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World Lighting: Lamps & LEDs

Industry Study with Forecasts for **2016 & 2021**

Study #2979 | January 2013 | \$6200 | 477 pages

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The ongoing shift to higher value, more efficient lighting technologies will be an important factor, as many countries phase out the sale of conventional incandescent lamps.

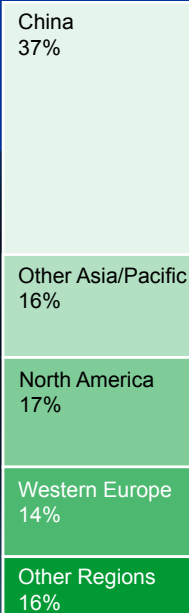
World demand to rise 12.3% annually through 2016

World demand for lighting is projected to climb more than 12 percent annually through 2016 to \$78.3 billion. Sales will be driven in general by an acceleration in economic activity, personal income, global motor vehicle output, and construction spending. However, a more important factor will be the ongoing shift to higher value, more efficient lighting technologies, particularly as many countries phase out the sale of conventional incandescent lamps for general use applications.

Developing countries to be fastest growing markets

Market gains in developing countries will outpace sales in the US, Western Europe, and Japan, fueled by ongoing industrialization efforts, increased manufacturing output, and rising standards of living. China alone will account for 49 percent of all additional product demand through 2016, strengthening its position as the largest national market for lamps and LEDs. Above average growth is also expected in countries such as Russia, Mexico, and Brazil. Sales of lighting in many of these developing areas will be aided by subsidies for consumer purchases of high efficiency lighting, sometimes with support from international organizations, as utilities seek to reduce the load on local energy grids or benefit from carbon reduction credits. Poland and other parts of Eastern Europe will post similarly

World Lighting Demand, 2016 (\$78.3 billion)



strong sales gains as economic conditions improve. Canada will also generate robust sales going forward as the country has been slower to require high efficiency lighting compared to other developed countries. In November 2011, the country's ban on the sale of conventional incandescent bulbs was delayed until the 2014-2016 period so the bulk of Canada's transition to higher value, high efficiency lighting will occur later than most other developed countries.

LED lighting devices to see fastest global gains

LED (or solid-state) lighting devices will record by far the fastest global market gains of any major product segment

through 2016. Historically, demand for LEDs used in lighting applications has been restrained by both high product prices and technical deficiencies in the quality and diffusion of light. However, the rapid rate of technological advances has dramatically improved their performance capabilities and resulted in substantial reductions in cost. Sales of fluorescent lamps will continue to expand, spurred in the near term by government-led efforts to phase out use of energy inefficient, general service, conventional incandescent lamps in many areas. While CFLs have generally been the replacement product of choice, sales are expected to be more limited going forward partly because of growing concern for their safe disposal.

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Sample Text, Table & Chart

ASIA/PACIFIC

South Korea: Lighting Demand by Type & Market

As in most parts of the world, incandescent lamps will be the poorest performing segment. Sales will decline through 2016 due to intense competition from more energy efficient and longer lasting products. Additionally, the country plans to phase out general use conventional incandescent lamps by the end of 2013. This ban will eliminate incandescent lamps because versions with sufficient energy efficiency levels, including most types of halogens, and conventional incandescent lamps in specialty shapes or sizes will still be sold in South Korea.

Fluorescent lighting was the largest segment in 2011, accounting for 40 percent of total sales. Fluorescent lighting has enjoyed successful penetration in South Korea for quite some time, with sales supported by the widespread availability of higher efficiency compact fluorescent lamps (CFLs). However, sales are expected to decelerate somewhat during the forecast period in light of falling prices for CFLs and increasing competition from LEDs. The South Korean government has instituted the extended producer responsibility (EPR) approach for lamps, in a system similar to that in the European Union in which responsibility for recycling is shifted away from local government waste management to the producer. The national system includes a deposit on lamps as well as regulations requiring recycling.

LEDs are the fastest market advances of any major product category. Advances will reflect ongoing performance upgrades and increased use in the large South Korean automotive market. Additionally, declining prices have made LEDs more affordable for use in a greater number of applications and markets, even as this puts a damper on value gains. Some local suppliers are already offering some types of general use LEDs within the \$15-20 price range, which is considered by many to be the tipping point toward widespread market penetration.

243

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TABLE VI-14

SOUTH KOREA: LIGHTING DEMAND BY PRODUCT & MARKET
(million dollars)

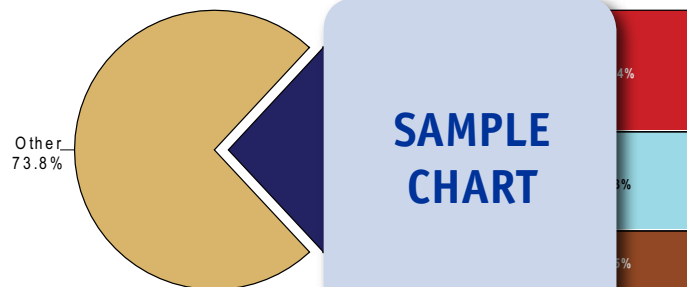
Item	2001	2006	2011	2016	2021
Asia/Pacific Lighting Demand	55	60	70	75	80
% South Korea	10	10	10	10	10
South Korea Lighting Demand	5.5	6.0	7.0	7.5	8.0
By Product:					
Lamps	1.5	1.5	1.5	1.5	1.5
Fluorescent	0.5	0.5	0.5	0.5	0.5
Incandescent	1.0	1.0	1.0	1.0	1.0
High Intensity Discharge/Other	0.0	0.0	0.0	0.0	0.0
Light-Emitting Diode	0.0	0.0	0.0	0.0	0.0
By Market:					
Buildings	1.5	1.5	1.5	1.5	1.5
Residential	0.5	0.5	0.5	0.5	0.5
Nonresidential	1.0	1.0	1.0	1.0	1.0
Outdoor	0.0	0.0	0.0	0.0	0.0
Motor Vehicles	0.0	0.0	0.0	0.0	0.0
Other Manufactured Goods	0.0	0.0	0.0	0.0	0.0

SAMPLE
TABLE

SAMPLE
TEXT

CHART VIII-1

WORLD LIGHTING MARKET SHARE
(\$43.9 billion, 2011)



SAMPLE
CHART

Sample Profile, Table & Forecast

COMPANY PROFILES

China Electric Manufacturing Corporation

No. 9, Section
 Taipei 100
 Taiwan
 886-2-2391
 http://www.

**SAMPLE
PROFILE**

Revenues:
 Employer

Key Products: standard and compact fluorescent, high intensity discharge, incandescent, halogen, and light-emitting diode lamps

China Electric Manufacturing manufactures and markets lighting products, including lamps, light-emitting diodes (LEDs), and lighting fixtures. The Company primarily serves markets in Taiwan, Japan, and Southeast Asia.

The Company is active in the world electric lighting industry via the manufacture and marketing of standard and compact fluorescent, high intensity discharge (HID), incandescent, halogen, and LED lamps. These products can be used in residential, commercial, industrial, public amenity, automotive, and other applications for general and specialty lighting end uses. China Electric Manufacturing's standard fluorescent lamps include T5, RA85, RA69, RA74, RA85, RA95, RA99, and circular types, as well as blacklight, germicidal, insect, plant cultivation, and other specialty lamps. Compact fluorescent lamps from the Company include spiral, miniature spiral, FTL, FDX, FPX, U-shaped, TIO2, and other types that can be used to replace traditional incandescent lamps.

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TABLE VI-13

SOUTH KOREA: LIGHTING SUPPLY & DEMAND

Item	2001	2006	2011	2016	2021
Gross Domestic Product (bil 2010\$)					
per capita GDP					
Population (mil persons)					
persons/household					
Households (mil units)					
Personal Consumption Expend (bil 2010\$)					
Construction Expenditures (bil 2010\$)					
Motor Vehicle Production (000 units)					
Motor Vehicles in Use (mil units)					
\$ lighting/mil \$ GDP					
\$ lighting/capita					
Lighting Demand (mil \$)					
net exports					
Lighting Shipments (mil \$)					
% South Korea					
Asia/Pacific Lighting Shipments (mil \$)					

**SAMPLE
TABLE**

"The market for electric lighting in South Korea will rise 9.5 percent annually through 2016 to \$2.4 billion. Advances will be spurred by an acceleration in economic and personal consumption expenditures growth, as well as a recovery in residential building construction activity. Although sales increases will not be as strong as those for the region overall, they will exceed advances forecast for Japan, the US, and Western Europe as a whole. Gains will be aided by ..."
 --Section VI, pg. 239

OTHER STUDIES

LEDs & High Efficiency Lighting

US demand for high efficiency lighting will increase 10.4 percent annually to \$11.7 billion in 2017, driven by a ban on incandescent lamps. The market for light emitting diodes (LEDs) will nearly double in size as they supplant traditional lamps in nearly every major lighting segment, especially outdoor lighting, residential and nonresidential applications. This study analyzes the \$7.1 billion US high efficiency lighting industry, with forecasts for 2017 and 2022 by product, market and US region. The study also evaluates company market share and profiles industry players.

#3068 November 2013 \$5300

Lamps

US demand for lamps is forecast to be restrained in unit terms, due to a ban on the manufacture and sale of most general service incandescent lamps by 2014. More expensive halogen lamps and high intensity discharge (HID) lamps will be the fastest growing products, causing total lamp demand to contract only slightly in value terms to \$7.2 billion in 2017. This study analyzes the \$7.4 billion US lamp industry, with forecasts for 2017 and 2022 by product and market. The study also evaluates company market share and profiles industry players.

#3054 October 2013 \$5300

Sensors

US sales of sensors are forecast to climb at a 6.1 percent annual rate through 2016 to \$14.9 billion. Process variable sensors will remain the largest category, while chemical property sensors and proximity and positioning sensors will post the fastest growth. Motor vehicles will once again be the leading sensor market as production rebounds from recessionary lows. This study analyzes the \$11.1 billion US sensors industry, with forecasts for 2016 and 2021 by type and market. The study also evaluates company market share and profiles industry competitors.

#2957 October 2012 \$5100

World Lighting: Lamps & LEDs

World demand for lighting is projected to climb more than 12 percent annually through 2016 to \$78.3 billion. Market gains in developing countries will outpace sales in the US, Western Europe, and Japan. LED (or solid state) lighting devices will record by far the fastest global market gains. This study analyzes the \$43.9 billion global industry for lamps and LEDs used in lighting applications, with forecasts for 2016 and 2021 by product, market, world region and for 18 countries. The study also evaluates company market share and profiles industry participants.

#2979 January 2013 \$6200

World Lighting Fixtures

Global demand for lighting fixtures will climb 6.9 percent annually through 2016 to \$153 billion. China alone will account for over one third of all new demand, retaining its position as the largest national market. Nonportable indoor lighting fixtures will record the fastest gains, fueled by a recovery in residential construction spending. This study analyzes the \$109.5 billion world lighting fixture industry, with forecasts for 2016 and 2021 by product, market, world region and for 24 major countries. The study also evaluates company market share and profiles industry competitors.

#2946 September 2012 \$6300

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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