



# World Electric Power Equipment

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Industry Study with Forecasts for **2011 & 2016**

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Study #2261 | October 2007 | \$5400 | 274 pages

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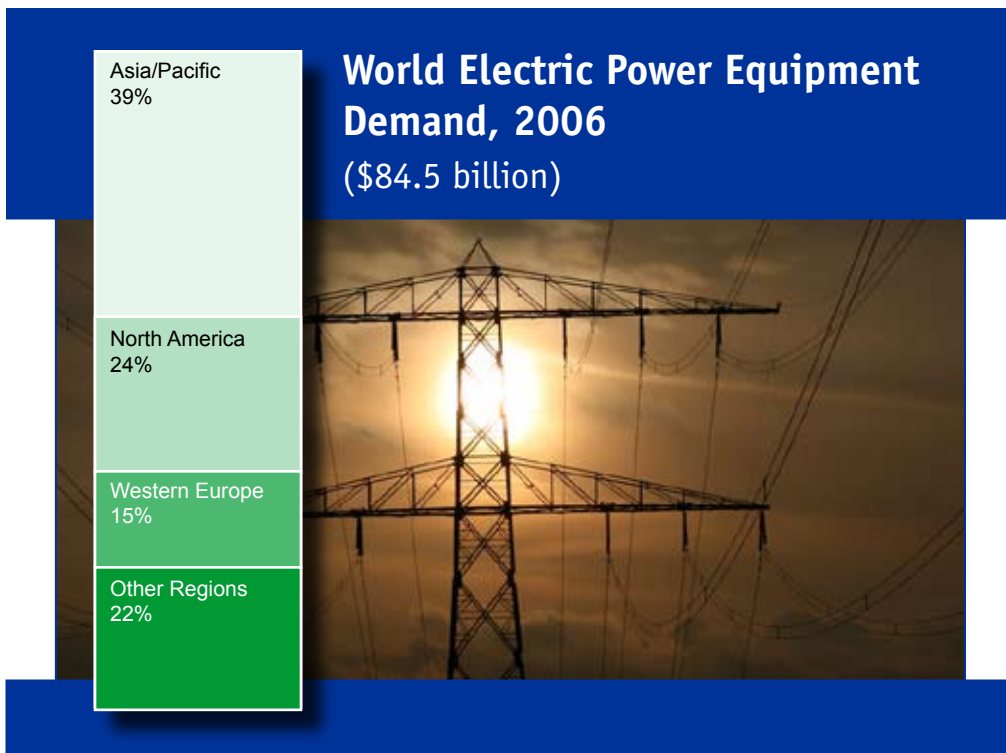
*Robust growth in developing Asian economies, combined with rapid urbanization and rising infrastructure spending will boost demand for electric power equipment in the Asia/Pacific region.*

## Global demand to rise 4.4% annually through 2011

World transmission and distribution electric power equipment demand is forecast to rise 4.4 percent per year through 2011 to \$105 billion. The largest regional markets for electric power equipment will remain the Asia/Pacific region and North America, with Western Europe also important. In 2011, China will account for a quarter of the world market. While the main product categories -- transformers, and switchgear and switchboard apparatus -- will register similar growth rates, certain products within these categories will perform more favorably than others.

## Asia/Pacific region to be fastest growing market

The Asia/Pacific region is projected to register the strongest gains in electric power equipment demand through 2011 among all regions (by a significant margin). The region is home to more than 55 percent of the world's population, with a sizable portion of these people currently living in rural areas often devoid of electricity. Robust economic growth in developing countries such as China and India, combined with rapid urbanization and growth in fixed investment spending (especially in infrastructure such as roads and electricity generation), will work to boost demand for electric power equipment in the



region. The developed Japanese market, however, will continue to register below world-average gains through 2011.

The North American and West European markets will both perform below the global average, with the latter particularly weak. Both regions have relatively large and mature markets for electric power equipment, with a sizable majority of their inhabitants already living in urbanized areas. Even rural inhabitants in North America and Western Europe typically have ready access to national electric grid supplies. In Western Europe, growth in electric power equipment demand will be further hampered by negligible gains in population levels through 2011.

## Industrial, commercial sector to show strongest gains by end use

Strongest gains in demand for electric power equipment are forecast for the industrial and commercial sector. Demand in the electric utilities sector will continue to see the slowest gains, a result of deregulation in the electricity sectors in virtually all parts of the globe. Competition from industrial cogeneration, independent power providers (IPPs) and renewable energy sources will force utilities to become more competitive via a combination of privatization, production cuts, and electricity purchases from IPPs and industrial producers with surpluses.



## Sample Text, Table & Chart

### ASIA/PACIFIC

#### China: Demand by Market & Product

Sales of electric power equipment from China are forecasted to reach \$6 billion, the most in the world. Besides a investment environment for electric power equipment and commercial reaching \$14.4 billion in

Demand in the next several years will continue to be aided by construction and development of the Three Gorges Yangtze River project; the dam is scheduled for completion in 2009, at which time it will become the world's largest hydroelectric dam. Demand for electric power generation equipment such as turbines will benefit more significantly than transmission and distribution equipment in the short run, since much of the new power can be transmitted using the existing grid network. By 2009, however, 15 new transmission lines to Central and Eastern China will be added. All these events are tentative, and electric power equipment demand forecasts will be affected by any changes in the completion date of each major stage of the project. Moreover, future demand will also be impacted by population movements and economic development in areas affected by the dam.

Reflective of China's booming electricity needs, the country's government is actively pursuing construction of nuclear power plants (much of the Western world had a moratorium on new nuclear power plant construction until high energy prices from 2005 to 2007 caused a rethink). Despite the lack of an indigenous industry (nuclear reactor imports will be extremely expensive), the Chinese government is planning to quadruple its nuclear power capacity (currently standing at less than two percent of nationwide electricity demand) by 2020 through the construction of as many as 32 large 1,000-megawatt reactors during that period. China currently has nine reactors in operation and four in construction.

TABLE VI-6

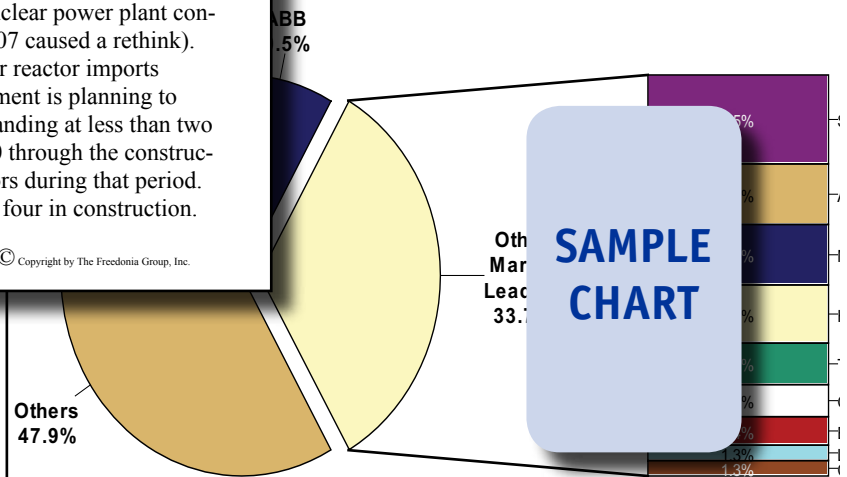
CHINA -- ELECTRIC POWER EQUIPMENT DEMAND BY MARKET & PRODUCT (million dollars)

Item	1996	2001	2006	2011	2016
Electric Power Generation (bil kWh)					
\$ elec power equip/000 kWh					
Electric Power Equipment Demand					
By Market:					
Industrial, Commercial & Other					
Electric Utilities					
Residential					
By Product:					
Transformers					
Switchgear/Switchboard Apparatus					

SAMPLE TABLE

CHART VIII-1

CHINA -- ELECTRIC POWER EQUIPMENT MARKET SHARE BY COMPANY, 2006 (\$84.5 billion)



SAMPLE CHART

## Sample Profile, Table & Forecast

### COMPANY PROFILES

#### S&C Electric Company

6601 North Ridge Boulevard  
 Chicago, IL  
 773-338-1000  
<http://www.s>

Annual Sales  
 Employment  
 Key Products  
 gear; circuit b

**SAMPLE PROFILE**

S&C Electric is a privately held manufacturer of high-voltage switching and protection products, and systems utilized in outdoor and indoor distribution and transmission applications. In addition to production activities, S&C Electric operates the Power Systems Services unit to provide support for the Company's products.

The Company's products include switches, fuses, fuse cutouts, links and limiters, switchgear, circuit breakers, station post insulators, and power quality devices. For example, among S&C Electric's switches are MINI-RUPTER, ALDUTI-RUPTER and SCADA-MATE products. MINI-RUPTER three-pole group-operated interrupter switches, which are intended for line, transformer and cable switching operations, are available in 4.16- to 27.6-kilovolt (kV) capacities. The Company's ALDUTI-RUPTER switch is suitable for line, transformer and cable switching, with voltage ratings through 34.5 kV and current ratings between 600 and 1,200 amperes. In July 2006, S&C introduced an ALDUTI-RUPTER switch with a 69-kV capacity. SCADA-MATE switches are designed for sensing, control and communications purposes in overhead applications. In February 2006, the Company introduced the CIRCUIT-ISOLATOR II disconnect switch, a versatile disconnect that is suitable for systems with voltage ratings between 69 and 138 kV.

TABLE VI-5

### CHINA -- ELECTRIC POWER EQUIPMENT SUPPLY & DEMAND (million dollars)

Item	1996	2001	2006	2011	2016
Population (millions)	1,200	1,250	1,300	1,350	1,392
GDP/capita	1,000	1,200	1,500	1,800	2,200
Gross Domestic Product (bil 2005\$)	1,200	1,500	1,950	2,430	3,060
Electric Power Generation (bil kWh)	1,000	1,200	1,500	1,800	2,100
Gross Fixed Investment (bil 2005\$)	1,000	1,200	1,500	1,800	2,100
\$ elec power equip/000 kWh	1,000	1,200	1,500	1,800	2,100
\$ elec power equip/000\$ invest	1,000	1,200	1,500	1,800	2,100
Electric Power Equipment Demand	1,000	1,200	1,500	1,800	2,100
net exports	1,000	1,200	1,500	1,800	2,100
Electric Power Equipment Shipments	500	700	1,000	1,300	1,700

**SAMPLE TABLE**

"Aggregate world electric power generation is projected to increase 2.7 percent per annum through 2011 to 20.9 trillion kilowatt hours. Fueling gains will be electrification initiatives and greater industrialization in the developing regions, especially Asia (and most notably China and India) and to a lesser extent the Africa/Mideast region. World growth will significantly decelerate from the 2001-2006 pace, in large part due to a slowing Chinese electricity generation sector."  
 --Section II, pg. 21

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**OTHER STUDIES**

**Circuit Breakers & Fuses**

US circuit breaker and fuse demand will grow 3.7% per year through 2011, supported by stronger outlooks for construction of nonresidential buildings and electric utilities. Circuit breakers will outpace fuses, led by strong growth in power circuit breakers. High-power fuses will pace the fuse segment. This study analyzes the \$3 billion US circuit breaker and fuse industry, with forecasts for 2011 and 2016 by product and market. It also evaluates company market share and profiles leading industry competitors.

#2252 ..... 10/2007..... \$4400

**Electric Transmission & Distribution Equipment**

US electrical transmission and distribution equipment demand will rise 3.6% yearly through 2011. Growth in nonutility generation and an improved regulatory outlook supporting investment in the electric grid will aid gains. Specialty transformers and metal-clad and -enclosed switchgear will lead gains. This study covers the \$17.5 billion US electrical transmission and distribution equipment market, with forecasts for 2011 and 2016 by product and market. It also details market share and profiles major firms.

#2198 ..... 07/2007..... \$4400

**World Fuel Cells**

Global fuel cell spending (R&D, investment, sales) will grow 15% yearly through 2011. Portable electronics will be the fastest growing commercial use while electric power generation will stay the largest. Proton-exchange membrane fuel cells will remain dominant over other chemistries. This study analyzes the \$5.2 billion world fuel cell industry to 2011 and 2016 by product, chemistry, application, world region and for 14 countries. It also reviews technology, evaluates market share and profiles major players.

#2194 ..... 05/2007..... \$5500

**Diesel Engines**

US demand for diesel engines will grow 3.8% annually through 2011. Best opportunities in the dominant motor vehicle market will be found in light-duty trucks, with the much smaller passenger car segment also faring very well. Off-highway diesel engines will experience slowing but still robust demand as new emissions regulations phase in. This study analyzes the \$16.6 billion US diesel engine industry to 2011 and 2016 by product, material and market. It also details market share and profiles major firms.

#2171 ..... 03/2007..... \$4400

**Solar Energy Products**

US demand for photovoltaic modules will more than triple by 2010, driven by innovations, economies of scale and government subsidies. Crystalline silicon cells will remain dominant while thin films will post stronger growth. Thin films use little or no silicon and can integrate photovoltaics within roofing shingles and other building materials. This study forecasts US solar energy product demand to 2010 and 2015 by product, market and region. It also evaluates market share and profiles major producers.

#2126 ..... 12/2006..... \$4300

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