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# World Electric Motors

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Industry Study with Forecasts for **2017 & 2022**

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Study #3055 | October 2013 | \$6100 | 425 pages

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**The Freedonia Group**

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: [info@freedoniagroup.com](mailto:info@freedoniagroup.com)

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*Gains will be driven by rebounding motor vehicle production in developed regions, and by rising durable goods manufacturing and consumer purchasing power in developing areas.*

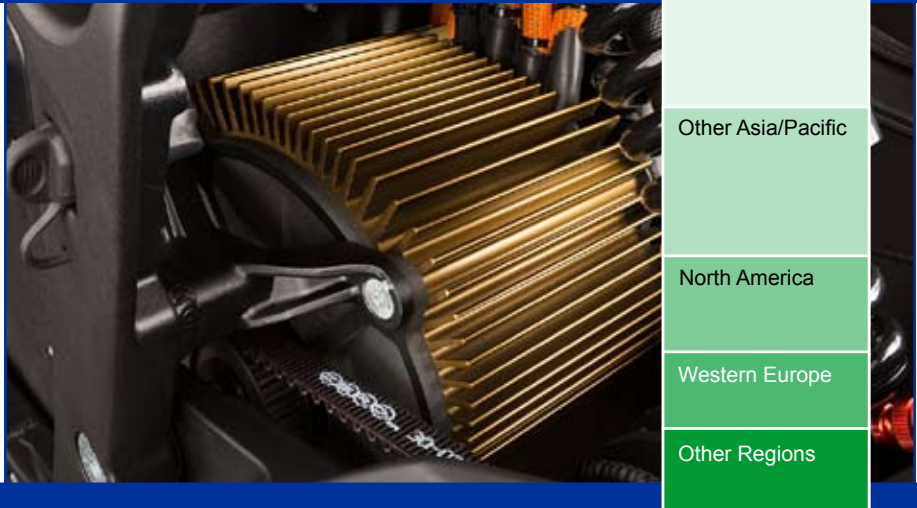
## World demand to rise 6.5% annually through 2017

World demand for electric motors is projected to increase 6.5 percent per year to \$122.5 billion in 2017. Electric motors are key components in many durable goods, and as manufacturing output rises sales of electric motors will follow. In the mature motor markets of the US and Western Europe, growth in demand will be driven by rebounding motor vehicle production and a healthier fixed investment environment. In nations where electric motor markets are still developing, sales will be fueled by rapidly growing durable goods manufacturing and the increasing ability of consumers to purchase items such as automobiles and household appliances.

## Asia/Pacific region to be largest source of growth

The Asia/Pacific region will be the largest source of market growth through 2017. Regional electric motor demand is expected to climb 7.9 percent per year to \$74.4 billion, accounting for more than 70 percent of all sales increases between 2012 and 2017. The vast majority of these gains will be registered in China, where demand will advance at a 9.1 percent annual rate, tied with India for the fastest pace of increase of the major markets in the world. Chinese electric motor sales will be stimulated by rapidly expanding production of a number of durable goods -- including aerospace equipment, electric bicycles

## World Electric Motor Demand, 2017 (\$122.5 billion)



and motorcycles, heating and cooling equipment, household appliances, machinery, and motor vehicles -- in a strong fixed investment environment. In 2017, China will account for almost two-fifths of world electric motor demand, and product sales in the nation will be greater than the market total for Japan, North America, and Western Europe combined.

## Demand in US, Western Europe to accelerate

Overall electric motor demand in the large mature markets of the US and Western Europe will expand faster than it did during the 2007-2012 period. In both the US and Western Europe,

manufacturing activity -- especially motor vehicle output -- plummeted between 2007 and 2009, before strengthening during the 2010-2012 period. Electric motor sales followed a similar pattern, falling between 2007 and 2009 before turning upward in recent years as manufacturing output recovered. In addition to rising domestic motor vehicle output, market gains in these nations will be bolstered by growing exports of industrial and other durable goods to the developing world. Demand for electric motors in Japan, another sizable, developed market, will decelerate through 2017 as manufacturers move production of many motor dependent durable goods like household appliances to lower labor cost countries.

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## Sample Text, Table & Chart

### OTHER REGIONS

**Brazil: Electric Motor Market Outlook --** Sales of electric motors in Brazil are forecast to annually expand 8.0 percent to \$ in 2017, growing roughly in line with the other Central and South American subregion but slowing from the advances registered between 2007 and 2012. Market gains will be constrained somewhat by a shift toward higher quality products and increased rewinding of older industrial electric motors, limiting aftermarket motor demand. Nonetheless, the market will be stimulated by an acceleration in durable goods manufacturing output, especially of motor dependent items like machinery and vehicles. Suppliers of electric motors to both of these industries will benefit from rising original equipment manufacturer (OEM) demand. Advances will also come from greater use of high value added technologies, particularly for wind power generation applications.

Despite AC and DC electric motors growing at about the same rate as the market as a whole through 2017, certain individual products will register faster (or slower) sales gains. For example, demand for AC motors will climb significantly over the next five years, starting from a small base -- bolstered by the growing popularity of air conditioning. Sales of IHP DC motors will grow at a steady pace of about 10 percent per annum from 2012. Demand for low voltage DC motors will be strong in the demand product type, particularly in the automotive industry. Advances will be supported by the growing vehicle industry.

Between 2012 and 2017, electric motor use in motor vehicle applications is expected to rise nearly 13 percent per year, surpassing household appliances to become the largest market in Brazil. In an acceleration in automobile output, gains will be spurred by a number of applications for motors in automobiles, which will be increasingly affordable as personal incomes continue to rise. Heating and cooling equipment market for electric motors is also

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### SAMPLE TEXT

TABLE VII-3

### BRAZIL: ELECTRIC MOTOR SUPPLY & DEMAND (million dollars)

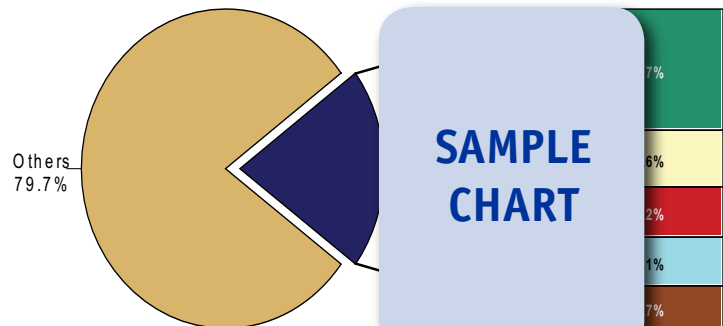
Item	2002	2007	2012	2017	2022
Population (mil persons)					
per capita GDP					
Gross Domestic Product (bil 2011\$)					
% fixed investment					
Gross Fixed Investment (bil 2011\$)					
Manufacturing Value Added (bil 2011\$)					
Motor Vehicle Production (000)					
\$ motors/capita					
\$ motors/000\$ GFI					
\$ motors/000\$ MVA					
Electric Motor Demand					
net exports					
Electric Motor Shipments					
% Brazil					
Central/South America Motor Shpts					

### STUDY COVERAGE

This Freedonia study, *World Electric Motors*, presents historical data (2002, 2007, 2012) plus forecasts for 2017 and 2022 for supply and demand, plus demand by product and market in six regions and 20 countries. The study also details key market environment factors, evaluates company market share and profiles 39 global industry competitors.

CHART VIII-1

### WORLD ELECTRIC MOTOR MARKET SHARE, 2012 (\$89.4 billion)



### SAMPLE CHART

## Sample Profile, Table & Forecast

### COMPANY PROFILES

#### Nanyang Explosion Protection Group Company Limited

22 North Zhong  
 Nanyang, Henan  
 China  
 86-377-6325-  
<http://www.cnepg.com>

Annual Sales:  
 Employment:

Key Products: explosion proof, brushless synchronous, oil pump, flameproof, squirrel cage, slip ring, high voltage, high efficiency, and non-sparking motors

Nanyang Explosion Protection Group is a manufacturer of explosion-proof and other motors, generators, and monitoring instrumentation for use in the petroleum, coal mining, chemicals, metallurgical, electric and nuclear power generation, and military markets, among others. The Company is privately held.

The Company's motors, which are available under the CNE brand name, range in output from 0.12 kilowatts to 100 megawatts and include explosion-proof and other varieties. Among Nanyang Explosion Protection Group's explosion-proof motors are YZU and YBZU series three-phase induction motors, which are suitable for use in locations where explosive mixtures of methane or coal dust are present.

Other motors from the Company include TAW series brushless synchronous, NEH oil pump, YB2 flameproof, Y and YR series squirrel cage and slip ring, Y2 series high voltage, YAXn series high efficiency, and YW series non-sparking types. For example, TAW series brushless synchronous motors feature explosion protection capabilities and can

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**SAMPLE  
PROFILE**

TABLE VII-4

### BRAZIL: ELECTRIC MOTOR DEMAND BY PRODUCT & MARKET (million dollars)

Item	2002	2007	2012	2017	2022
Central/South America Motor Demand 17					
% Brazil					
Brazil Electric Motor Demand					
By Product:					
AC					
Fractional					
Integral					
DC					
Fractional					
Integral					
By Market:					
Motor Vehicles					
Household Appliances					
Heating & Cooling Equipment					
Machinery					
Other					
	175	250	415	600	825

**SAMPLE  
TABLE**

"Shipments of electric motors from facilities in Brazil are expected to rise, keeping pace with domestic demand and accelerating from market performance during the 2007-2012 period. The country's trade surplus will expand through 2017, when it will be equivalent to five percent of local motor production."  
 --Section VII, pg. 195



**OTHER STUDIES**

**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

**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

**World Motorcycle Components**

World demand for motorcycle components, including those for electric bicycles (e-bikes) and motorcycles (e-cycles), will grow 7.5 percent annually to \$119.5 billion in 2017. Engine and drivetrain parts will remain the largest category, while tires will grow the fastest. The Asia/Pacific region will remain the dominant market. This study analyzes the \$83.2 billion world motorcycle component industry, with forecasts for 2017 and 2022 by market, product, world region, and for 20 countries. The study also evaluates company market share and profiles industry participants.

#3061 ..... August 2013 ..... \$5900

**Batteries in China**

Demand for batteries in China is forecast to increase 13.0 percent annually to 259 billion yuan in 2016. Secondary batteries will outpace primary types, led by the fast-growing rechargeable lithium batteries segment. The primary battery market will remain dominant, supported by the supplantation of zinc-carbon/chloride batteries by alkaline types. This study analyzes the 141 billion yuan battery industry in China, with forecasts for 2016 and 2021 by type and market. The study also evaluates company market share and profiles industry participants.

#3030 ..... June 2013 ..... \$5300

**Electric Motors**

US demand for electric motors will increase at an accelerated rate of 4.6 percent annually through 2017 to \$14.4 billion. AC motors will remain the largest segment while hermetic motors will grow the fastest. The heating and cooling equipment market will provide the best growth opportunities. Integral horsepower motors will outpace fractional horsepower types. This study analyzes the \$11.5 billion US electric motors industry, with forecasts for 2017 and 2022 by type and market. The study also evaluates company market share and profiles industry players.

#3007 ..... March 2013 ..... \$4900

**About The Freedonia Group**

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

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