World Diesel Engines

Industry Study with Forecasts for 2012 & 2017

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Despite a slower growth rate, substantial increases in demand will occur in every segment of the world diesel engine market, with most new demand in the motor vehicle segment.

Global demand to expand 3.5% yearly through 2012

World diesel engine demand is forecast to expand 3.5 percent per year through 2012 to $153 billion. This represents a considerable deceleration from the growth posted during the 2002-2007 period, reflecting an expected slowdown in motor vehicle and off-highway equipment production and a moderation in metal prices. Despite the slower growth rate, substantial increases in demand will occur in every segment of the world diesel engine market, with most new demand in the motor vehicle segment.

Motor vehicle, stationary power types to lead gains

Demand for diesel engines in the stationary power segment is expected to expand at the fastest annual rate, as industrialized nations transition to alternative energy sources (stationary engines used as backup generators) and developing countries continue to invest in their infrastructure (micropower generation). Nonetheless, the stationary segment will continue to play only a small role in the global diesel engine market. Demand in the motor vehicle segment is forecast to grow 3.7 percent per year, accounting for a majority of new growth from 2007 to 2012. The off-highway segment is expected to perform slightly below the market average as commodity and agricultural prices retreat from their elevated 2007 levels, which will undermine demand for several key types of machinery and equipment.

Asia/Pacific region to remain largest market

Between 2002 and 2007, growth in the Asia/Pacific regional market was driven by rising demand for diesel engines in China, India, Indonesia and Thailand where increased domestic production of motor vehicles, machinery and equipment encouraged demand. The Asia/Pacific market for diesel engines is forecast to grow 4.0 percent annually through 2012, with China alone responsible for over 18 percent of total new global demand generated between 2007 and 2012. The largest absolute gains in the regional market will occur in the heavy truck and bus segment, which will total $26.7 billion in 2012.

The diesel engine market in Western Europe is projected to decelerate through 2012, due to weakness in the production of motor vehicles and machinery. Some of the region’s largest diesel engine markets, such as Germany, France and Spain, are expected to experience restrained growth. In North America, growth will be driven by the motor vehicle segment, which is set to benefit from higher levels of heavy vehicle output and the increased use of diesel engines in light vehicle production. From 2007 to 2012, demand for diesel engines in Eastern Europe and Latin America is expected to expand faster than the global average, yet each region will still only account for about five to six percent of aggregate demand.
India: Supply & Demand

Diesel engine demand in India totaled $4.9 billion in 2007, growing 12.5 percent per year since 2002. Factors directly related to the diesel engine market combined with broader economic trends to produce double-digit growth. From 2002 to 2007, India continued to experience rising living standards and large inflows of foreign capital, driving demand for diesel engines. The most noteworthy gains occurred in the light vehicle and heavy truck and bus segments, both of which expanded over 18 percent per year. Increasing demand for diesel engines in these two segments coincided with a 20 percent per year increase in motor vehicle output. Although light vehicle diesel engine demand more than doubled from 2002 to 2007, the segment represented only eight percent of total demand in 2007. Production of agricultural, mining and construction equipment also surged during this period, pushing demand for related diesel engines to $2.7 billion.

Diesel engine demand is projected to increase 7.1 percent annually through 2012 to $6.9 billion. Relatively restrained growth in the large off-highway segment will result in a more moderate rate of expansion for the entire diesel engine market. The overall market will easily outpace both the regional and global averages for the 2007-2012 period. Sagging sales of machinery and equipment in India are expected to constrain production in the large off-highway segment will expand 3.0 percent per year through 2012. With its extensive potential for growth, the motor vehicle segment of the diesel engine market is predicted to expand 11.9 percent per year through 2012 to $3.4 billion. Rising demand for heavy trucks and buses in the transport industry will coincide with increasing sales of light vehicles; together, the two segments will represent nearly half of total demand in 2012, up ten percent from 2007. Stationary diesel engines will continue to play a
### COMPANY PROFILES

**Renault SA**

13-15 quai le Gallo  
92513 Boulogne-Billancourt cedex  
France  
33-176-840404  
http://www.renault.com

Revenues:  
$55.7 billion (2007)  
Geographic Revenues:  
(2007, as percent of total) France 32%, Euromed 11%, Other European Countries 43%, Other Asian and African Countries 7%, and Americas 8%

Employment:  
130,180 (2007)

Key Products:  
diesel engines and parts

Renault is engaged in the production and distribution of automobiles, light commercial vehicles and trucks, and parts and accessories. The Company operates in two segments: Automobile and Sales Financing. Additionally, Renault holds a 44-percent share of Nissan Motor Company Limited (Japan).

Renault was the fourth largest manufacturer of diesel engines and parts in 2007, accounting for six percent of global sales. The Company is active in the world diesel engine industry through the Automobile segment, which had 2007 revenues of $52.9 billion. The segment produces automobiles, light commercial vehicles and trucks, and parts and accessories, including diesel engines. Through the segment, Renault produces and sells DCI and D series engines for the RENAULT and DACIA vehicle lines. The DCI series includes models with power output ranging from 55 to 185 horsepower (hp) and in 1.5-, 2-, 2.2-, 2.5- and 3-liter (L) configurations. These engines are used in such models as TWINGO, CLIO, MODUS, KANGOO, LOGAN, MEGANE,

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**Sample Profile, Table & Forecast**

“Shipments of diesel engines and parts from India totaled $4.3 billion in 2007, after growing 9.9 percent per annum since 2002. Nonetheless, the country still posted a net trade deficit of $620 million in 2007. With demand being projected to grow 7.1 percent per year through 2012, the net trade deficit is set to reach $930 million in that year.”

--Section VI, pg. 148
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