

## China Research Topical Report

## Forget Diesel, It's Time for Hybrid Vehicles

By Isaac Wang, Industry Analyst

**Forecast****Frequency, Time Period**

- 5-year annual forecasts for electronics equipment and semiconductor devices
- 10-year annual forecasts for new energy vehicles

**Measures**

- Revenue
- Units
- Percentages

**Regions, Markets**

- China

**Applications/Products Covered**

- New Energy Vehicles
  - Hybrid Vehicles
  - Electronic Vehicles
  - Hydrogen and Fuel-Cell Vehicles
- Automotive Powertrain
  - Alternators
  - Cruise Control
  - Electronic Throttle Control
  - Engine Management Systems
  - Transmissions

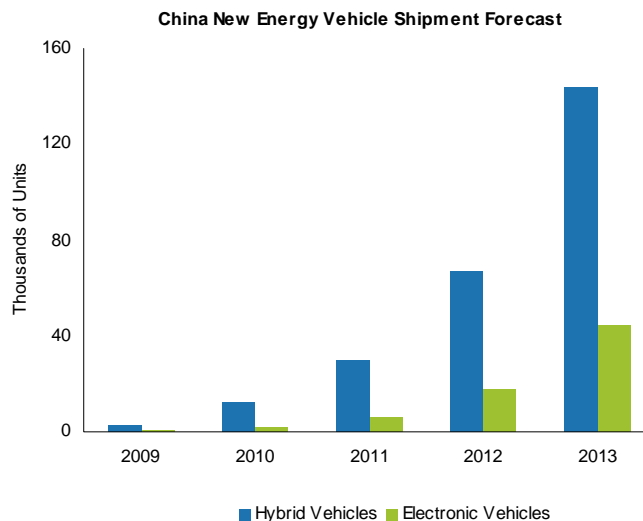
**Technologies Covered**

- Emission Requirement Standards
- Hybrid Vehicles
- Electronic Control Units

With the acquisition of R&D expertise and the government's endorsement in manufacturing, the growth of hybrid and electronic vehicles will accelerate in China, which stands to benefit from China's national economic stimulation plan. iSuppli forecasts that shipment of Hybrid Vehicles and Electronic Vehicles will reach 143,000 and 44,800, respectively, in 2013. R&D on Hybrid Electronic Control Unit (HECU) will become a popular point for investment in the China Powertrain market in the next five years.

This will make the Powertrain segment the major driver of the total automotive electronics market in China. iSuppli forecasts that the revenues for the China Powertrain market will reach \$2.84 billion in 2009, growing 19.2% from last year.

This report reviews the latest developments in China's automotive Powertrain industry, including new markets as well as manufacturing and technology trends. It also examines the impact of the economic and political situation, and provides a five-year market forecast that maps future developments in China's automotive Powertrain electronics systems and semiconductor devices.

**Critical Questions Answered**

- What is the current forecast for the China automotive powertrain market?
- What are the major drivers and trends in the China automotive powertrain market?
- What are the popular applications in the China automotive powertrain market?
- Who are the major players in the China automotive powertrain market?
- What factors are impacting the China automotive powertrain market?

**Who Should Read This?**

- Automotive OEMs
  - Planning
  - Purchasing
- Automotive Electronics Equipment OEMs
  - Executive Team
  - Planning
  - Procurement
  - Marketing/Sales
- Automotive Electronics Semiconductor Suppliers
  - Executive Team
  - Planning
  - Procurement
  - Marketing/Sales

**Lead Analyst****Isaac Wang, Industry Analyst**

At iSuppli, Isaac is responsible for the research and analysis of the automotive, industrial, medical, and electronics contract manufacturing markets in China. He also assists in the China Application Market Forecast Tool in these areas.

Prior to joining iSuppli, Isaac worked for STMicroelectronics as a sales engineer, where he was responsible for the key Electronics Manufacturing Service customers in East China.

Isaac holds a Bachelor of Science in Electronic Engineering from Tsinghua University. He also earned a Bachelor of Science in Mechanical Engineering from Nanjing University of Aeronautics and Astronautics.

**Sample Table of Contents**

Executive Summary  
Findings and Implications  
Overview of Engine Management Systems and Electronic Control Units  
China Vehicle Consumption and Forecast  
China Fuel Market Structure Forecast  
Emission Requirement Standards  
Demand from Hybrid Vehicles  
China Powertrain Electronics Applications Revenues and Forecast  
China Powertrain Market MCU Consumption Forecast

**Figures**

Engine Management System Overview  
Schematic of ECU Hardware  
China's Sedan Consumption and Forecast, 1997-2013  
Market Weights and Growth Forecast for China's Automotive Industry  
China Automotive Powertrain Electronic Equipment Production Forecast, 2007-2013  
Schematic of Gasoline Engine ECU  
Schematic of Diesel Engine ECU  
China Fuel Market Structure Forecast, 2008-2013  
Engine Technologies for Meeting Different Emission Requirement Standards  
International Emission Requirement Standards and Enforcement Schedule  
Emission Requirement Standards Enforcement Progress in China  
ECU Schematic of HEVs  
China New Energy Vehicle Shipment Forecast, 2009-2013  
Semiconductor Consumption Forecast of China Automotive Powertrain Market, 2008-2013  
Semiconductor Consumption Forecast of China Automotive Powertrain Market by Component, 2008-2013  
New Increments to Semiconductor Consumption for China Powertrain Market, 2009-2013  
China Powertrain Market MCU Consumption Forecast by System, 2008-2013

**Tables**

The Electronic Control Systems on Engines  
China Powertrain Electronics Applications Shipment and Forecast, 2008-2013  
China Powertrain Equipment Supply Matrix and Market Share, 2008  
China Powertrain Semiconductor Supply Matrix and Market Share, 2008