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# Electric Transmission & Distribution Equipment

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

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Study #3029 | May 2013 | \$5100 | 317 pages

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[www.freedoniagroup.com](http://www.freedoniagroup.com)



**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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*The rising utilization of renewable energy sources in electricity generation will drive market growth, as new installations will require more equipment to transmit power along the electric grid.*

## US demand to rise 4.8% annually through 2017

US demand for electric power transmission and distribution (T&D) equipment is forecast to climb 4.8 percent annually to \$30.4 billion in 2017, accelerating from the pace of the 2007-2012 period, when product sales in every major market for these products slowed. The rising utilization of renewable energy sources in electricity generation will drive market growth, as new installations will require a significant amount of equipment to transmit power along the electric grid. Independent power producers' (IPPs) and nonutility generators' (NUGs) expanding share of electricity generation will also stimulate gains since connecting new operations to the grid will require a significant investment in electric T&D equipment. In addition, the continued adoption of "smart" technologies will provide growth opportunities.

## Residential market to post fastest growth

Electric utilities will continue to be the largest customers for electric T&D equipment, representing over half of all product demand in 2017. The important industrial and nonutility generator market will account for one-third of all electric T&D equipment sales, supported by the growing importance of IPPs and NUGs. The greatest sales increases in this sector will be for switchgear products such as power circuit breakers and power switching equipment. Advances will reflect heavy investment by these

## US Electric Transmission & Distribution Equipment Demand, 2017 (\$30.4 billion)



firms to protect sensitive industrial machinery and connect new facilities to the grid.

The residential market is expected to post the fastest gains in percentage terms through 2017, averaging 7.3 percent per annum after struggling between 2002 and 2012. Sales advances will be spurred by a marked rebound in residential construction expenditures and regulatory changes requiring increased use of arc-fault circuit interrupters. The commercial market is also projected to record above average growth as commercial construction activity recovers and use of sensitive electronics such as computers and security systems continues to climb.

## Electric meters to lead gains

Electric meters are expected to register the fastest sales increases of any electric T&D equipment product. The ongoing development of the "smart grid" and related demand for more costly "smart meters" will help spur meter value gains. The rising popularity of distributed generation and net metering programs, as well as the labor cost savings associated with use of smart meters, will also drive demand. Other products that will experience sizeable sales growth through 2017 include molded case circuit breakers, nonutility transformers, and power circuit breakers, supported by expansion of the industrial and nonutility generator market.

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## Sample Text, Table & Chart

### MARKETS

#### Electric Power Transmission & Distribution Equipment

Demand for electric power transmission and distribution equipment in the commercial sector is expected to increase through 2017 to 2022. This growth is driven by several factors, including the expansion of the commercial sector, the increasing use of sensitive electrical equipment like computers and microprocessors, and the need for improved power quality and protection. The susceptibility of these electronics to power quality and power surges will lead to increased sales of sophisticated power distribution and protection equipment to protect them from currents and voltage fluctuations. Furthermore, additional growth will arise as more companies begin to employ environmentally friendly on-site power generation systems, which require protective switchgear to route power and protect circuitry and meters capable of reading inflows and outflows of electricity. To provide one example, in February 2013 Target announced the installation of fuel cells at two stores in California as part of a corporate program to incorporate on-site energy generation at its facilities. Other efforts include the installation of solar panels on the roofs of 26 Target stores. Nevertheless, moderate growth in commercial electricity demand, although a rebound from the declines posted between 2007 and 2012, will restrain sales gains.

As in some other markets, changing consumer preferences have altered the product mix used in the commercial sector. More circuit breakers have replaced fuses in a vast majority of applications. Circuit breakers provide better equipment protection and coordination with advanced power distribution systems as well as cost savings as a result of reduced need for replacement parts and maintenance. While fuses offer a lower initial cost, they require the use of more labor for replacement.

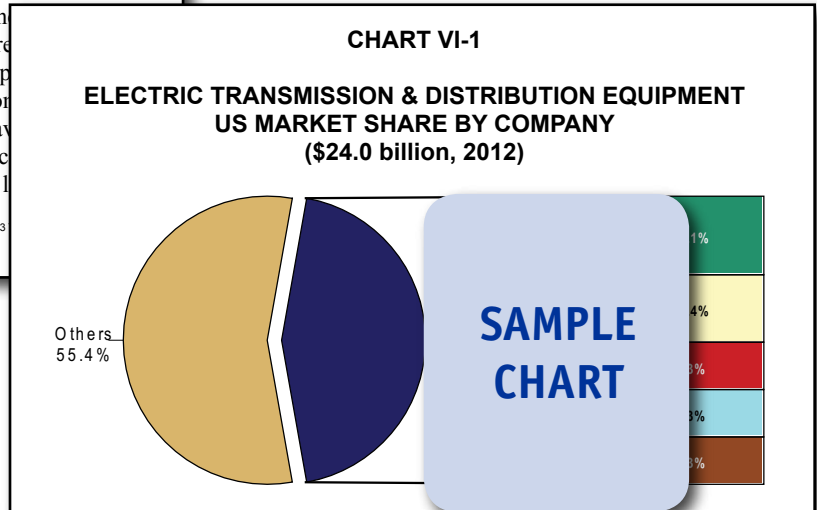
178

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**TABLE V-7**  
**COMMERCIAL MARKET FOR ELECTRIC TRANSMISSION & DISTRIBUTION EQUIPMENT (million dollars)**

Item	2002	2007	2012	2017	2022
Commercial Electric Demand (bil kWh)					
\$ T&D equip/000 kWh electricity					
Commercial Market					
By Product:					
Switchgear					
Transformers					
By Sector:					
Mercantile & Service					
Office					
Lodging					
Food Sales & Service					
Warehouse & Other					
% commercial					
Total Electric T&D Equipment Demand					

**SAMPLE TABLE**

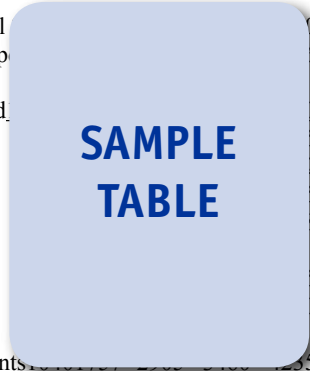


**SAMPLE CHART**

## Sample Profile, Table & Forecast

**TABLE IV-4**  
**METAL-CLAD & METAL-ENCLOSED SWITCHGEAR SUPPLY & DEMAND**  
 (million dollars)

Item	2002	2007	2012	2017	2022
Electric Utility Equip Expenditures (bil \$ metal-clad/000\$ elec utility eqp exp					
Metal-Clad & Metal-Enclosed Demand					
Metal-Clad Switchgear					
Metal-Enclosed Load Interrupting					
Metal-Enclosed Low Voltage					
Metal-Enclosed Bus Bars					
+ exports					
- imports					
Metal-Clad & Metal-Enclosed Shipments					



**COMPANY PROFILES**

**AZZ Incorporated**  
 1 Museum Place, Suite 500  
 3100 West 7th Street  
 Fort Worth, TX 76107  
 817-810-0095  
 http://www.a...

Revenues: \$...  
 Employment...

Key Products... res, bus duct components & and other switch-gear; and tran...

**SAMPLE PROFILE**

AZZ Incorporated manufactures and supplies lighting fixtures, bus duct, and electrical power distribution centers and assemblies for industrial, petrochemical, and power generation and transmission applications. The Company operates in two segments: Electrical and Industrial Products, and Galvanizing Services.

The Company participates in the US electric transmission and distribution equipment industry through the Electrical and Industrial Products segment. In FY 2013, the segment had revenues of \$234 million, of which the US accounted for \$190 million, and employed 850. The segment designs, manufactures, tests, and installs products that distribute electrical power under such brand names as ATKINSON, CGIT, CENTRAL ELECTRIC, CALVERT, and BLENKHORN & SAWLE brands. The segment operates through a number of subsidiaries, five of which participate in the US electric transmission and distribution equipment industry: Central Electric Company, Calvert Company, CGIT Systems Incorporated, Nuclear Logistics Incorporated (NLI), and Blenkhorn & Sawle Limited. The segment operates plants in Pittsburg,

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“The market for metal-clad and metal-enclosed switchgear will expand slower than switchgear demand overall through 2017, decelerating significantly from the gains posted between 2007 and 2012. The replacement market for these products is expected to experience healthy growth based on the increasing popularity of automated electrical distribution systems that incorporate metal-clad and metal-enclosed switchgear and allow for ...”  
 --Section IV, pg. 93



**OTHER STUDIES**

**World Electric Motors**

This study analyzes the world electric motor industry. It presents historical demand data (2002, 2007, 2012) and forecasts for 2017 and 2022 by product (e.g., AC fractional and integral horsepower, DC fractional and integral horsepower), market (e.g., motor vehicles, household appliances, heating and cooling equipment, machinery), world region, and for 30 major countries. The study also considers market environment factors, evaluates company market share, and profiles industry players.

#3055 ..... August 2013 ..... \$6100

**Batteries in China**

This study analyzes the primary and secondary battery industry in China. It presents historical demand data (2001, 2006, 2011) and forecasts for 2016 and 2021 by type (zinc carbon/chloride, alkaline, lithium, lead-acid, rechargeable lithium, nickel-metal hydride, nickel-cadmium), and market (consumer, industrial, government, health care, portable devices, transportation equipment, motive power, backup power). The study also considers market environment factors, evaluates company market share and profiles industry participants.

#2980 ..... June 2013 ..... \$5400

**World Turbines**

The world market for turbines and related products (turbine-based engines, generators, and generator sets) is forecast to rise 6.4 percent annually to \$162 billion in 2016. Wind turbines will remain the largest and fastest growing segment (albeit at a more moderate rate), while demand for gas combustion turbines will accelerate. This study analyzes the \$119 billion world turbine industry, with forecasts for 2016 and 2021 by application, product, world region and for 22 countries. The study also evaluates company market share and profiles industry competitors.

#3009 ..... March 2013 ..... \$6100

**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

**Smart Meters**

US smart meter product and service demand is projected to increase 11.3 percent annually to \$4.4 billion in 2016. Gains will be driven by the rising penetration of smart meters, particularly advanced metering infrastructure (AMI) products. The rising share of smart meters in use will support demand for parts and services. This study analyzes the \$2.6 billion US smart meter product and service industry, with forecasts for 2016 and 2021 by product, market and US geographic region. The study also evaluates company market share and profiles industry participants.

#2844 ..... February 2012 ..... \$4900

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