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Hybrid & Electric Vehicles: United States

May 2018



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About This Report

Scope & Method

This report forecasts US hybrid and electric vehicle (HEV) demand and production in units to 2022 and 2027. Total demand is segmented by product in terms of:

- full hybrid
- plug-in hybrid
- battery electric
- fuel cell electric

Total demand is also segmented by market as follows:

- light vehicles
- medium- and heavy-duty vehicles

To illustrate historical trends, total demand is provided in annual series from 2007 to 2017; production and the various segments are reported at five-year intervals for 2012 and 2017.

Excluded from the scope of this report are micro hybrids, in which vehicle propulsion is generated from an internal combustion engine but some technological features found in hybrid vehicles – specifically start-stop systems – are used to improve fuel economy. Because these vehicles do not use an electric motor for propulsion, they fall outside the scope of this report.

This report quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading suppliers, are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Hybrid & Electric Vehicles: United States (FF85023) is based on [Global Hybrid & Electric Vehicles](#), a comprehensive industry study published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources including:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- national, regional, and international non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 7 | Industry Codes Related to Hybrid & Electric Vehicles

NAICS/SCIAN 2007		SIC	
North American Industry Classification System		Standard Industrial Classification	
336111	Automobile Manufacturing	3711	Motor Vehicles and Car Bodies
336112	Light Truck and Utility Vehicle Manufacturing		
336120	Heavy Duty Truck Manufacturing		

Source: US Census Bureau

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Resources

The Freedonia Group

Global Hybrid & Electric Vehicles, May 2018

Freedonia Industry Studies

Global Batteries, June 2018

Global Motorcycles, May 2018

Recreational Vehicles in the US, April 2018

Global Automotive Lubricants, December 2017

North America Automotive Aftermarket, November 2017

Automotive Aftermarket for Electronic Components in North America, September 2017

Global Bus Market, May 2017

Automotive Aftermarket for Powertrain Components in North America, March 2017

Global Diesel Engines Market, January 2017

Battery Markets in the US, December 2016

Single-Use (Primary) Batteries in the US, November 2016

Rechargeable (Secondary) Batteries, September 2016

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Automotive Repair & Maintenance Services: United States

Batteries: United States

Buses: United States

Diesel Engines: United States

Energy: United States

Medium- & Heavy-Duty Trucks & Buses: United States

Motorcycles: United States

Motor Vehicles: United States

Recreational Vehicles: United States

Transport Equipment: United States

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CleanTechnica

EV World

Green Car Congress

Green Car Reports

HybridCars.com

Ward's AutoWorld

Agencies & Associations

Alliance of Automobile Manufacturers
American Public Transportation Association
California Fuel Cell Partnership
Electric Drive Transportation Association
International Council on Clean Transportation
International Energy Agency
National Automobile Dealers Association
National Highway Traffic Safety Administration
United States Census Bureau
United States Department of Energy
United States Department of Transportation
United States Energy Information Administration
United States Environmental Protection Agency
United States International Trade Commission