

Global Heavy-duty Electric Trucks Market to Reach USD 6.58 Billion by 2032

<https://marketpublishers.com/r/G9D999355DDFEN.html>

Date: February 2025

Pages: 285

Price: US\$ 3,750.00 (Single User License)

ID: G9D999355DDFEN

Abstracts

The Global Heavy-duty Electric Trucks Market is valued at approximately USD 1.22 billion in 2023 and is anticipated to witness an accelerated compound annual growth rate (CAGR) of 6.58% from 2024 to 2032. With mounting regulatory pressure to curb carbon emissions and stringent environmental policies, industries are increasingly shifting towards electrified transportation solutions. Heavy-duty electric trucks, leveraging advanced propulsion systems and next-generation battery technology, are rapidly transforming logistics, construction, and waste management sectors. As governments worldwide reinforce sustainability mandates, the adoption of zero-emission trucks is expected to surge, reshaping the global freight and industrial transportation landscape.

The accelerated market expansion is primarily driven by technological advancements in battery efficiency, along with the declining cost of lithium-ion batteries. Industry giants are making substantial investments in R&D, focusing on enhancing payload capacity, optimizing power efficiency, and improving charging infrastructure. Notably, the introduction of hydrogen fuel cell trucks has opened new avenues for long-haul applications, ensuring extended range and faster refueling. Furthermore, government incentives and subsidies supporting the deployment of electric trucks are encouraging fleet operators to transition towards sustainable transport solutions. However, high initial investment costs, limited charging infrastructure, and battery weight constraints remain significant hurdles to mass adoption.

North America dominates the heavy-duty electric trucks market, fueled by aggressive policy measures, such as the Zero-Emission Vehicle (ZEV) Program and increasing investments in EV infrastructure. Europe follows closely, driven by strict emission regulations under the EU Green Deal and initiatives like the European Battery Alliance

(EBA), which focus on securing a competitive supply chain for battery-powered commercial vehicles. Meanwhile, the Asia-Pacific region is set to experience the highest growth rate, spearheaded by China, Japan, and South Korea, which are heavily investing in EV charging networks and pioneering battery technology innovations.

To stay ahead of the curve, major players in the heavy-duty electric truck market are forming strategic partnerships with battery manufacturers and energy providers to scale up production and expand their charging infrastructure footprint. Additionally, the integration of AI-powered fleet management systems and telematics solutions is enhancing vehicle efficiency, reducing operational costs, and boosting overall fleet sustainability. As nations continue pushing toward a zero-emission future, the global heavy-duty electric trucks market is poised for exponential growth, reshaping the future of commercial transportation.

Major Market Players Included in This Report:

Tesla Inc.

Daimler Truck AG

Volvo Group

BYD Company Ltd.

PACCAR Inc.

Scania AB

Nikola Corporation

Rivian Automotive Inc.

Tata Motors Limited

Hyundai Motor Company

Navistar International Corporation

Ford Motor Company

MAN Truck & Bus SE

Hino Motors Ltd.

XOS Trucks Inc.

The Detailed Segments and Sub-segments of the Market are Explained Below:

By Vehicle Class:

Class 7

Class 8

By Propulsion Type:

Battery Hybrid Electric Vehicle (BEV)

Plug-in Hybrid Electric Vehicle (PHEV)

Hybrid Electric Vehicle (HEV)

By Application:

Logistics & Delivery

Construction

Waste Management

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Rest of Latin America

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Key Takeaways:

Market estimates and forecasts for 10 years from 2022 to 2032.

Annualized revenues and regional-level analysis for each market segment.

Detailed analysis of the geographical landscape with country-level insights.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations for future market approaches.

In-depth evaluation of market demand-supply dynamics and competitive structure.

Contents

CHAPTER 1.GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET EXECUTIVE SUMMARY

- 1.1.Global Heavy-duty Electric Trucks Market Size & Forecast (2022-2032)
- 1.2.Regional Summary
- 1.3.Segmental Summary
 - 1.3.1.{By Vehicle Class}
 - 1.3.2.{By Propulsion Type}
 - 1.3.3.{By Application}
- 1.4.Key Trends
- 1.5.Recession Impact
- 1.6.Analyst Recommendation & Conclusion

CHAPTER 2.GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1.Research Objective
- 2.2.Market Definition
- 2.3.Research Assumptions
 - 2.3.1.Inclusion & Exclusion
 - 2.3.2.Limitations
 - 2.3.3.Supply Side Analysis
 - 2.3.3.1.Availability
 - 2.3.3.2.Infrastructure
 - 2.3.3.3.Regulatory Environment
 - 2.3.3.4.Market Competition
 - 2.3.3.5.Economic Viability (Consumer's Perspective)
 - 2.3.4.Demand Side Analysis
 - 2.3.4.1.Regulatory Frameworks
 - 2.3.4.2.Technological Advancements
 - 2.3.4.3.Environmental Considerations
 - 2.3.4.4.Consumer Awareness & Acceptance
- 2.4.Estimation Methodology
- 2.5.Years Considered for the Study
- 2.6.Currency Conversion Rates

CHAPTER 3.GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET DYNAMICS

3.1. Market Drivers

- 3.1.1. Increasing demand for sustainable, zero-emission transportation solutions
- 3.1.2. Advancements in battery efficiency and next-generation propulsion technologies
- 3.1.3. Robust government incentives and supportive regulatory frameworks

3.2. Market Challenges

- 3.2.1. High initial capital expenditure and cost-intensive technology integration
- 3.2.2. Limited charging infrastructure and constraints in battery weight and performance

3.3. Market Opportunities

- 3.3.1. Expansion in emerging markets and strategic global supply chain integration
- 3.3.2. Innovations in hydrogen fuel cell technology and AI-driven telematics solutions
- 3.3.3. Collaborative partnerships for infrastructure development and R&D advancement

CHAPTER 4. GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET INDUSTRY ANALYSIS

4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economical
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

4.3. Top Investment Opportunity

4.4. Top Winning Strategies

4.5. Disruptive Trends

4.6. Industry Expert Perspective

4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET SIZE & FORECASTS BY VEHICLE CLASS 2022-2032

5.1.Segment Dashboard

5.2.Global Heavy-duty Electric Trucks Market: {Vehicle Class} Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

5.2.1.Class

5.2.2.Class

CHAPTER 6.GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET SIZE & FORECASTS BY PROPULSION TYPE 2022-2032

6.1.Segment Dashboard

6.2.Global Heavy-duty Electric Trucks Market: {Propulsion Type} Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

6.2.1.Battery Hybrid Electric Vehicle (BEV)

6.2.2.Plug-in Hybrid Electric Vehicle (PHEV)

6.2.3.Hybrid Electric Vehicle (HEV)

CHAPTER 7.GLOBAL HEAVY-DUTY ELECTRIC TRUCKS MARKET SIZE & FORECASTS BY REGION 2022-2032

7.1.North America Heavy-duty Electric Trucks Market

7.1.1.U.S. Heavy-duty Electric Trucks Market

7.1.1.1.{Vehicle Class} Breakdown Size & Forecasts, 2022-2032

7.1.1.2.{Propulsion Type} Breakdown Size & Forecasts, 2022-2032

7.1.2.Canada Heavy-duty Electric Trucks Market

7.2.Europe Heavy-duty Electric Trucks Market

7.2.1.UK Heavy-duty Electric Trucks Market

7.2.2.Germany Heavy-duty Electric Trucks Market

7.2.3.France Heavy-duty Electric Trucks Market

7.2.4.Spain Heavy-duty Electric Trucks Market

7.2.5.Italy Heavy-duty Electric Trucks Market

7.2.6.Rest of Europe Heavy-duty Electric Trucks Market

7.3.Asia-Pacific Heavy-duty Electric Trucks Market

7.3.1.China Heavy-duty Electric Trucks Market

7.3.2.India Heavy-duty Electric Trucks Market

7.3.3.Japan Heavy-duty Electric Trucks Market

7.3.4.Australia Heavy-duty Electric Trucks Market

7.3.5.South Korea Heavy-duty Electric Trucks Market

7.3.6.Rest of Asia-Pacific Heavy-duty Electric Trucks Market

- 7.4.Latin America Heavy-duty Electric Trucks Market
 - 7.4.1.Brazil Heavy-duty Electric Trucks Market
 - 7.4.2.Mexico Heavy-duty Electric Trucks Market
 - 7.4.3.Rest of Latin America Heavy-duty Electric Trucks Market
- 7.5.Middle East & Africa Heavy-duty Electric Trucks Market
 - 7.5.1.Saudi Arabia Heavy-duty Electric Trucks Market
 - 7.5.2.South Africa Heavy-duty Electric Trucks Market
 - 7.5.3.Rest of Middle East & Africa Heavy-duty Electric Trucks Market

CHAPTER 8.COMPETITIVE INTELLIGENCE

- 8.1.Key Company SWOT Analysis
 - 8.1.1.Tesla Inc.
 - 8.1.2.Daimler Truck AG
 - 8.1.3.Volvo Group
- 8.2.Top Market Strategies
- 8.3.Company Profiles
 - 8.3.1.Tesla Inc.
 - 8.3.1.1.Key Information
 - 8.3.1.2.Overview
 - 8.3.1.3.Financial (Subject to Data Availability)
 - 8.3.1.4.Product Summary
 - 8.3.1.5.Market Strategies
 - 8.3.2.Daimler Truck AG
 - 8.3.3.Volvo Group
 - 8.3.4.BYD Company Ltd.
 - 8.3.5.PACCAR Inc.
 - 8.3.6.Scania AB
 - 8.3.7.Nikola Corporation
 - 8.3.8.Rivian Automotive Inc.
 - 8.3.9.Tata Motors Limited
 - 8.3.10.Hyundai Motor Company
 - 8.3.11.Navistar International Corporation
 - 8.3.12.Ford Motor Company
 - 8.3.13.MAN Truck & Bus SE
 - 8.3.14.Hino Motors Ltd.
 - 8.3.15.XOS Trucks Inc.

CHAPTER 9.RESEARCH PROCESS

9.1. Research Process

9.1.1. Data Mining

9.1.2. Analysis

9.1.3. Market Estimation

9.1.4. Validation

9.1.5. Publishing

9.2. Research Attributes

I would like to order

Product name: Global Heavy-duty Electric Trucks Market to Reach USD 6.58 Billion by 2032

Product link: <https://marketpublishers.com/r/G9D999355DDFEN.html>

Price: US\$ 3,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G9D999355DDFEN.html>