2Fgroup%2Froadmaps%3Fcategory%3DEnergy%20Efficiency%20and%20Conservation--subcategory%3Dundefined--subject%3Dundefined--type%3Dundefined--display_type%3DCard--title%3DComprehensive%20Roadmap%20for%20the%20Electric%20Vehicle%20Industry.

Thailand: Thailand Board of Investment, "EV Board Gives the Green Light to EV 3.5 Package, Positioning Thailand as the Key Regional Hub for Electric Vehicle Manufacturing," press release, November 1, 2023, https://www.boi.go.th/un/boi_event_detail?module=news&topic_id=134676&language=en.

Policy measures driving the electrification of 2Ws in India include schemes under the Faster Adoption and Manufacturing of Electric Vehicles in India (FAME) II[33] and PM E-DRIVE programs,[34] which provide national-level purchase subsidies for consumers with a target of reaching 1 million e2Ws and 500,000 e3Ws by 2030. At the subnational level, Delhi's EV Policy 2.0 has a target for 95% of new registrations of 2Ws, 3Ws, private cars, taxis, light goods vehicles, and buses to be electric by 2027.[35] Several

33 Ministry of Heavy Industries, "FAME India Scheme Phase II," accessed July 1, 2026, https://heavyindustries.gov.in/en/fame-ii.

34 Government of India, "PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE)," accessed July 1, 2026, https://www.india.gov.in/spotlight/details/pm-electric-drive-revolution-in-innovative-vehicle-enhancement-pm-e-drive.

35 Transport Department, "Delhi Electric Vehicle Policy," accessed July 1, 2026, https://transport.delhi.gov.in/transport/delhi-ev-policy.

other states, including Andhra Pradesh, Madhya Pradesh, and Maharashtra, have also set their own adoption targets through 2029 and 2030.[36]

In Indonesia, the electrification of 2Ws has become a key focus across different government entities, including the Ministry of Energy and PLN (Indonesia's state-owned electricity company). The government aims to reach a cumulative 13 million e2Ws and achieve full electrification of the segment by 2050. Meanwhile, Kenya aims to pursue a low-carbon, climate-resilient development pathway through priority measures related to electric mobility, as elaborated in the *2023–2027 National Climate Change Action Plan (NCCAP) III* and the *2022–2050 Long-Term Low-Emission Development Strategy (LT-LEDS)*. The country aims to increase the share of electric motorcycle sales to at least 30% of total motorcycle sales by 2027 and 100% by 2050.[37]

In some cases, electrification targets for 2Ws are embedded in national EV policy frameworks. The Philippines has targeted a 50% EV share for non-household motorcycles by 2030 and 60% by 2040 under its *Comprehensive Roadmap for the Electric Vehicle Industry*, although implementation of announced support measures has been postponed, limiting the near-term impact of these targets. In Pakistan, the *New Energy Vehicles (NEV) Policy 2025–2030* aims for 30% of all new vehicles to be electric by 2030, including 2Ws and 3Ws.[38]

POLICY MEASURES AND INCENTIVE SCHEMES

Policy approaches to achieve these national targets vary across markets, with Asian countries generally emphasizing fiscal incentives and industrial policy and European countries typically relying more on regulatory measures and phaseout targets. Alternatively, emerging markets such as Indonesia and Colombia have combined fiscal incentives with targeted mandates and non-fiscal benefits.

In China, the growth of e2Ws has been supported by a combination of incentives, city-level restrictions on conventional motorcycles in urban centers, and large-scale charging infrastructure mandates.[39]

Indonesia has introduced purchase incentives, import duty exemptions, and government fleet electrification mandates. As noted above, the country's long-term targets include goals of 100% e2W sales by 2050 and 13 million electric motorcycle sales by 2030. However, Indonesia discontinued some support programs, creating a gap between stated targets and near-term policy execution.[40] The country typically accounts for approximately 1% or less of global e2W sales despite being one of the world's largest 2W markets by total volume.

In India, policymakers rolled out demand-side incentives under the FAME II and PM E-DRIVE regulations. These include a lower goods and services tax on EVs, which has helped lower the total cost of ownership of e2Ws. On the production side, the central government and some state governments have provided battery capacity-based subsidies for advanced chemistry cells, aiming to build domestic battery manufacturing capacity for vehicles, including 2Ws.

36 Arijit Sen et al., *Vision 2050: Update on the Global Zero-Emission Vehicle Transition in 2025* (International Council on Clean Transportation, 2026), https://theicct.org/pr-vision-2050-update-on-the-global-zev-transition-in-2025/.

37 Ministry of Roads and Transport, *National Electric Mobility Policy* (2026), https://www.transport.go.ke/sites/default/files/Emobility%20Policy%20Final.pdf.

38 Press Information Department, "National Electric Vehicle (NEV) Policy 2025–30."

39 Zifei Yang, "A Sneak Peek at the 2025 Global Electric Two-Wheeler Market," *International Council on Clean Transportation Staff Blog*, December 23, 2025, https://theicct.org/sneak-peek-at-the-2025-global-electric-two-wheeler-market-dec25/.

40 Julian Isaac, "Indonesia to Tighten Fiscal Policy on Electric Vehicles Starting 2026," *Indonesia Business Post*, December 22, 2025, https://indonesiabusinesspost.com/5843/markets-and-finance/indonesia-to-tighten-fiscal-policy-on-electric-vehicles-starting-2026.

Thailand's EV3.5 program combines purchase subsidies and reduced excise duties for EVs, including the 2W segment. Similarly, Pakistan offers purchase subsidies for e2Ws and e3Ws through the Cost Sharing scheme.[41] The government also offers custom duty cuts on EVs (including e2Ws) and sales tax exemptions and has rolled out incentives to encourage local manufacturing of EVs; it also plans to introduce incentives for small- and medium-sized EV manufacturers to further boost local production.[42] Table 2 summarizes adopted policies and incentives for e2Ws across selected countries.

Table 2

Demand- and supply-side supporting policies for electric two-and three-wheelers

Policy/incentive type[a]	Purchase incentives	Tax exemptions	Import duty reduction/ exemption	Road restrictions	Public fleet mandates	Industrial policy (manufacturing and battery swapping)
China	¥1 billion incentive under the e-bike trade-in program			Restrictions for ICE 2Ws to enter city center		
Colombia			Motor vehicle tax and VAT exemption	Peak-and-plate traffic restrictions		
India	₹2.6 crore funding for 2Ws and 3Ws under the PM E-DRIVE scheme					Production-linked incentive scheme for advanced batteries
Indonesia		Motor vehicle tax and transfer fee exemptions	Import duty exemption under Minister of Finance Regulation (PMK) Number 10 of 2024			Production incentives with local content requirement
Pakistan	Cost sharing scheme for direct subsidies	Sales tax exemption	Custom duty reductions and exemptions			
Philippines					5% electrification of corporate and government fleet	
Thailand	EV 3.5 Policy Package		EV 3.5 Policy Package			

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Across these jurisdictions, efforts to spur e2W and e3W growth have followed a similar underlying formula: demand-side incentives paired with supply-side manufacturing support and policy levers. To meet their targets—whether binding or aspirational—governments will need to ensure policy measures and incentive schemes remain consistently aligned with these long-term electrification goals or risk a widening gap between policy ambition and realized market share.

APPENDIX: DEFINITION AND DATA SOURCE

DEFINITIONS

Zero-emission vehicles: Motor vehicles that emit zero greenhouse gases or air pollutants at the tailpipe, including battery electric vehicles (BEVs) and hydrogen fuel-cell electric vehicles (FCEVs).

Two-wheelers: Motorcycles and scooters with a top speed of at least 25 km/hr that fit the L1, L2, L3, and L5 category. This includes micromobility options such as electric-assisted bicycles and low-speed electric scooters.

Three-wheelers: Three-wheelers that fall under the UNECE L2, L4, or L5 classification. In India, three-wheelers include e-carts, e-rickshaws, and L3, L5M, and L5N vehicles.

MARKET COVERAGE

Asia-Pacific: Australia, Bangladesh, China, India, Japan, Mongolia, Nepal, New Zealand, Pakistan, South Korea, Sri Lanka.

Southeast Asia: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.

Europe: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

Rest of Europe and the Middle East: Albania, Bosnia, Iran, Israel, Macedonia, Moldova, Montenegro, Russia, Serbia, Türkiye, Ukraine.

Africa: Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa, Tanzania, Uganda.

Americas: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, the United States.

MISSING DATA/INFORMATION

Data on 2W and e2W fleet characteristics were not available for all the models sold in the six regions. This table summarizes the extent of missing data in the fleet characteristic analysis. The percentages indicate the share of vehicles with available characteristic data relative to total 2W sales (for engine size) and total e2W sales (for motor power, range, and maximum speed) in each region.

Region	Engine size		Motor power		Range		Maximum speed	
	2024	2025	2024	2025	2024	2025	2024	2025
America	100%	100%	96%	97%	94%	94%	94%	94%
Rest of Europe and the Middle East	89%	87%	86%	75%	81%	71%	87%	74%
Africa	95%	95%	85%	94%	85%	94%	85%	94%
Europe	99%	99%	92%	91%	92%	90%	93%	91%
Southeast Asia	98%	99%	100%	100%	100%	100%	100%	100%
Asia-Pacific	99%	99%	100%	100%	99%	98%	100%	100%

Data source: New vehicle registration data include content supplied by MotorCycles data.

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