Electric Motorcycle Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Tires, Components & Aftermarket (Automotive & Transportation)
> **Source:** https://www.mordorintelligence.com/industry-reports/electric-motorcycle-market
> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 1.45 billion
Projected Forecast (2031)	USD 1.45 billion
Growth Rate (CAGR)	25.72 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

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![Major players in Electric Motorcycle industry](images/chart_2.png)

![Electric Motorcycle Market Size](images/chart_3.png)

![Electric Motorcycle Market Share by Battery Type, 2025](images/chart_4.png)

![Electric Motorcycle Market Share by Motor Type, 2025](images/chart_5.png)

![Electric Motorcycle Market Growth Rate by Region](images/chart_6.png)

![Electric Motorcycle Market Concentration](images/chart_7.png)

![Icon](images/chart_8.png)

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![Mordor Intelligence on Facebook](images/chart_12.svg)

![Mordor Intelligence on Pinterest](images/chart_14.svg)

![Mordor Intelligence on Instagram](images/chart_15.svg)

![ESOMAR](images/chart_17.png)

![GPTW](images/chart_19.png)
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Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview

Study Period
|

2019 - 2031
|

Market Size (2026)
|

USD 1.45 Billion
|

Market Size (2031)
|

USD 4.54 Billion
|

Growth Rate (2026 - 2031)
|

25.72 %
|

Fastest Growing Market
|

South America
|

Largest Market
|

Asia-Pacific
|

Market Concentration
|

Low
|

Major Players

*Disclaimer: Major Players sorted in no particular order

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Market Overview
Electric Motorcycle Market Analysis by Mordor Intelligence

The electric motorcycle market was valued at USD 1.15 billion in 2025 and is ex pected to grow from USD 1.45 billion in 2026 to USD 4.54 billion by 2031, at a CAGR of 25.72% during the forecast period (2026–2031). Momentum reflects the convergence of urban commuters, delivery fleets, and performance riders on a single technology path that couples battery innovation with policy support. Charging and swap networks are expanding across dense megacities, closing convenience gaps that once favored gasoline. Manufacturers are expanding their product portfolios from entry-level scooters to 60 kW sport bikes, a range that reframes electric two-wheelers as mainstream rather than a novelty. The competitive field remains open, with regional specialists leveraging localized incentives and vertically integrated platforms to win share.

Key Report Takeaways

* By battery type, lithium-ion held 64.52% of the electric motorcycle market share in 2025, while sodium-ion and other emerging chemistries are projected to record a 26.92% CAGR through 2031.

* By power output, motorcycles below 3.6 kW led with 44.21% of the electric motorcycle market share in 2025; those above 10 kW are forecast to post the fastest CAGR, at 28.39% through 2031.

* By motor type, hub motors captured 62.29% of the electric motorcycle market share in 2025, whereas mid-drive motors are anticipated to grow at a 28.49% CAGR through 2031.

* By end-use, personal ownership accounted for 78.31% of the electric motorcycle market size in 2025, and delivery & logistics fleets are advancing at a 29.34% CAGR to 2031.

* By geography, Asia-Pacific commanded 73.28% of the electric motorcycle market share in 2025, and South America is expanding the fastest at a 27.07% CAGR to 2031.

Key Market Trends

Market Trends and Insights

Drivers Impact Analysis of Electric Motorcycle Market*

Driver |

(~) % Impact on CAGR Forecast |

Geographic Relevance |

Impact Timeline |

Li-Ion Cost Drop and Energy Density Gains

|

+3.8%
|

Global, with strongest impact in Asia-Pacific and Europe

|

Medium term (2-4 years)
|

Govt Incentives and Zero-Emission Mandates

|

+3.3%
|

North America and EU core, expanding to Asia-Pacific markets
|

Short term (≤ 2 years)
|

2W Charging and Swap Network Expansion

|

+2.9%
|

Asia-Pacific core, spill-over to South America and MEA
|

Medium term (2-4 years)
|

Micromobility Fleets Lower TCO, Drive Adoption

|

+2.7%
|

Global, with early commercialization in China and India
|

Long term (≥ 4 years)
|

Breakthrough Sodium-Ion and Solid-State Chemistries

|

+2.4%
|

Urban centers globally, concentrated in North America and Europe
|

Short term (≤ 2 years)
|

OTA Connectivity and In-Vehicle Data Monetization

|

+1.8%
|

Developed markets first, expanding to emerging economies
|

Medium term (2-4 years)
|

Source: Mordor Intelligence
|

Competitive Landscape

Competitive Landscape

The electric motorcycle market remains fragmented, with the five largest brands—NIU Technologies, Yadea Group, LiveWire, Vmoto, and Zero Motorcycles—collectively accounting for only a small share of global volume. This fragmentation creates significant opportunities for new entrants. NIU differentiates itself through software, using over-the-air updates and a monthly subscription tier to generate recurring revenue and keep its hardware up to date. This model reduces warranty costs and strengthens customer retention. LiveWire, which Harley-Davidson spun off, mitigates R&D risk by co-developing platforms with KYMCO. Its joint S2 maxi-scooter targets first-time electric vehicle buyers in Europe and Asia. Vmoto and Zero Motorcycles complete the leading group by combining Western brand appeal with contract manufacturing in Asia, enabling them to maintain lean cost structures while preserving premium market positioning.

A second layer of competition comes from agile start-ups that specialize in performance niches. Stark Future’s 60 kW motocross bike illustrates how small teams can leapfrog legacy players by sourcing turnkey powertrains and focusing on lightweight frames and distinctive styling. These brands allocate capital to composite materials and advanced thermal management rather than large dealer networks, relying instead on direct-to-consumer channels and pop-up test-ride events. Battery suppliers increasingly court such specialists with modular packs that integrate battery management systems, thereby cutting engineering lead times.

Regional assemblers and component makers further fragment the field. Kenyan and Rwandan start-ups pair battery-swap infrastructure with locally assembled two-wheelers, tailoring durability for rough roads and monetizing energy subscriptions rather than vehicle sales. European accessory suppliers now offer plug-and-play mid-drive kits that let boutique labels launch limited runs without full homologation cycles. Cloud-based telematics platforms provide over-the-air diagnostics and predictive maintenance analytics, enabling even small brands to match the connectivity features of larger rivals.

Electric Motorcycle Industry Leaders

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NIU Technologies

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Yadea Group Holdings Ltd.

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LiveWire EV, LLC

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Vmoto Limited

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Zero Motorcycles Inc.

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*Disclaimer: Major Players sorted in no particular order

Component Component 3 Scope Of The Report Bottom

Global Electric Motorcycle Market Report Scope

The electric motorcycle market is segmented by battery type, power output, motor/drive type, end use, and geography.

By Battery Type, the market is segmented into Lead-acid, Lithium-ion, Lithium-ion Polymer, Sodium-ion & Emerging. By Power Output, the market is segmented into the following ranges: Below 3.6 kW, 3.6 - 7.2 kW, 7.2 - 10 kW, and Above 10 kW. By Motor / Drive Type, the market is segmented into Hub Motor, Belt Drive, Chain Drive, and Mid-drive Motor. By End-use, the market is segmented into Personal / Individual, Commercial & Corporate, Micromobility Service, and Delivery & Logistics. By Geography, the market is segmented into North America (United States, Canada, and Rest of North America), South America (Brazil, Argentina, and Rest of South America), Europe (United Kingdom, Germany, Spain, Italy, France, Russia, and Rest of Europe), Asia-Pacific (India, China, Japan, South Korea, and Rest of Asia-Pacific), and Middle East & Africa (United Arab Emirates, Saudi Arabia, Turkey, Egypt, South Africa, and Rest of Middle East & Africa).

Market forecasts are provided in terms of Value (USD) and Volume (Units).

By Battery Type

Lead-acid
|

Lithium-ion
|

Lithium-ion Polymer
|

Sodium-ion & Emerging Chemistries
|

Segmentation Accordion Item

By Region

North America
|

United States
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|

Canada
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Rest of North America

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South America
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Brazil
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Argentina
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Rest of South America
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Europe
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United Kingdom
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Germany
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Spain
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Italy
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France
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Russia
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Rest of Europe
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Asia-Pacific
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India
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China
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Japan
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South Korea
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Rest of Asia-Pacific
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Middle East and Africa
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United Arab Emirates
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Saudi Arabia
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Turkey
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Egypt
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South Africa
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Rest of Middle East and Africa
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Frequently Asked Questions

How large will the electric motorcycle market be by 2031?

It is forecasted to reach USD 4.54 billion, expanding at a 25.72% CAGR from 2026 to 2031.

Which battery chemistry grows fastest in electric two-wheelers?

Sodium-ion packs are projected to rise at a 26.92% CAGR through 2031, outpacing lithium variants.

Which power segment shows the highest momentum?

Motorcycles above 10 kW are expected to post the fastest 28.39% CAGR to 2031.

Which region commands the largest share of current electric motorcycle sales?

Asia-Pacific held 73.28% of global revenue in 2025.