

# Global Markets for Natural Gas Vehicle Components

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## Abstracts

Battered by gasoline and diesel fuel prices in recent years, many consumers, businesses and industries are intrigued by natural gas vehicles (NGVs), the most prevalent on-road alternative fuel vehicles in the world. In the last five years, record numbers of NGVs have been added to the road worldwide, either the conversion of existing diesel and gasoline vehicles or purchases of factory model NGVs. Natural gas vehicles present consumers and fleet owners with significant vehicle lifetime fuel savings, lower emissions and cleaner burning vehicle operation.

Recent margins between the pump prices for petroleum fuels and compressed (CNG) or liquefied natural gas (LNG) have never been better in many countries, including the United States. While influenced by diverse factors, fuel markets in Asia, Europe and the Americas all feature a relative discount for natural gas compared to petroleum fuels. Gasoline and diesel prices globally are being increasingly strained by transportation demand in the developing world. The future global NGV market is even more auspicious given the potential of shale gas and other unconventional natural gas deposits to boost regional natural gas production around the world.

As a fuel both dynamic in its sourcing (new deposits, reserves, and renewable production), natural gas requires technological keys to unlock the potential of its greater supply through applications in transportation. NGV components represent a multi-billion dollar global industry as the tools of petroleum fuel displacement with cleaner, cheaper natural gas. Backed by recent, unprecedented growth in NGV populations worldwide, NGV components outfitted onto factory models or aftermarket converted vehicles represent a leading supply chain market in the alternative vehicle field.

Providing a product- and technology-oriented analysis of the global NGV market, Global Markets for Natural Gas Vehicle Components presents 2008-2022 market data for the core components of NGVs:

NGV fuel storage cylinders and tanks (market value and units sold; type I metal cylinders vs. composites cylinders; light duty [LD] vehicle cylinders vs. medium and heavy duty [MD/HD] cylinders)

NGV fuel delivery systems and conversion kits (market value and units sold)

Dedicated natural gas vehicle engines (market value and units sold) Global NGV components markets are also broken out by geographic region:

Asia-Pacific

Middle East & Africa

Russia and the Commonwealth of Independent States (CIS)

Europe

North America

Latin America

Some country markets such as China, the United States, India, Brazil and Russia are also identified in terms of NGV component market value through 2022. Historical and projected contextual NGV populations are also provided through 2022 for the following vehicle segments:

Light duty NGVs including passenger cars, pick-up trucks, and governmental and commercial sector vehicle fleets

Medium duty / heavy duty natural gas buses including transit buses, school buses, larger vans, and coaches

Medium duty / heavy duty natural gas trucks including utility service vehicles, semi-trailer tractors (semis), delivery trucks, and other on-road commercial and industrial vehicles used for the transportation of freight and payloads

This market report concisely examines leading external factors and trends indicative of

recent growth in the demand for NGV components and that inform the report's ten-year market projections. Trends in global transportation fuel pricing and supply, as well as other fuel market features, are reviewed through granular perspectives on individual country markets.

## Report Methodology

The data, assessments and analysis provided in Global Markets for Natural Gas Vehicle Components is based on primary and secondary research. Primary research included interviews with experts in the field of natural gas vehicles and a leading supplier of vehicle natural gas engines. Secondary research included the comprehensive review and consolidation of governmental data resources, industry association estimates on NGV population and natural gas transportation fuel consumption, technical studies, and NGV component manufacturer and supplier financial data.

The report features reliable and comprehensive figures regarding NGV populations worldwide, collected from a multitude of sources and tediously reviewed to eliminate inconsistencies and false industry readings. Component cost and pricing data were similarly collected from a variety of sources and applied to the number of NGVs annually made available through conversion or factory production. Market projections were informed through expert energy forecasts, fuel market trends, and anticipated developments in natural gas refueling infrastructure, vehicle market penetration, and vehicle OEM participation in the NGV market.

## What You'll Get in This Report

Global Markets for Natural Gas Vehicle Components contains exclusive insights and projections regarding the current state and future of global NGV populations and the revenue opportunities available in the production and sales of NGV-specific components. Readers will benefit from extensive data, comprehensive market coverage and unique analysis, presented in easy-to-read and illustrative charts, tables and graphs accompanied by fluid and concise commentary and conclusions.

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