Multiclient Research

LIGHTING FIXTURES

Introducing Csil expertise for the lighting fixtures industry: a selection of pages (partially blind) from 2013-2012 Market Reports

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Sample of index from "The lighting fixtures market in the United States"

May 2013. 100 pages, catalogue price EUR 1600

Contents

Sample of "Scenario" from: "The European market for lighting fixures. Part I"

May 2013. 230 pages, catalogue price EUR 2900

Summary

Activity trend

After the impasse registered in 2011 (+1,9%), the European lighting fixtures consumption showed a slight recovery signal in 2012 (+2,3%). Imports registered an increase of 4.2%, similarly export recorded a +3.3% growth. Due to the positive trend on international markets, European production mantained a certain stability with a +1.3% growth in the year.

Consumption has been sustained exclusively by the technical segment (+4.8%) as residential lighting fixtures had a light decline (-1.3%) in 2012. In 2012 the European production of lighting fixtures registered a total value of approximately EUR 10,601 million. Double digit growth in production has been experienced in Denmark and Greece. The Netherlands and the United Kingdom increased by 9.6% and 7% respectively. Also Spain (6.8%) and Sweden (4.5) had a performance over the average. On the contrary, a standstill situation in 2012 is showed by Germany (-0.5%) and in a marked way in Italy (-2.3%)

In terms of consumption, four countries (Germany, the United Kingdom, Italy and France) account for around 63% of total consumption.

Trade

After the dramatic slump of 2009, exports of lighting fixtures steadily increased in the three consecutive years and reached EUR 8,324 million during 2012. A positive performance in comparison with the year before (+3.3%) along a weak middle term positive trend (+1.8% yearly for the 2007-2012 period).Among the main exporters Denmark, the Netherlands and United Kingdom increased over the average in 2012. On the other side, Germany (3%) and Italy (1%) increased at lower path and Austria and Belgium had a decline of respectively -3.8% and – 9.8%.

Export flows to Central-South America and Middle East areas had a relevant increase in 2012 compared to 2011 (respectively 32% and 23%) confirmed by a middle term growth higher than the average with a +9.7% and 10.8% yearly from 2007 to 2012.The total value of imports increased by 4% in the year 2012 to EUR 9,835 million. Over the average import increase for Germany, Sweden and United Kingdom (with a double digit growth rate).

Decrease in imports was a bit less relevant as far as residential lighting and Chinese products are concerned.

Imports from the Asia and Pacific region soared in 2012 increasing by 13%, while in the medium term (2007-2012) the average stood at +7%.

Employment and productivity

Employment in the lighting industry was estimated at around 64,000 for 2012. The average turnover per employee is estimated EUR 166,000 (approximately the same level of 2011).

Employment in the lighting industry has been slightly increasing in North Europe and decreasing in Southern Europe (see chapter 6). Employment growth in Trilux, Waldmann, Hess, Dietal, Delta Light, Fagerhult, Markslojd.

Main players

In 2012 the top 50 players in Western Europe controlled around 76% of the EU 16 production of lighting fixtures. In table 2.1, the total refers to the EU 16 production. Philips (Professional and Consumer) sales refer only to what is sold in EU 16 at least for 2009-2012 data.

Zumtobel's sales are growing in Germany, United States and China, while Philips Professional is growing especially in the United Kingdom. Philips Professional increased especially in outdoor lighting.

If we consolidate Philips Lighting Professional and Philips Consumer sales in the 16 considered countries, the total amounted to around EUR one billion in 2012.

Sample of activity trend from: "The lighting fixtures market in India".

February 2012, 90 pages, catalogue price EUR 1600

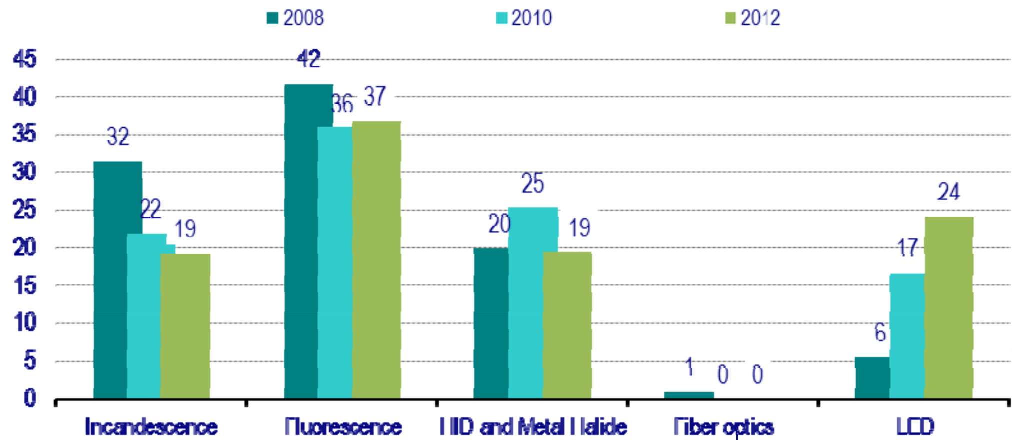
India. Lighting fixtures. Activity trend, 2002- 2011. Million INR

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Production	28,180	35,034	40,532	43,547					xxxxx	xxxxx
Export	7,258	8,496	9,289	8,874	10,049	10,996	11,751	10,983	12,329	13,974
Import	1,832	2,466	3,040	3,122	3,804	4,929	6,410	7,573	10,126	13,508
Consumption	22,753	29,004	34,396	37,795					xxxxx	xxxxx

Source: CSIL estimates

Sample of evolution of lighting sources in a national market.

XXXX. Lighting fixtures. Breakdown of supply by light sources 2008-2010-2012. Percentage shares



Source: CSIL

Sample of market segmentation from:"The European market for lighting controls"

March 2013. 90 pages, catalogue price EUR 3000

Europe. Sales of lighting controls by segment, 2012. Million Euro and percentages

		Million Euro	%
xxxxxx	R	52	10
xxxxxx	C	146	28
Hotels	C	78	15
Retail	C	26	5
xxxxxx	C	26	5
Institutional	C		
Industrial plants/warehouses	I		
Hospitals/healthcare	I		
Urban landscape (outdoor)	O		
Streets (outdoor)	O		
Others	O	16	3
TOTAL		520	100

Source: CSIL
Note: R: residential, C: commercial, I: industrial; O: outdoor

Sample pages on analyzing Technology issues

Adaptive lighting control is a necessity going forward given the energy crisis we face globally and the fact that lighting consumes a very large share of the energy used. Efficient solid-state lighting (SSL), using LED sources, is a step in the right direction for slashing energy usage, and controls that eliminate over-lighting can greatly enhance savings. Lighting manufacturers and companies dedicated to sensor and control products support adaptive-control scenarios today, although the networking schemes that link products are largely proprietary. Standards-based networks would enable interoperable products from multiple vendors, but a robust, standardized, lighting-centric network is still a work in progress.

Two main elements have to be considered in analyzing the market evolution:

1.The transition to LED lighting has sparked an increased interest in controls. LEDs are easily dimmable. Moreover dimming SSL delivers energy savings that track the lower light output in a near linear fashion. The efficiency of many LED drivers does drop slightly at less than full load, but the savings remain substantial.

2. The expansion of home automation and web technology towards the lighting sector. In the long run, this means that players coming from home automation will gain ground in this market (Siemens, etc..). In response, controls companies are bringing down cost and making systems easier to use including supporting control applications on popular devices such as smart phones and tablets such as Apple’s iPad.

The biggest obstacle to broader deployment remains the lack of a full network stack for lighting there are wired and wireless networks that could serve in lighting, but in every instance one or more required layers are missing.

The major lighting vendors all have some approach to control systems using either wired or wireless interconnects to link lighting and occupancy sensors, switches and dimmers, and light fixtures to a centralized controller.

Companies that specialize in control technologies, however, have a broader range of network elements, wireless support, and system controllers. Among the others Lutron has perhaps the broadest array of offerings in the segment with products that target light-control in individual residential rooms, whole-house systems, and commercial-building systems. Moreover the lighting controls are part of a larger automation offering that includes control of HVAC systems, motorized window shades, and appliances.

Lutron has evolved a proprietary wireless scheme called Clear Connect over the past 15 years that is a key enabler of its products. For example, in an individual room application, Clear Connect can link a wall-mounted control pad with occupancy and light sensors, dimmer wall switches, plug-in lamp dimmer modules, and other elements. A wireless wall switch that connects to a ceiling-mounted luminaire could switch or dim the load based on local activation of the switch or wireless commands received from the control pad or a handheld remote. The electronic dimmer creates a phase-cut AC signal similar to the output from a triac dimmer and works with any phase-cut-compatible lamp or luminaire.

Whole-house systems build on that functionality via wireless repeaters that extend the range of the network. And Lutron offers dedicated controllers such as the RadioRA 2 and HomeWorks systems that can control multiple rooms or zones. For commercial applications, or perhaps high-end residential, Lutron offers systems capable of controlling more zones and adds a wired interconnect capability called EcoSystem that is an enhanced version of the DALI standard for light control.

According to the sample analysed “digital control panels” already cover 70% of the market, progressively replacing the analogical panels. Touch screen is increasing fast, bus just covering 5% of total.

Sample table on lighting fixtures trade from a Report

XXXXXXX. Imports of lighting fixtures by country and by geographical area, 2007-2012

Country and geographical area	EUR Million						% share		% annual changes	
	2007	2008	2009	2010	2011	2012	2007	2012	12/11	Av. 07/12
China	68.1	68.9	48.9	72.4	72.8	85.6	25.8	30.5	17.6	4.7
Germany	32.7	32.5	25.4	26.7	35.0	35.7	12.4	12.7	2.0	1.8
Sweden	46.7	41.4	33.0	34.9	37.9	34.3	17.7	12.2	-9.6	-6.0
Italy	26.5	23.0	16.8	16.8	22.4	19.4	10.0	6.9	-13.7	-6.1
Netherlands	8.1	8.5	7.2	8.4	12.2	15.8	3.1	5.6	30.2	14.3
France	6.1	5.7	5.4	6.5	8.1	12.7	2.3	4.5	57.3	15.9
Belgium	10.8	10.3	6.6	6.8	10.6	10.9	4.1	3.9	2.1	0.1
United Kingdom	8.4	8.0	4.8	4.3	5.8	8.1	3.2	2.9	39.5	-0.8
Poland	5.3	5.3	3.5	4.9	6.9	7.5	2.0	2.7	8.7	7.4
Norway	11.9	11.2	9.0	7.6	8.0	7.0	4.5	2.5	-12.3	-10.0
Finland	6.6	6.7	3.9	5.3	5.0	6.5	2.5	2.3	28.1	-0.4
Spain	7.6	7.0	5.1	6.3	6.4	5.3	2.9	1.9	-18.1	-7.2
Slovakia	4.4	4.0	3.2	3.7	3.7	4.9	1.7	1.7	34.2	2.1
India	4.6	4.6	3.5	5.4	5.3	4.8	1.7	1.7	-9.6	0.9
Austria	3.4	3.5	3.4	4.0	4.1	3.1	1.3	1.1	-24.8	-1.5
Estonia	0.8	0.8	0.8	0.9	5.9	2.2	0.3	0.8	n.s.	22.7
Taiwan	1.6	1.9	0.7	1.1	1.7	2.1	0.6	0.7	22.9	5.1
Slovenia	0.2	0.3	0.2	0.2	0.4	1.7	0.1	0.6	n.s.	55.0
Hungary	0.5	0.2	0.3	0.6	0.5	1.5	0.2	0.5	n.s.	24.8
Turkey	0.3	0.6	0.9	1.6	1.9	1.4	0.1	0.5	-29.4	32.7
Top 20	254.5	244.3	182.7	218.3	254.7	270.3	96.4	96.4	6.1	1.2
others	9.6	10.1	7.8	8.2	10.6	10.2	3.6	3.6	-3.7	1.2
Americas	1.7	1.5	1.1	0.9	0.8	1.3	0.6	0.5	65.8	-4.5
- North America	1.6	1.4	1.1	0.9	0.8	1.3	0.6	0.5	63.3	-4.6
- Central-South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.s.	-1.9
Asia and Pacific	78.6	80.7	57.0	82.9	85.2	97.6	29.8	34.8	14.4	4.4
Europe	183.6	172.1	132.4	142.6	179.1	181.5	69.5	64.7	1.3	-0.2
- European Union (15)	157.5	147.0	112.2	120.4	148.0	152.3	59.6	54.3	2.9	-0.7
- New EU Members (12)	13.5	12.7	10.0	12.4	20.4	20.1	5.1	7.2	-1.6	8.3
- Enlarged EU (27)	171.0	159.7	122.1	132.8	168.5	172.4	64.8	61.5	2.3	0.2
- Norway & Switzerland	12.3	11.7	9.3	8.1	8.5	7.6	4.6	2.7	-10.7	-9.1
- Other Europe	0.3	0.7	1.0	1.7	2.1	1.5	0.1	0.5	-29.5	34.7
Middle East	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	11.0	-10.6
Africa	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	-34.3	-5.3
Other Countries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.c.	n.c.
World Total	264.1	254.4	190.5	226.5	265.3	280.5	100.0	100.0	5.7	1.2

Source: CSIL processing of official data

Sample of market share analysis from:"The European market for lighting controls"

May 2013. 70 pages, catalogue price EUR 1600

Turkey. Outdoor lighting. Sales and market shares in a sample of leading companies, 2012

Company	Country	Outdoor lighting sales in Turkey		% market shares
		Eur million	%	
xxxxx	TR	18.9	60	11.9
xxxxx	TR	12.7	70	8.0
xxxxx	TR	10.2	30	6.4
Glopsan - Veraluce	TR	9.3	100	5.8
Osram/Siteco (Turkey)	TR	7.3	50	4.6
Toros Ayidinlatma	TR	7.2	100	4.5
Gecem Aydınlatma	TR	5.9	70	3.7
Gül Elektrik - Jupiter	TR	4.8	30	3.0
PSL Elektronik - Fiberli	TR	4.3	60	2.7
Heper Moonlight	TR	4.0	100	2.5
Assan Elektronik	TR	3.8	50	2.4
Alkan Kardesler Elektrik	TR	3.8	45	2.4
Özlem Aydınlatma - Polight	TR	3.1	100	2.0
Sarnikon Metal Electronics	TR	2.8	60	1.7
Isikyildiz Elektrik - IA Lightstar Electric	TR	1.9	100	1.2
Arlight	TR	1.8	10	1.1
Bahar	TR	1.8	20	1.1
Burc	TR	1.6	100	1.0
DMB Elektronik - ProNeo	TR	1.4	33	0.8
Tan	TR	1.4	100	0.8
Buse	TR	1.4	100	0.8
Isbak	TR	1.2	60	0.8
Turay	TR	1.2	30	0.8
Stilas	TR	1.2	32	0.7
Focus Led	TR	1.1	70	0.7
Litpa Aydınlatma	TR	1.0	20	0.6
Kengo	TR	0.9	30	0.6
Ozartas	TR	0.9	20	0.6
Baytas	TR	0.8	60	0.5
LSP	TR	0.7	30	0.4
Zumtobel	AT	0.6	20	0.4
Lidefa - A.T.S.	TR	0.5	20	0.3
Hella - Intermobil	TR	0.5	30	0.3
AFC OptoLed	TR	0.4	100	0.3
CHRA Lighting	TR	0.4	20	0.3
Teknoled	TR	0.4	20	0.3
Bestas Elektronik	TR	0.4	40	0.3
Pedas Elektrik	TR	0.4	10	0.2
Global	TR	0.3	100	0.2
Disano (Lamplast)	IT	1.5	50.0	0.9
Top 40		123.6		77.5
Others		35.9		22.5
Total outdoor consumption		159.5		100.0

Source: CSIL

Sample of market share analysis from:“The European market for emergency lighting”.

September 2012, 40 pages, catalogue price EUR 1600

XXXX countries. Top players in the emergency lighting market. Million Euro and percentages

Company	Country	Sales by country (Million Euro)	% on total company sales
xxxx			
xxxx			
Chinese Players	CN	4.0	5
Effekta	SW	2.5	50
Schneider Electric (Ova Bargellini)	IT	2.4	3
Zumtobel+Thorn	AT	1.5	8
Thomas & Betts	NL	1.3	10
Legrand	FR	1.2	2
xxxx	DE	1.1	5
Schreder Comatelec	BE	0.8	4
Daisalux	ES	0.7	3
Cooper Safety	UK	0.6	1
Philips Lighting	NL	0.6	10
Havells-Sylvania	DE	0.5	9
I-Valo	FL	0.4	80
Siteco	DE	0.4	5
Etap	BE	0.3	2
xxxx	PL	0.3	5
xxxx	DE	0.2	5
xxxx	ES	0.1	1
20 Companies			
Others			
TOTAL		30.0	

Source: Csil

Sample of short profiles from: “The lighting fixture market in Russia”.

January 2013.100 pages, catalogue price EUR 1600

AtomSvet is a Russian manufacturer of LED lighting systems. AtomSvet lighting systems possess a wide range of applications: from lighting industrial facilities, housing and utilities to street lighting, including in regions with adverse climatic conditions (IP 67).The AtomSvet lighting systems was used at facilities with adverse operating environments, including nuclear power plants, oil and gas, chemical and metallurgical production facilities, mines and ore enrichment plants. AtomSvet was founded in 2009 when while implementing a building renovation project at one of ‘Rosatom’ (the State Atomic Energy Corporation) production sites, FNK GROUP faced the need to replace lighting systems using traditional light sources by those using LEDs (to meet the requirements of the Federal law "On power saving and on increase in energy efficiency"). The main customers of the company are state-owned enterprises. Great interest of AtomSvet products is of Siberian companies, because lighting fixtures operate at -60°C. AtomSvet is a Russian manufacturer of LED lighting systems for a wide range of applications: lighting industrial facilities, housing, utilities, street lighting, including in regions with adverse climatic conditions.The high quality and reliability of AtomSvet lighting systems enable them to be used at facilities with adverse operating environments, including nuclear power plants, oil and gas, chemical and metallurgical production facilities, mines and ore enrichment plants.Production of LED lighting systems of AtomSvet is certified in compliance with the Russian standards. AtomSvet Quality Management System has been tested and registered by "RusSert " Authorized Organization for compliance with GOST R ISO 9001 - 2008 (ISO 9001:2008). All the components are subject to strict quality control, at each manufacture stage all the units and components undergo multiple testing.In 2009 while implementing a building renovation project at one of ‘Rosatom’ (the State Atomic Energy Corporation) production sites, FNK GROUP faced the need to replace lighting systems using traditional light sources by those using LEDs (to meet the requirements of the Federal law "On power saving and on increase in energy efficiency").A research of the market of Russian manufacturers demonstrated that none of the current LED lighting systems complied with the high requirements being specified by the enterprises of the nuclear power industry for lighting systems.FNK GROUP incorporated AtomSvet LLC which currently mass produces LED lighting systems under the trade mark "AtomSvet", and has its own R&D department and advanced production facilities.

Sample of refence prices analysis from: “The lighting fixture market in Russia”

January 2013.100 pages, catalogue price EUR 1600

Russia. Industrial lighting. Reference retail prices in a sample of stores, 2012. Prices in Rub

Category	Application	Market range	Brand	Price list (RUB)
Ceiling/ suspended (gas discharge, metal halide), HB range , IP20	Plants, warehouses, indoor public and sport facilities, exhibition halls	LM	Vladasvet (Ru)	1.515-2.371
Ceiling/ suspended (gas discharge, metal halide), High Bay range, IP65	Plants, warehouses, indoor public and sport facilities, exhibition halls	LM	Vladasvet (Ru)	1.825-2.619
Ceiling/ suspended (gas discharge, metal halide), HB range, IP65	Plants, warehouses, indoor public and sport facilities, exhibition halls	UM	Lighting Tecnologies (Ru)	4.656-9.043
Ceiling/ suspended (gas discharge, metal halide)	Plants, warehouses	L-M-U	*Galad (Ru)	1.225-7.223
Ceiling/ recessed or suspended, (LED), IP54	Plants, warehouses	M	Leader Light (Ru)	6.000-15.067
Ceiling/ recessed or suspended, (LED), IP65	Plants, warehouses	UM	Svetlana Optoelektronica (Ru)	9.204-10.068
Ceiling/ recessed or suspended, (LED), IP66	Plants, warehouses	UM	Ledel (Ru)	6.950-25.000
Ceiling/ suspended (LED), IP65	Plants, warehouses	U	*Galad (Ru)	17.104-30.336
Ceiling/suspended, built-in, antibacterical, 60x60, IP54	Medical	UM	Lighting Tecnologies (Ru)	4.045-9.679
Ceiling/suspended, built-in, antibacterical, IP54, LED	Medical	UM	Lighting Tecnologies (Ru)	4,710
Ceiling, dust and moisture-proof , IP53	Plants, warehouses	L	Feron (Ru)	229-353
Ceiling, fluorescent linear, dust and moisture proof, IP65	Plants, warehouses, medical, premises with chemically aggressive media	M	Ardatov Astz (Ru)	1.211-3.414
Ceiling, fluorescent linear, T=-40°C, IP65	Refrigerators, freezers	M	Ardatov Astz (Ru)	1.838-3.414
Ceiling, fluorescent linear, T=-30°C, IP65	Refrigerators, freezers, parking lots	UM	Lighting Tecnologies (Ru)	4.009-6.265
Ceiling, built-in, IP54	petrol / gas stations, warehouses, sport facilities	M	Ardatov Astz (Ru)	2.968-5.360
Ceiling, built-in, IP54	Petrol/gas stations, plants, warehouses, hospitals, underwater	UM	Lighting Tecnologies (Ru)	1.699-6.782
Ceiling	Underground, tunnels	M	*Galad (Ru)	2.225-5.292
Emergency, IP42, IP65	airports, railway stations, exhibition halls	UM	Lighting Tecnologies (Ru)	1.478-4.658
Emergency, IP42, IP65, LED	airports, railway stations, exhibition halls	UM	Lighting Tecnologies (Ru)	2.871-4.043
Explosion-proof, ceiling, fluorescent, IP65	Plants, warehouses	M	Gagarinskiy Plant GSTZ (Ru)	5.310-6.962
Explosion-proof, wall/ceiling (LED), IP65, T=-45°C	Plants, warehouses, indoor sport facilities	M	Leader Light (Ru)	5.460-15.300
Explosion-proof, wall/ceiling (LED), IP65, T=-45°C	Plants, warehouses, indoor sport facilities	UM	Fokus (Ru)	10.205-35.425
Projectors / floodlight	Underground, tunnels	UM	*Galad (Ru)	8.366-17.175
Projectors / floodlight (LED), IP65	Underground, tunnels	U	Svetovod (Ru)	39500
Suspended (gas discharge), IP20	Plants, warehouses	L	Vladasvet (Ru)	484-1.315
Suspended (gas discharge), IP65	Plants, warehouses	LM	Vladasvet (Ru)	1.081-2.188
Suspended (gas discharge, metal halide), IP65	Plants, warehouses, sport facilities	UM	Lighting Tecnologies (Ru)	4.656-8.040
Suspended (gas discharge), IP54	Plants, warehouses, outdoor industrial facilities	UM	Elgo	from 6.000
Suspended (LED), IP54, IP65	Plants, warehouses, public buildings	U	Barrus Group	17.995-29.900
Wall / Ceiling, Suspensed, dust and moisture-proof, IP53, IP65	Plants, warehouses	L	Vladasvet (Ru)	118-376

Source: CSIL

Market range: L=lower; M=middle; U=upper; UM=upper-middle

Sample of short profiles from: "The world market for outdoor lighting fixtures".

September 2012, 160 pages, catalogue price EUR 2000

Total sales

World market of outdoor lighting fixtures is equal to around 16.1 billion USD for the year 2011. Top 50 players cover approximately 45% of the market.In top positions, we find (with estimated data) Philips Lighting, Acuity Brands, Schreder, GE Lighting, Toshiba.

Philips Lighting

Philips Lighting's turnover raised from EUR 6546 million in the year 2009, to EUR 7638 million in 2010 (+15%), and EUR 7638 million in 2011 (+1%).Its breakdown is 41% lamps, 20% lighting systems, solutions and controls, 8% automotive and specialty, 26% professional lighting, 5% consumer lighting. Philips lighting outdoor fixtures are estimated in the region of 1.4-1.5 billion USD, some 5%-10% more in comparison with 2010.

Acuity Brands

On October 14, 2010, the Company acquired for cash all of the outstanding capital stock of Winona Lighting, Inc. ("Winona Lighting"), a premier provider of architectural and high-performance indoor and outdoor lighting products headquartered in Minnesota. On July 26, 2010, the Company acquired the remaining outstanding capital stock of Renaissance Lighting, Inc. ("Renaissance"), a privately-held, pioneering innovator of solid-state light-emitting diode ("LED") architectural lighting. Renaissance, based in Herndon, Virginia, offered a full range of LED-based specification-grade downlighting luminaires and developed an extensive intellectual property portfolio related to advanced LED optical solutions and technologies. On April 20, 2009, the Company acquired 100% of the outstanding capital stock of Sensor Switch, Inc. ("Sensor Switch"), an industry-leading developer and manufacturer of lighting controls and energy management systems. On December 31, 2008, the Company acquired for cash and stock substantially all the assets and assumed certain liabilities of Lighting Controls & Design ("LC&D"). Located in Glendale, California, LC&D is a manufacturer of comprehensive digital lighting controls and software.

Schréder

Schréder, more than 2,000 employees, 2011 turnover of around US$ 485 million, specialises in the manufacture of outdoor lighting for urban landscapes, architectural and industrial lighting, floodlighting as well as tunnel lighting and signage. France, the UK and Spain are the top markets. Schréder is active in the United Kingdom with the Urbis brand. Schréder Group GIE, Belgian based, is active in over 40 countries worldwide, in the field of public, urban, floodlighting, tunnel and transit, and special application lighting. Schréder Group GIE's North American operations are based in Chicago and Montreal. It was formerly part of a joint venture with Lumec.

Schréder operates in several countries in Latin America, including Bolivia (since 30 years), Argentina (branch since 2006), Chile, Brazil, and other markets through the exporting company Comelec.

GE Lighting

General Electric is an American multinational founded more than 130 years ago that operates in many sectors, including lamps and lighting fixtures (residential and commercial sector, outdoor segment). In 2010 total turnover was USD 150 billion. Lighting products are part of the Consumer & Industrial division that accounts for around 6% of total revenues. Sales of outdoor lighting fixtures amounted roughly to US$ 315 million in 2010 (consolidated figures GE Lighting UK, GE India, GE Lighting USA, GE do Brasil). GE Lighting has combined Lumination, its LED operation, and GE Lighting Systems, its commercial and industrial lighting group, to form GE Lighting Solutions. GE manufactures in Spain amenity lighting luminaires. The optical system in their controls the light emanating from rings of LEDs with a series of circular profiled moulded reflectors. Fully sealed to IP65. GE Lighting Systems is one of the world's largest manufacturers of high intensity discharge (HID) and speciality flurescent lighting systems. Product range is mostly Outdoor, including roadway and high street lighting, tunnel and parking, flood and sport lighting poles, decorative area lighting. Lighting Systems offers also photometric services. GE Lighting Systems is certified with a Six Sigma quality approach in all manufacturing and commercial processes.

Xxxxx Lighting & Technology

Xxxxx Lighting & Technology is part of Xxxxx Corporation and is involved in the manufacturing of lighting fixtures and lighting source. In FY 2010 ended March 2010 the company recorded 164 billion YEN turnover (US$ 1.8 billion). Lighting fixtures represent roughly 70% of this value, while the rest is composed by lamps. In March 2010 Xxxxx stopped 120 years production of incandescent lighting bulbs converting entirely the production to energy saving lamps and heavily investing in LED products. Production plants in France and Taiwan were closed during the year and domestic production of lighting products started to be progressively transferred in China and Korea.

Xxxxx Lighting

Xxxxx Industries plc (NYSE: CBE) is a global electrical products manufacturer with 2011 revenues of US$ 5.4 billion. Revenues for 2011 increased 6.8% compared to 2010. Sales of lighting fixtures are estimated in the region of 1.1 billion USD. Sales of lighting fixtures registered an estimated growth by 10%. Lighting fixtures are relevant both inside the Energy and Safety Division (54% of the company turnover, +16%) and the Electricals division (46% of the company turnover, +11%). The company has seven operating divisions with leading market positions and brands, including Bussmann electrical and electronic fuses; Crouse-Hinds and CEAG explosion-proof electrical equipment; Halo and Metalux lighting fixtures; and Kyle and McGraw-Edison power systems products. In 2011 sixty-two percent of total sales were to customers in the industrial and utility end-markets and forty percent of total sales were to customers outside the United States. Xxxxx has manufacturing facilities in 23 countries as of 2011. Residential markets represented approximately 7% of 2011 annual revenues and include energy-efficient lighting and lighting control products. Xxxxx r's other markets represent 5% of 2011 revenue and include platforms sold into military, defense and electronics markets. New products includeLED linear platforms, wall washers, office suspensions, cove luminaires, wall sconces, emergency, undercabinet luminaires. Also manufacturing Controls.

Xxxxx Electric

Xxxxx Electric reached a lighting fixtures turnover of 34,3 billion YEN in FY 2011 (US$ 430 million), an increase of 4% in comparison with the previous year (+15% in US$). The company is pushing its diversified sectors (lighting products, applied optics products, electronic products and communication equipment) and sales of lighting fixtures to the domestic sector in order to face the decline of the demand of outdoor lighting fixtures (around 60% of the total sales) from public bodies. In the Lighting Sector, sales increased as the company introduced 45 lines of products including urbanscape lighting, the “LED EYE lamp” and approximately 220 new LED product items. Iwasaki plan to launch 62 lines of products and approximately 300 new items during the next fiscal year. The company has two manufacturing plants in the United States (EYE lighting in OHIO manufactures of HID lamp, arc tubes and outer bulbs), one in China (Dalian) for the production of mercury lamps, stems and other high pressure discharge lamps and two manufacturing facilities in Australia (Spectra Lighting Pty Ltd and Australian Streetscape Pty Ltd.) both located in Queensland are specialised in the production of street lighting and indoor luminaires. Sales in North America represent 7% of total, Australia and other Asian countries accounts for 13%, while the remaining (1%) is sold in Europe.

Panasonic Electric Works Co., Ltd.

Sales of LED based outdoor fixtures stood at about US$ 15 million in 2010.

Indal Group

The Indal Group comprises the companies Indalux (outdoor, Spain), Sluz (architectural, Spain), 3E (outdoor, France), Industria (industrial and outdoor, Netherlands), WRTL (United Kingdom, since 2006), Lefebvre, Raguer (France), Indal China and more branches in Brazil, Colombia, Germany, Portugal, Poland, the Czech Republic and Belgium. It has been purchased by Philips at the end of 2011.Turnover EUR 160 million (+7%). Approximately 90% outdoor and 10% indoor. Indal is currently one of the most successful and knowledgeable European LED lighting manufacturer, operating in more than 50 countries worldwide. Lighting products are manufactured and supplied by three main production sites located in Spain, France and The Netherlands (around 620 peple in Europe). In South America, Indal has production units in Brazil and Colombiato supply the Latin American markets. Indal representative office in China was established in July 2005. The office is located in Shenzhen next to the border with Hong Kong. Indal produces Stela LED street lighting luminaire. By the end of 2010 there were approximately 40,000 Stela installations throughout Europe delivering large energy savings and reducing harmful CO2 emissions. Special attention today has to be given to the Luma model.This latest solution is especially intended for traffic routes. It is a logical extension after the Stela family (for residential areas and city roads), T-line (for traffic tunnels), Ocean and Element family (residential areas and city centres) and Dot (indoor lighting). Like the Stela, the Luma is also growing into a family: last year, Indal introduced the Luma 2 (maximum 120 LEDs) and the Luma 3 (maximum 200 LEDs). In other words, a suitable LED solution is now available for all situations. With an innovative circular design, compared with traditional luminaires, Disq LED gives an answer to the new roadlighting and urban amenity lighting needs by providing great energetic efficiency as well as an important contribution to the reduction of CO2 emissions. Energy saving is achieved by means of the use of the INDAL REVOLED technology incorporated to the new DISQ LED model. Such a technology consists of the application of the COO-LED cooling system allowing LEDs to work at a low temperature, thus increasing their efficacy and service life. Moreover, it counts on a DIRECTA lens technology integrating the lens and its protection (without the need for a reflector), which, in turn, yields lower light loss and provides light distribution in a directed way. Product portfolio includes 12 collections of street and urban landscape outdoor lighting. Main brands are Indalux (technical outdoor), 3E (urban landscape, modern), Claude-Lefebvre (urban landscape, classic), Sluz (architectural). Grupo Indal recently launched the new DISQ LED luminaire which comes to complete the new family of DISQ luminaires. With an innovative circular design, compared with traditional luminaires, Disq LED gives an answer to the new road lighting and urban amenity lighting needs by providing great energetic efficiency as well as an important contribution to the reduction of CO2 emissions. Energy saving is achieved by means of the use of the INDAL REVOLED technology incorporated to the new DISQ LED model. Such a technology consists of the application of the COO-LED cooling system allowing LEDs to work at a low temperature, thus increasing their efficacy and service life. Moreover, it counts on a DIRECTA lens technology integrating the lens and its protection (without the need for a reflector), which, in turn, yields lower light loss and provides light distribution in a directed way.

Bega

Bega plays mostly in the high end of the outdoor lighting market (around 80% of total lighting sales), exporting in several countries, including USA. Bega Group is composed by BEGA (Minden-Germany), BOOM (Puurs-Belgium) and GLASHÜTTE LIMBURG (Limburg-Germany). The first and second specialise in outdoor lighting, while the latter operates mainly in the indoor residential segment. The group totalled US$ 188 million turnover in 2011, around 45% is sold outside the German market. The company is using the LED technology especially for a new series of bollards. In the past, Bega trademarks have often become generic terms for many luminaires such as the "light brick" which has formed part of company portfolio for over 50 years. Bega ha intensively focused on in-ground lighting for more than 40 years. The term "bollards" which is commonly used today can be traced back to BEGA developments. The company develops also BEGA light design elements. "Light cubes" are offered for urban environments and green spaces. The housing made of heavy die cast aluminium withstands the impact of physical damage and weather factors. "Open spaces of a high design level or landscaped roof terraces almost transform the light cubes into sculptures, harmonizing perfectly with fine furnishings".

iGuzzini

iGuzzini was established in 1958. It is the Italian leader in technical and architectural lighting and ranks amongst the leading companies in Europe. iGuzzini new outdoor range includes Archilede, LED street light with a patented optical system allowing it to achieve optimum column spacings without the reduction in uniformity of light distribution. Electricity consumption can be slashed by up to 40% compared to traditional systems. The group is present with 16 commercial subsidiaries in Germany, France, Spain, United Kingdom, Norway, Switzerland, Denmark, Benelux, China, Hong Kong-Macao-Taiwan, Singapore, Russia, Dubai, USA, Finland, Sweden. iGuzzini is a firm with 1,170 employees and a total turnover of EUR 185 million in 2011 (+7%). Almost 70% turnover generates abroad, with the UK, Spain and France making around 31%. Gas discharge is still the main lighting source (51%) but LED is increasing fast: from 18% to 24%.

Erco

Erco is a specialist in indoor and outdoor architectural lighting. The company also makes lighting control systems, hardware and software. The estimated sales revenue for 2011 was in the region of EUR 140 million (US$ 195 million) with 3% growth compared to the previous year. LED share around 20%.

ERCO has its headquarters in Lüdenscheid, an industrial town steeped in tradition, right in the heart of Germany. The majority of the staff work here in the Design, Production, Sales and Administration departments. In 2012 ERCO started offering new and upgraded versions, powered by cutting-edge LED technology, for its product ranges Powercast, Beamer, Cylinder façade and the orientation luminaires. Driven by ERCO's highly efficient LED lenses produced in-house, these innovative lighting tools for outdoor applications create enormous cost saving potential without compromising on security or light quality.

Sample of market shares from: “The lighting fixtures market in the Middle East and North Africa”.

November 2012. 200 pages, catalogue price EUR 1600

Country XXXX. Sales of lighting fixtures and market shares of top 50 playes, 2011

Company	Country	Lighting sales in..(US$ million)	% shares on total lighting sales	% market shares	Segments*
El Sew	EG	25.0	100.0	8.0	I
Asfou	EG	20.0	100.0	6.4	RC
Phi	MENA	19.3	11.0	6.2	RCIO
Elect	EG	10.0	100.0	3.2	IO
Iem	EG	10.0	100.0	3.2	RCIO
AiA Light	EG	10.0	100.0	3.2	C
Ka	EG	9.8	100.0	3.2	RC
3 Bro	EG	9.5	100.0	3.1	RCIO
Nahde	EG	9.1	100.0	2.9	-
Middle	EG	8.8	100.0	2.8	RCIO
Style	EG	8.0	100.0	2.6	RC
GLC	EG	6.0	100.0	1.9	R
Siraj L	EG	5.0	100.0	1.6	C
Al-	EG	5.0	100.0	1.6	RC
Eg	AT	3.0	0.6	1.0	RO
GE	MENA	3.0	15.0	1.0	O
Schr	BE	2.9	0.6	0.9	O
Fal	EG	2.9	100.0	0.9	CI
Fut	EG	2.1	100.0	0.7	IO
El N	EG	1.7	100.0	0.5	R
Smart	EG	1.4	100.0	0.5	RCIO
Makled	EG	1.4	70.0	0.5	CO
Sitec	DE	1.3	0.4	0.4	CIO
iGuz	IT	1.2	0.5	0.4	RCIO
Yath	EG	1.0	100.0	0.3	RCI
Electro	EG	1.0	100.0	0.3	-
Power	EG	1.0	100.0	0.3	-
Hoffme	DE	0.7	1.4	0.2	RCO
Dep	UAE	0.7	5.0	0.2	RCIO
Zum	AT	0.7	0.1	0.2	RCIO
	CZ	0.6	1.2	0.2	RC
Fager	SE	0.6	0.1	0.2	CIO
Targ	IT	0.5	0.2	0.2	CO
Ledio	TW	0.4	2.0	0.1	C
Erc	DE	0.4	0.2	0.1	CO
Artem	IT	0.4	0.2	0.1	RCO
Leds C	ES	0.4	0.6	0.1	RCO
Fael	IT	0.3	1.2	0.1	O
	UK	0.3	1.6	0.1	C
SimonL	ES	0.3	0.8	0.1	O
Lasv	CZ	0.2	0.6	0.1	C
Ro	PL	0.2	0.8	0.1	O
Switch	FR	0.2	0.6	0.1	CO
Ivel	IT	0.2	0.6	0.1	CO
Baul	DE	0.2	0.8	0.1	C
Re	CH	0.2	0.1	0.1	RCO
Fl	IT	0.2	0.1	0.1	RCO
Meyer	DE	0.2	0.8	0.1	O
Linea	IT	0.2	0.2	0.1	RCO
Castal	IT	0.1	0.6	0.0	CO
Total 50 players		187.4	28.3	60.2	
Others		123.7		39.8	
Egypt consumption		311.1		100.0	

Source: CSIL processing * R=Residential; C=commercial; I=Industrial; O=outdoor

Sample of short company profiles from: "The European market for lighting fixtures Part II".

May 2012. 120 pages, catalogue price EUR 1600

Total sales

Consumption of lighting fixtures in xxxx amounted to EUR 1732 million in 2011, registering a 20% increase in just two years (2009-2011). Top ten manufacturers supply 22% of the entire demand of lighting fixtures in xxxx. Among them we include Philips (production in Poland), Zumtobel (production in Romania till 2009), Schréder, Fagerhult, Eglo. In a two years span, sales boomed for Philips, Fagerhult, Kanlux, Elba, Modus.

Sales pretty stable for Es-System and Brilux, a bit declining for Zumtobel, Schreder, Eglo. Philips, Fagerhult and Marksloid hold sizeable market shares in Poland, Beghelli and Philips in Czech Republic, Eglo and Schreder in Hungary, Philips and Schreder in Slovakia,Siteco and Zumtobel in Slovenia, Zumtobel and Schreder in Bulgaria, Zumtobel, Philips and Beghelli in Romania.

ES-System, is a Poland-based company engaged in the design, production and sale of lighting systems and luminaries. ES-System's products are used for offices, commercial, public and industrial facilities, open spaces, railways, streets and parks. The company's product portfolio consists of three types of luminaries: indoor (70%), including architectural and industrial lighting systems; outdoor (30%), comprising projectors, specialists systems, street and amenity lighting, and emergency lighting solutions, including light-emitting diode (LED) systems. ES-System has three Poland-based subsidiaries Es-System Wilkasy, Es-System Rzeszow and Es-System Nt, as well as two foreign companies in Germany and Sweden. ES-System was listed on the Warsaw stock exchange in 2007.Turnover (EUR 41.5 million) decreased by 2% in comparison with the previous year.10% sales are LED lighting based.

Brilux was founded in 1995. Brilux S.A. is the leading company of the Brilux Group, including six Polish and ten foreign companies from Bulgaria, Czech Republic, Spain, Germany, Romania, Slovakia, Ukraine, Hungary, Great Britain and China. The company supplies a wide range of lighting products: among the professional lighting equipment we find road and park lighting, lighting for architectural purposes, fittings for public objects, offices, hotels. The company also offers residential lighting fixtures, garden lighting fixtures, special implementations, light sources and accessories. Products are sold under the ELGO, BRILUM and BRILUX brands. Distribution: 30% direct, 60 lighting specialists, 10% DIY.

Kanlux S.A. has a EUR 33 million turnover. Expanding its business in overseas markets, Kanlux S.A. opened subsidiaries in the Czech Republic, Slovakia, Hungary, Ukraine, Romania, and Bulgaria, followed by Germany and Russia in 2011. Kanlux is among the market leaders in the Czech as well as in the Slovakian lighting sector. Wide range of lighting solutions, which can be divided into four product groups: architectural lighting, residential outdoor lighting, home lighting, light sources, as well as a complementary range of wiring accessories and modular devices. In total, there are over 1,500 items available in Kanlux offer.

Elba is the leading producer of lighting fixtures in Romania. It was founded in 1921 and privatised in 1995. The company provides luminaries for industrial, commercial, public, domestic, for sport halls and fields, schools, hospitals. Further to lighting fixtures (80%), Elba also supplies automotive luminaries (20%), moulds, tools and dies and design services for the upgrade and maintenance of indoor, outdoor and street lighting systems, public and architectural.

More than 1,000 employees, and a turnover of approximately EUR 27 million in 2011 (40% automotive, 20% outdoor lighting fixtures, 40% indoor).

Elba products are marketed through its commercial division, the s.c. Elba-com s.a. company, which mainly handles the network of dealers covering the Romanian market but also the EU, Central and Eastern Europe, Middle East. PXF Lighting operates in Poland since 1994 under the name of Plexiform. In Kaluszyn the company has a manufacturing department of 4,500 square metres, where it produces ceiling and suspension fixtures that are equipped with emergency module systems and electronic ballasts. It also produces hospital lighting, lighting controls and outdoor fittings for bridges, theatres and sports facilities.

Sample of export performance from: “The lighting fixtures market in China”.

July 2012. 160 pages, catalogue price EUR 1600

Lighting fixtures. Export of Chinese players to Middle East. Million USD and %

Company	country	Lighting sales in the Country (Million US$)	% market shares	% on total lighting sales
O	CN	13.6	2.7	40
Violet	CN	9.3	1.9	20
Shengqiu	CN	7.3	1.5	10
NVC	CN	6.4	1.3	2
Sunw	CN	6.2	1.2	10
Ok	CN	6.0	1.2	10
Hon	CN	5.4	1.1	10
Uni	CN	5.4	1.1	10
TC-O	CN	4.6	0.9	5
Lon	CN	4.6	0.9	20
Shena	CN	4.6	0.9	5
Hua	CN	4.5	0.9	4
Chang	CN	4.3	0.9	20
Bri Light	CN	3.7	0.7	5
Yashi	CN	3.5	0.7	10
TP-S	CN	3.5	0.7	8
Jing	CN	3.5	0.7	5
AD Li	CN	3.4	0.7	10
Js	CN	3.1	0.6	5
Touv	CN	3.1	0.6	5
QSSI	CN/USA	3.0	0.6	5
Allred	CN	2.9	0.6	5
Meses (2009)	CN	2.9	0.6	20
Zhonglian Lighting	CN	2.8	0.6	40
Plusrite	CN	2.3	0.5	5
Watran	CN	2.0	0.4	10
Venezina (2009)	CN	2.0	0.4	10
ELX	CN	2.0	0.4	10
Comyan	CN	1.9	0.4	5
Hongyuan	CN	1.9	0.4	10
Ketai	CN	1.7	0.3	10
Quantum	CN	1.6	0.3	5
Hizhen	CN	1.5	0.3	5
Oushang	CN	1.5	0.3	5
Zhenye (2009)	CN	1.5	0.3	10
Boom Lighting	CN	1.4	0.3	5
CNL Lighitng	CN	1.4	0.3	5
TopTech lighting (2009)	CN	1.3	0.3	5
Sunsun	CN	1.3	0.3	5
Yuyao Better (2010)	CN	1.3	0.3	10
HuaYu Lighting (2009)	CN	1.2	0.2	10
Singbee (2009)	CN	1.2	0.2	3
Zhongyi Flysky	CN	1.0	0.2	10
Centent	CN	1.0	0.2	10
Boslin	CN	1.0	0.2	10
Melody	CN	1.0	0.2	10
Acme	CN	0.9	0.2	5
Gaoya	CN	0.9	0.2	5
ChangLong Electrical	CN	0.9	0.2	10
Aihua (2009)	CN	0.9	0.2	5
Ares Lighting	CN	0.8	0.2	20
Jinsheng Illumination	CN	0.8	0.2	5
Valdon (2009)	CN	0.7	0.1	10
Kam Tat	CN	0.7	0.1	10
CGD	CN	0.6	0.1	5
Fanya	CN	0.6	0.1	5
Suncad (2009)	CN	0.6	0.1	5
Shineme	CN	0.5	0.1	10
Haodian (2009)	CN	0.4	0.1	10
M&C Lighting (2009)	CN	0.3	0.1	10
Total sample		160.4	32	7
others		339.3	68	3
TOTAL		499.7	100	4

Source: CSIL

Coming soon:

"The lighting fixtures market in Asia Pacific". September 2013

"E-commerce for the lighting fixtures industry". September 2013

"LEDs and the worldwide market for lighting fixtures". October 2013

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