

Hydrogen Truck Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Electric Vehicles & Clean Mobility (Automotive & Transportation)

> **Source:** <https://www.mordorintelligence.com/industry-reports/hydrogen-truck-market>

> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
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Base Market Size	USD 3.23 billion
Projected Forecast (2031)	USD 3.23 billion
Growth Rate (CAGR)	20.54 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

![Major players in Hydrogen Truck industry](images/chart_2.png)

![Hydrogen Truck Market Size](images/chart_3.png)

![Hydrogen Truck Market Share by Tonnage Capacity, 2025](images/chart_4.png)

![Hydrogen Truck Market Share by Ownership, 2025](images/chart_5.png)

![Hydrogen Truck Market Growth Rate by Region](images/chart_6.png)

![Hydrogen Truck Market Concentration](images/chart_7.png)

![Icon](images/chart_8.png)

![footer background image](images/chart_10.png)

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![ESOMAR](images/chart_17.png)

![GPTW](images/chart_19.png)

Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market OverviewStudy Period | 2019 - 2031 |

Market Size (2026) | USD 3.23 Billion |

Market Size (2031) | USD 8.22 Billion |

Growth Rate (2026 - 2031) | 20.54 % |

Fastest Growing Market | Asia-Pacific |

Largest Market | Europe |

Market Concentration | Medium |

Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Hydrogen Truck Market Analysis by Mordor Intelligence
The hydrogen truck market size was valued at USD 2.68 billion in 2025 and is expected to reach USD 3.23 billion in 2026 and USD 8.22 billion by 2031, growing at a CAGR of 20.54% over 2026-2031. The hydrogen truck market is moving ahead because heavy-duty freight decarbonization has become a structural requirement, with the EU tightening CO2 rules for new heavy-duty vehicles and pushing OEMs to commit capital to hydrogen platforms rather than treat them as side programs. Cost conditions are also improving, as the U.S. Department of Energy continues to target clean hydrogen production at USD 2/kg by 2026 and USD 1/kg by 2031, which supports the commercial case for the hydrogen truck market, where fuel cost remains the main barrier to parity[1]“Medium and Heavy-Duty Decarbonization,” U.S. Department of Energy, energy.gov. The hydrogen truck market is also benefiting from the fact that long-haul operators still face range, payload, and downtime constraints with battery-electric trucks on demanding duty cycles, while fuel cell trucks are already showing durable real-world performance in commercial freight use. Corridor buildout, shipper-backed freight contracts, and leasing structures that shift residual-value risk away from fleet buyers are widening the practical opportunity set for the hydrogen truck market in Europe, North America, and selected Asia-Pacific routes. Competition remains active but not closed, because first movers in vehicles, infrastructure, and transport-as-a-service still have room to shape standards, capture corridor traffic, and lock in fleet relationships before broader scaling begins across the hydrogen truck market.

Key Report Takeaways* By tonnage capacity, above 30 Tons held 42.15% of the hydrogen truck market share in 2025 and is projected to expand at a 26.75% CAGR through 2031.

* By range, 300-500 miles accounted for 54.33% of the hydrogen truck market size in 2025, while above 500 miles is forecast to grow at a 33.45% CAGR through 2031.

* By application, Logistics captured 57.04% of revenue in 2025, while Mining is projected to advance at a 30.26% CAGR through 2031.

* By ownership, Fleet Operators represented 67.12% of revenue in 2025 and also recorded the highest projected CAGR at 28.14% through 2031.

* By body type, Box Trucks led with 38.05% revenue share in 2025, while Tankers are forecast to grow at a 26.31% CAGR through 2031.

* By geography, Europe led with 45.11% revenue share in 2025, while Asia-Pacific is projected to expand at a 24.65% CAGR through 2031.

Key Market Trends

Market Trends and Insights
Drivers Impact Analysis of Hydrogen Truck Market*
Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |
Green-Hydrogen LCOH Decline | +5.2% | Global, with early gains in renewable-rich hubs across MENA, Iberia, and APAC | Medium term (2-4 years) |
Expansion of Zero-Emission Corridors | +4.8% | North America, Europe, and China corridor systems | Medium term (2-4 years) |
Limitations for Long-Haul Duty Cycles | +3.1% | Global, strongest in North America and continental Europe | Short term (≤ 2 years) |
Clean-Fuel Procurement Mandates | +2.9% | North America and Europe, with spillover into export corridors | Medium term (2-4 years) |
Renewable-Energy Curtailment Monetization | +2.0% | APAC, Europe, MENA, and selected U.S. renewable regions | Long term (≥ 4 years) |
OEM Leasing Models | +1.7% | North America and Europe, with early extension into Canada and South Korea | Short term (≤ 2 years) |
Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The hydrogen truck market remains moderately fragmented, with a small group of OEMs accounting for most visible commercial deployments while a wider set of infrastructure, fuel, finance, and service providers compete around them. Hyundai holds a first-mover advantage through XCIENT deployments and the scale of its HTWO platform, which gives it a more integrated operating footprint than many rivals across the current hydrogen truck market. Daimler Truck, Volvo Group, and Toyota are building a strong counterweight through Cellcentric, which shows that competition is shifting from isolated truck programs toward shared fuel cell platforms with broader industrial backing. That move is strategically important because it combines commercial vehicle scale with long-standing fuel cell know-how and raises the likelihood of more standardized heavy-duty technology paths. It also suggests that future leadership in the hydrogen truck market will depend on depth across manufacturing, systems integration, and fuel ecosystem partnerships rather than on vehicle assembly alone.

The competitive white space is strongest in bundled service models, because fleets still need fuel access, financing, maintenance, digital fleet support, and residual-value protection in one package rather than through separate vendors. Hyroad Energy's model in California and Hylika's approach in France both point to a version of the hydrogen truck market where the winning commercial offer is a managed operating solution rather than a truck sale by itself. Scania's pilot partner strategy also fits this pattern, since it uses real freight customers to gather operational data before scaling commercial supply more aggressively. These strategies matter because the hydrogen truck market still needs learning loops from actual route data, not only engineering validation. In effect, companies that can shorten that learning cycle while keeping customer risk low are gaining a durable competitive advantage.

A second layer of competition is forming around certification, technology standards, and fuel architecture. Safety standards such as ISO 23273 and the ongoing evolution of global technical rules continue to shape who can enter the hydrogen truck market credibly and at what cost. Volvo's 2026 hydrogen combustion testing and Daimler's liquid hydrogen development show that the market is still open on powertrain pathways, even though fuel cell trucks remain the core commercial narrative. That diversity keeps the hydrogen truck market innovative, but it also delays full standardization in infrastructure and asset planning. Over the next few years, companies that can align vehicle technology with dependable fueling, financing, and service support are likely to outperform peers that remain strong in only one part of the value chain.

Hydrogen Truck Industry Leaders* Hyundai Motor Company

- * Daimler Truck AG
- * Toyota Motor Corporation
- * Volvo Group
- * Dongfeng Motor Corporation

* *Disclaimer: Major Players sorted in no particular order

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Component Component 3 Scope Of The Report Bottom

Global Hydrogen Truck Market Report ScopeThe scope includes segmentation by tonnage capacity (3.5 to 7.5 tons, 7.5 to 16 tons, 16 to 30 tons, and above 30 tons), range (below 300 miles, 300–500 miles, and above 500 miles), application (logi

stics, construction, agriculture, mining, utility, and others), ownership (fleet operators and individual owners), and body type (flatbed, box truck, refrigerated, tanker, and tipper). The analysis also covers regional-level segmentation, including North America, South America, Europe, Asia-Pacific, the Middle East, and Africa. Market size and growth forecasts are presented by value in USD and by volume in units.

By Tonnage Capacity3.5 to 7.5 Tons |
7.5 to 16 Tons |
16 to 30 Tons |
Above 30 Tons |

Segmentation Accordion Item

By GeographyNorth America | United States |
| Canada |
| Rest of North America |
South America | Brazil |
| Argentina |
| Rest of South America |
Europe | United Kingdom |
| Germany |
| Spain |
| Italy |
| France |
| Russia |
| Rest of Europe |
Asia-Pacific | India |
| China |
| Japan |
| South Korea |
| Rest of Asia-Pacific |
Middle East and Africa | United Arab Emirates |
| Saudi Arabia |
| Turkey |
| Egypt |
| South Africa |
| Rest of Middle East and Africa |

Frequently Asked Questions

What is the current value of the hydrogen truck market?

The hydrogen truck market is valued at USD 3.23 billion in 2026. It is forecast to reach USD 8.22 billion by 2031 at a 20.54% CAGR.

Which region leads global adoption of hydrogen-powered trucks?

Europe led with 45.11% share in 2025. Its lead is supported by corridor rules, renewable hydrogen policy, and active fleet support programs.

Which segment is growing fastest by application?

Mining is the fastest-growing application with a 30.26% CAGR through 2031. Remote operations, heavy haul cycles, and limited grid access support this growth.

Which ownership model is leading adoption?

Fleet operators lead with 67.12% share in 2025 and also post the fastest growth at 28.14% CAGR. Their scale helps secure fuel contracts, financing, and service support that smaller buyers usually cannot match.