

# Electric Commercial Trucks and Buses

**ANMD-MRS16-160 · E-Mobility & Autonomous Transport Technologies**

*A Global Sustainability Due Diligence & Market Research Study*

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

## WHY THIS REPORT

Electric commercial trucks and buses electrify the heaviest, highest-mileage segment of road transport — transit buses, heavy- and medium-duty trucks, coaches and hydrogen fuel-cell vehicles. With outsized emissions per vehicle, their electrification delivers disproportionate climate and air-quality benefits. This decision-grade study sizes the global market three ways — value, units shipped and fleet in operation — across vehicle class, powertrain, application and end-user, across seven regions and four scenarios to 2032, with outlooks to 2050.

## SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report’s backbone. Electric trucks and buses cut outsized per-vehicle emissions and urban air pollution, while raising battery-material, grid-impact and just-transition questions that responsible deployment must address.

**Mapped Sustainable Development Goals:**

<b>SDG 7</b> Affordable Clean Energy	<b>SDG 9</b> Industry & Innovation	<b>SDG 11</b> Sustainable Cities	<b>SDG 12</b> Responsible Consumption	<b>SDG 13</b> Climate Action
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**Measurable sustainability outcomes assessed:**

- Zero-tailpipe urban transport and cleaner air
- Lower total cost of ownership on high-mileage duty cycles
- Fleet-emissions compliance at scale
- Critical-mineral sourcing, grid impact and just-transition as material risks

**Framework alignment:** Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

## WHAT'S INSIDE AT A GLANCE

<b>53</b> Chapters	<b>9</b> Report Parts	<b>7</b> Regions Covered	<b>40+</b> Country Markets
<b>2025–32</b> Forecast Horizon	<b>4</b> Forward Scenarios	<b>25+</b> Companies Profiled	<b>5</b> SDGs Mapped

## REPORT COVERAGE

**Geographic scope:** North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. Asia Pacific dominates deployment (China) on massive electric-bus and growing truck fleets; Europe scales on zero-emission zones and CO<sub>2</sub> truck standards; North America grows on the Advanced Clean Trucks rule; other regions assessed on their own merits.

## MARKET OVERVIEW

### From transit-bus beachhead to broader freight electrification.

Electric trucks and buses are moving from transit-bus beachhead to broader freight electrification. Demand is driven by zero-emission mandates, fleet TCO and depot-charging build-out, against high upfront cost, range and payload limits and depot-grid needs. The market is read three ways — value, units shipped and fleet in operation — and forecast under four scenarios, each region reported separately.

- **Asia Pacific dominates deployment** — China's massive electric-bus and growing electric-truck fleets and manufacturing base
- **Europe scales on mandates** — city zero-emission zones, CO<sub>2</sub> truck standards and bus-electrification programmes
- **North America grows on regulation** — California's Advanced Clean Trucks rule and federal funding for fleets
- **Total cost of ownership is the differentiator** — high-mileage duty cycles make electric TCO competitive faster than for passenger vehicles

## REGIONAL OUTLOOK

Across seven reporting regions, the report separates deployment leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Country Markets & Drivers
Asia Pacific	Deployment leader	China, India, South Korea — electric buses, truck fleets, manufacturing
Europe	Mandate-driven	Germany, France, Netherlands — ZE zones, truck CO <sub>2</sub> standards
North America	Regulation-led	United States, Canada — Advanced Clean Trucks, fleet funding
Middle East	Strategy-led	Saudi Arabia, UAE — bus electrification, sovereign investment
Latin America	Emerging	Brazil, Chile — electric-bus fleets (Santiago leadership)
Africa	Frontier	South Africa, Kenya — bus and fleet pilots

## KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> <li>• Zero-emission zones &amp; truck CO<sub>2</sub> standards</li> <li>• Fleet TCO on high-mileage duty cycles</li> <li>• Transit-bus &amp; municipal electrification</li> <li>• Depot &amp; megawatt charging build-out</li> <li>• Battery &amp; fuel-cell advances</li> </ul>	<ul style="list-style-type: none"> <li>• High upfront cost &amp; financing</li> <li>• Range, payload &amp; charging-time limits</li> <li>• Depot-charging &amp; grid-upgrade needs</li> <li>• Residual-value &amp; battery-life uncertainty</li> <li>• Hydrogen-infrastructure gaps (fuel-cell)</li> </ul>

## SEGMENTATION SNAPSHOT

<b>By Vehicle Class</b>	Electric transit buses · heavy-duty trucks · medium-duty trucks · coaches · hydrogen fuel-cell commercial
<b>By Powertrain</b>	Battery-electric · hydrogen fuel-cell · range-extended
<b>By Application</b>	Passenger · commercial · two-wheeler / micro-mobility
<b>By End User</b>	OEMs · fleet operators · charge-point operators · consumers
<b>By Business Model</b>	Hardware sales · software / subscription · services
<b>By Scale</b>	Consumer · fleet · OEM / industrial-scale

## TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

### Part I — Report Foundation, Discovery and Strategic Intelligence

- › Chapter 1. Scope, Methodology and Report Architecture
- › Chapter 2. Industry Discovery Summary — Electric Commercial Trucks and Buses
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

### Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- › Chapter 5. Industry Overview and Market Evolution
- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
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- › Chapter 9. End-User and Demand-Side Intelligence
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### Part IV — Technology, Innovation and Category-Specific Intelligence

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- › Chapter 20. Emerging and Next-Generation Technology Intelligence
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- › Chapter 22. Research, Innovation and Funding Landscape

**Part V — Company, Competition, Patent and Project Intelligence**

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**Part VII — Supply Chain, Policy, Legal, Economics and Finance**

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**Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict**

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- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
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**Part IX — Annexes, Directories and Reference Material**

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- › Chapter 53. Reference Annexes

**COMPETITIVE & INVESTMENT SNAPSHOT**

The competitive field spans Chinese commercial-EV leaders, established truck and bus OEMs, and new entrants, against the cautionary backdrop of Proterra's restructuring. Deal activity — M&A, technology acquisition and platform expansion — signals a market consolidating around scalable, bankable, deployment-ready solutions.

**Representative players profiled in the full report:**

BYD Company Limited · Daimler Truck Holding AG · Volvo Trucks (AB Volvo) · TRATON SE (MAN / Scania) · Tesla, Inc. (Tesla Semi) · and further profiled commercial-EV OEMs

**Investment intelligence:** venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a clear investment verdict.

## KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global electric commercial-vehicle market, and how fast will it grow to 2032?
- ? Which regions, vehicle classes and powertrains offer the strongest risk-adjusted opportunity?
- ? How do TCO, depot charging and fuel-cell pathways change fleet viability?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the category align with the SDGs, fleet-emissions and just-transition policy?

## WHY ANMD — THE DIFFERENCE

*Most market studies stop at tonnes and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, carbon-integrity and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.*

- **Triangulated sizing** — every market read three ways (value (US\$), units shipped and fleet in operation) so value, capacity and volume views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, conditions-based investment verdict.

## WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, fleet operators and logistics firms, truck and bus OEMs, transit authorities, charging and depot providers, policymakers, lenders and ESG teams, plus strategic corporate planners and decision-makers.

## Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com) · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

## Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com). The full detailed table of contents will be sent directly to your registered company email address.