

CNG Powertrain Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Market Report | 2024-11-05 | 180 pages | Global Market Insights

AVAILABLE LICENSES:

- Single User \$4850.00
- Multi User \$6050.00
- Enterprise User \$8350.00

Report description:

The Global CNG Powertrain Market, valued at USD 90.3 billion in 2023, is projected to grow at a compound annual growth rate (CAGR) of 17.2% from 2024 to 2032. This growth is primarily driven by increasing environmental regulations and emissions standards worldwide. Governments are intensifying efforts to reduce greenhouse gas emissions and improve air quality, particularly in urban areas with high pollution levels. As a result, CNG vehicles, which emit lower levels of nitrogen oxides, particulate matter, and carbon dioxide than traditional gasoline and diesel vehicles, are gaining popularity.

These stricter regulations encourage both automakers and fleet operators to invest in CNG technology to comply with environmental standards while benefiting from tax incentives and subsidies. With growing environmental awareness, the demand for eco-friendly transportation solutions like CNG powertrains is expected to rise, further fueling market expansion.

In addition to regulatory support, the expansion of CNG refueling infrastructure is a key factor driving market growth. Increased investments by governments and private entities in building more refueling stations enhance accessibility for both individual consumers and fleet operators. This widespread availability helps alleviate concerns about refueling options, allowing CNG vehicle owners to drive with confidence.

The improved infrastructure also supports the adoption of CNG vehicles in public transportation and commercial fleets, accelerating the shift towards cleaner energy solutions. The presence of a robust refueling network encourages manufacturers to produce more models designed for CNG use, further stimulating market growth. As the infrastructure continues to expand, CNG is becoming an increasingly viable and attractive alternative fuel option.

The market is segmented by vehicle type into light commercial vehicles (LCVs), heavy commercial vehicles (HCVs), and passenger cars. The passenger car segment held the largest market share in 2023, accounting for over 45%, and is expected to surpass USD 180 billion by 2032. CNG-powered passenger cars are popular due to their lower cost of ownership, as CNG is typically more

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

affordable than gasoline or diesel. Additionally, advancements in CNG technology have improved fuel efficiency, making CNG vehicles a more attractive option for environmentally conscious consumers.

The market is also segmented by drive type, including front-wheel drive (FWD), rear-wheel drive (RWD), and all-wheel drive (AWD). The FWD segment held the largest share in 2023, at around 58%, owing to its cost-effectiveness and efficiency, especially for urban and passenger vehicles. FWD systems are ideal for small to mid-sized vehicles and contribute to better fuel economy and reduced production costs.

In 2023, the Asia Pacific region accounted for 45% of the global CNG powertrain market revenue, with China leading the market. The region's focus on clean energy and investments in CNG infrastructure has driven the widespread adoption of CNG vehicles, particularly in urban and commercial sectors. Stringent emissions regulations and the demand for cost-effective transportation solutions also contribute to market growth in the region.

Table of Contents:

Report Content

Chapter 1 Methodology & Scope

1.1 Research design

1.1.1 Research approach

1.1.2 Data collection methods

1.2 Base estimates and calculations

1.2.1 Base year calculation

1.2.2 Key trends for market estimates

1.3 Forecast model

1.4 Primary research & validation

1.4.1 Primary sources

1.4.2 Data mining sources

1.5 Market definitions

Chapter 2 Executive Summary

2.1 Industry 360 synopsis, 2021 - 2032

Chapter 3 Industry Insights

3.1 Industry ecosystem analysis

3.2 Supplier landscape

3.2.1 Natural gas suppliers

3.2.2 CNG kit manufacturers

3.2.3 Vehicle manufacturers

3.2.4 CNG filling station operators

3.2.5 Aftermarket service providers

3.3 Profit margin analysis

3.4 Comparison of automotive powertrain vs CNG powertrain

3.5 Technology & innovation landscape

3.6 Key news & initiatives

3.7 Regulatory landscape

3.8 Impact forces

3.8.1 Growth drivers

3.8.1.1 Stricter environmental regulations and emission standards worldwide

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 3.8.1.2 Rising awareness of climate change and sustainability
- 3.8.1.3 Technological advancements in engine and fuel storage technology
- 3.8.1.4 Expansion in the CNG refueling infrastructure
- 3.8.1.5 Governments in various regions are offering subsidies, tax incentives, and grants
- 3.8.2 Industry pitfalls & challenges
 - 3.8.2.1 Higher initial vehicle and conversion costs
 - 3.8.2.2 Reduced driving range compared to conventional fuels
- 3.9 Growth potential analysis
- 3.10 Porter's analysis
- 3.11 PESTEL analysis

Chapter 4 Competitive Landscape, 2023

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

Chapter 5 Market Estimates & Forecast, By Component, 2021 - 2032 (\$Bn, Units)

- 5.1 Key trends
- 5.2 Engine
- 5.3 Fuel injector
- 5.4 Transmission
- 5.5 Fuel tank
- 5.6 Exhaust system
- 5.7 Control unit

Chapter 6 Market Estimates & Forecast, By Vehicle, 2021 - 2032 (\$Bn, Units)

- 6.1 Key trends
- 6.2 Passenger cars
 - 6.2.1 Sedans
 - 6.2.2 Hatchbacks
 - 6.2.3 SUV
- 6.3 Commercial vehicles
 - 6.3.1 Light Commercial Vehicles (LCV)
 - 6.3.2 Heavy Commercial Vehicles (HCV)

Chapter 7 Market Estimates & Forecast, By Drive, 2021 - 2032 (\$Bn, Units)

- 7.1 Key trends
- 7.2 Front Wheel Drive (FWD)
- 7.3 Rear Wheel Drive (RWD)
- 7.4 All-Wheel Drive (AWD)

Chapter 8 Market Estimates & Forecast, By Fuel, 2021 - 2032 (\$Bn, Units)

- 8.1 Key trends
- 8.2 Mono-fuel
- 8.3 Bi-fuel

Chapter 9 Market Estimates & Forecast, By Application, 2021 - 2032 (\$Bn, Units)

- 9.1 Key trends
- 9.2 Transportation
- 9.3 Logistics
- 9.4 Industrial

Chapter 10 Market Estimates & Forecast, By Region, 2021 - 2032 (\$Bn, Units)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 10.1 Key trends
- 10.2 North America
 - 10.2.1 U.S.
 - 10.2.2 Canada
- 10.3 Europe
 - 10.3.1 UK
 - 10.3.2 Germany
 - 10.3.3 France
 - 10.3.4 Spain
 - 10.3.5 Italy
 - 10.3.6 Russia
 - 10.3.7 Nordics
- 10.4 Asia Pacific
 - 10.4.1 China
 - 10.4.2 India
 - 10.4.3 Japan
 - 10.4.4 South Korea
 - 10.4.5 ANZ
 - 10.4.6 Southeast Asia
- 10.5 Latin America
 - 10.5.1 Brazil
 - 10.5.2 Mexico
 - 10.5.3 Argentina
- 10.6 MEA
 - 10.6.1 UAE
 - 10.6.2 South Africa
 - 10.6.3 Saudi Arabia

Chapter 11 Company Profiles

- 11.1 AB Volvo
- 11.2 Continental AG
- 11.3 Cummins Inc.
- 11.4 Ford Motor Company
- 11.5 FPT Industrial S.P.A.
- 11.6 General Motors Company
- 11.7 Honda Motor Company
- 11.8 Hyundai Motor Company
- 11.9 IVECO S.p.A.
- 11.10 Landi Renzo
- 11.11 Mahindra & Mahindra Ltd.
- 11.12 MAN SE
- 11.13 NGV Motori
- 11.14 Nissan Motor Co., Ltd.
- 11.15 Robert Bosch GmbH.
- 11.16 Stellantis N.V.
- 11.17 Suzuki Motor Corporation
- 11.18 Tata Motors Limited
- 11.19 Volkswagen AG

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

11.20 Westport Fuel Systems Inc.



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

CNG Powertrain Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Market Report | 2024-11-05 | 180 pages | Global Market Insights

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	\$4850.00
	Multi User	\$6050.00
	Enterprise User	\$8350.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-10"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com