



Freedonia Focus Reports  
US Collection

# Hybrid & Electric Light Vehicles: United States

August 2020



**BROCHURE**  
CLICK TO ORDER  
FULL REPORT

[www.freedoniafocusreports.com](http://www.freedoniafocusreports.com)

# Table of Contents

---

<b>1. Highlights</b>	<b>3</b>
<b>2. Market Environment</b>	<b>4</b>
Historical Trends	4
Key Economic Indicators	6
Hybrid & Electric Powertrains	7
Environmental & Regulatory Factors	9
<b>3. Segmentation &amp; Forecasts</b>	<b>11</b>
Power Source	11
Full Hybrid	13
Plug-In Hybrid	14
Battery Electric	15
Fuel Cell Electric	16
<b>4. Industry Structure</b>	<b>18</b>
Industry Characteristics	18
Market Share	19
Toyota Motor Corporation	19
Tesla	20
Ford Motor Company	20
<b>5. About This Report</b>	<b>21</b>
Scope	21
Sources	21
Industry Codes	22
Freedonia Methodology	22
Resources	24

# List of Tables & Figures

---

Figure 1   Key Trends in US Hybrid & Electric Light Vehicle Retail Sales, 2019 – 2024	3
Figure 2   US Hybrid & Electric Light Vehicle Demand Trends, 2009 – 2019	4
Table 1   Key Indicators for US Hybrid & Electric Light Vehicle Demand, 2009 – 2024 (2012US\$ bil)	6
Table 2   Comparison of Hybrid & Electric Light Vehicle Powertrain Types	8
Figure 3   US Hybrid & Electric Light Vehicle Retail Sales by Power Source, 2009 – 2024 (000 units)	11
Table 3   US Hybrid & Electric Light Vehicle Retail Sales by Power Source, 2009 – 2024 (000 units)	11
Figure 4   US Hybrid & Electric Light Vehicle Retail Sales by Power Source, 2009 – 2024 (%)	12
Figure 5   US Hybrid & Electric Light Vehicle Market Share by Company, 2019 (%)	19
Table 4   NAICS & SIC Codes Related to Hybrid & Electric Light Vehicles	22

# About This Report

---

## Scope

This report forecasts to 2020 and 2024 US light-duty hybrid and electric vehicle (LD HEV) retail sales in units. Total retail sales are segmented by power source in terms of:

- full hybrid electric vehicles (FHEVs)
- plug-in hybrid electric vehicles (PHEVs)
- battery electric vehicles (BEVs)
- fuel cell electric vehicles (FCEVs)

To illustrate historical trends, total retail sales and the various segments are provided in annual series from 2009 to 2019.

Mild hybrids are considered a type of full hybrid for the purposes of this report. 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.

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

## Sources

*Hybrid & Electric Light Vehicles: United States* (FF85044) represents the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources, such as:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental 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 4 | NAICS & SIC Codes Related to Hybrid & Electric Light Vehicles

NAICS/SCIAN 2017		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

## Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a variety of quantitative and qualitative techniques to present the best overall picture of a market’s current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both top-down and bottom-up) and then triangulate those results to come up with the most accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research, consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

Freedonia 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)

## About This Report

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.

## Copyright & Licensing

The full report is protected by copyright laws of the United States of America and international treaties. The entire contents of the publication are copyrighted by The Freedonia Group.

## Resources

### Freedonia Industry Studies

*Global Batteries*

*Global Buses*

*Global Hybrid & Electric Vehicles*

*Global Motorcycles*

*Recreational Vehicles in the US*

### Freedonia Focus Reports

*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*

### Freedonia Custom Research

### Trade Publications

*Automotive Industries*

*Automotive News*

*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

## About This Report

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