World Diesel Engines

Industry Study with Forecasts for 2018 & 2023

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World demand to rise 7.7% annually through 2017

Global diesel engine sales are forecast to rise 7.7 percent per year through 2017 to $248.5 billion, representing a marked acceleration from the 2007-2012 pace. Higher production of medium and heavy trucks and buses and of off-highway machinery will combine with a rebound in light vehicle output in Western Europe and the growing popularity of diesel cars in a number of nations, most notably the US and India, to generate increased engine demand.

Asia/Pacific region to remain largest, fastest growing market

In 2012, the Asia/Pacific region was the largest user of diesel engines by a wide margin, due primarily to the massive Chinese, Indian, and Japanese markets, which are three of the world’s five largest national buyers of diesel engines. China and India will also be among the fastest expanding national markets through 2017, spurred by rapidly climbing production of diesel-powered motor vehicles and off-highway machinery. However, regional sales gains will be restrained by a sharp deceleration in the Japanese market, reflecting a drop in motor vehicle output as production capacity continues to move overseas.

Demand for diesel engines will rebound in Western Europe, supported by a recovery in the area’s economy following the debt-related recessions experienced in a number of nations in 2012. Diesel light vehicles made in Western Europe are considered to be the gold standard for diesel passenger cars, and an upturn in vehicle sales in the region, the growing popularity of these cars in the US, and rising incomes in several large developing countries will boost production levels. North America will also see an increase in diesel engine sales growth through 2017. Value gains in North America will be concentrated in the large medium/heavy vehicle and off-highway and other mobile machinery markets, and will be supported by improved economic conditions and greater investment in construction and mining projects around the world.

Light vehicle, machinery markets to grow the fastest

In the dominant motor vehicle market, the medium and heavy vehicle segment will record slower sales growth than that for light vehicles through 2017 in percentage terms, due primarily to an already high diesel penetration rate that leaves less room for expansion. Demand for light vehicle diesel engines will advance at a faster pace due to an expected increase in the diesel penetration rate in India and the US and higher overall light vehicle output in Western Europe and Thailand. Market gains will be even stronger in percentage terms for off-highway and other mobile machinery applications.
South Korea: Diesel Engine Supply & Demand

Sales of diesel engines in South Korea were $7.4 billion in 2012, comprising one-tenth of all regional demand. Nearly two-thirds of all diesel engines sold in this nation are used in off-highway and other mobile applications, as South Korea is one of the world’s leading shipbuilders and a sizeable producer of agricultural and construction machinery. Motor vehicle manufacturers in this nation are not well-established in world diesel vehicle markets, particularly for light vehicles, and as a result sales of diesel engines for these uses tend to lag levels in the country’s regional neighbors. From 2007 to 2012, diesel engine demand expanded 5.2 percent per annum, a healthy rate of expansion but below the regional pace. Rapid gains in the small light motor vehicle segment, owing largely to the introduction of diesel vehicles by several South Korean car manufacturers, counterbalanced more moderate growth in other larger market segments.

Shipments of diesel engines from plants in South Korea were $8.3 billion in 2012, representing 12 percent of all regional product output. Much of the country’s engine manufacturing is captive and, as a result, a great deal of the units made in South Korea are used in domestic off-highway and other mobile, especially marine, applications. Diesel engine shipments advanced at a 7.1 percent annual rate from 2007 to 2012, supported by gains in the domestic market and increased exports to nearby developing nations, particularly China, Singapore, the Philippines, and Vietnam. South Korea was a net exporter of diesel engines in 2012, recording $900 million in exports, which was equivalent to 11 percent of all local production.

South Korean diesel engine shipments are forecast to rise 8.0 percent per year through 2017 to $12.1 billion, continuing to outpace gains in domestic demand but trailing regional output increases. Growth will be supported by robust demand from key South Korean shipbuilders.
Weichai Power Company Limited
26 Minsheng East Street
Weifang, Shandong 261061 China
86-536-819-7777
http://www.weichai.com

Sales: $7.6 billion (2012)
Geographic Sales: (2012, as % of total) China more than 99%, Other Areas less than 1%
Employment: 40,000 (2012)

Key Products: diesel engines for construction machinery, heavy-duty trucks, & large- & normal-sized passenger vehicles, plus other end uses

Weichai Power is one of the largest manufacturers of high-power, high-speed diesel engines in China. The Company also produces automobiles and related products, and conducts trading activities. Weichai Power does business through four segments: Diesel Engines, Automobiles and Other Major Automobile Components, Other Components, and Import and Export Services.

The Company participates in the world industry via the Diesel Engines segment, which had sales of $2.8 billion in 2012. The segment’s operations primarily comprise the manufacture of diesel engines for heavy-duty trucks, construction machinery, and large and normal passenger vehicles. The Company sold 307,400 diesel engines in 2012, of which 207,500 were for heavy-duty trucks, 62,600 were for construction machinery, 21,600 were for large passenger vehicles, 900 were for normal-sized passenger vehicles, and 14,800 were for other end uses.

Diesel engines from Weichai Power include truck, marine, power generation, bus and construction equipment types. These engines range in size from 2 to 33 liters, including LANDKING WP, WD12, WD615,
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Other Studies

Electric Motors
US electric motor demand will rise 5.4 percent per year through 2018 to $16.2 billion. Growth in the dominant AC motors segment will outpace DC types. The motor vehicle market will grow the fastest and remain the largest category, followed by the heating/cooling and machinery markets. IHP electric motors will outpace FHP types in both value and volume terms. This study analyzes the $12.5 billion US electric motor industry, with forecasts for 2018 and 2023 by type, power rating, and market. The study also evaluates company market share and profiles industry players.

#3238 December 2014 $5200

Electric Power Transmission & Distribution Equipment
US demand for electric power transmission and distribution (T&D) equipment is expected to rise 5.5 percent annually through 2019 to $33.4 billion. Switchgear and pole and transmission line hardware will be the fastest growing products. The residential sector and industrial and nonutility generators will be the fastest growing markets. This study analyzes the $25.5 billion US electric power T&D equipment industry, with forecasts for 2019 and 2024 by product and market. The study also evaluates company market share and profiles industry competitors.

#3256 February 2015 $5300

World Fuel Cells
Global demand for commercial fuel cells will almost triple to $4 billion in 2017 and then triple again by 2022 to $12 billion. Motor vehicle, portable electronics, and industrial stationary/motive power applications will grow the fastest. Japan and the US will remain by far the largest markets, while China and South Korea will grow the fastest. This study analyzes the $1.5 billion world fuel cell industry, with forecasts for 2017 and 2022 by product, chemistry, application, world region, and for 16 countries. The study also evaluates company market share and profiles industry players.

#3140 April 2014 $6300

Wind Turbine Systems
US demand for wind turbine systems is forecast to reach $18.9 billion in 2018, a nearly ninefold increase over severely depressed 2013 levels. The market for wind turbines tends to be highly volatile due to its reliance on government incentives. Feed-in-tariff payments and various grants from the Department of Energy will drive gains going forward. This study analyzes the $2.1 billion US wind turbine system industry, with forecasts for 2018 and 2023 by type, component, application and US region. The study also evaluates company market share and profiles industry players.

#3139 March 2014 $5100

Battery & Fuel Cell Materials
US demand for battery and fuel cell materials is expected to grow 4.3 percent annually through 2017 to $6.1 billion. Polymers, metals and other materials will lead gains. Material usage in secondary batteries will outpace primary batteries, while fuel cells will be the fastest growing application overall from a small base. This study analyzes the $4.9 billion US battery and fuel cell material industry, with forecasts for 2017 and 2022 by type, function and application. The study also evaluates company market share and profiles industry players.

#3115 January 2014 $5100