Russian Lighting Equipment Market: Evolution in 2011–2014 and the Current Situation



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Business confidence index in the lighting equipment industry

Business Confidence Index (BCI) is a quality indicator describing the overall state of entrepreneurial behavior in different sectors of the economy. BCI is calculated as the average value of assessment "balance figures". Assessment balance figures include the following factors: demand level, stock reserves, number of employees involved in production, and production output.

The Russian Federal State Statistics Service (Rosstat) monthly assesses BCI of companies that are engaged in mining, processing, production and distribution of electric power, natural gas and water.

In April 2015, Lighting Business Consulting launched its program to monthly interview top managers of lighting equipment and electrical equipment enterprises with a view to assessing the industry's current state and dynamics of business activities.

In 2015, the LBC BCI values showed a positive tendency overall: the index started to grow in April and showed negative dynamics only in September, but still remained above zero (Diagram 1). This illustrates how different factors included in the assessment method have affected the summary index value. This has led to a conclusion that in 2015 sales were the most problematic issue for the lighting equipment enterprises: performance over the 6 months out of 9 shows a decrease in sales volume as compared to the forecast value (during April and May this factor "pulled" the entire index below zero). The best-performing factors were the sales of warehouse stock, production plans and product demand level: throughout the entire period, all performance indicators were positive (the demand indicator fell below zero only in May). This means that the economic crisis did not affect the industry as much as it had been expected by the market players.

We should specifically mention that all the LBC BCI index components were above zero only for 3 months out of 9, i.e. in August, October, and December.

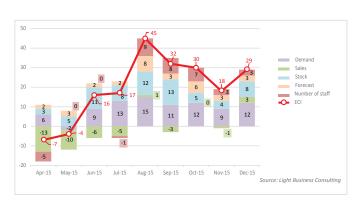


Diagram 1. LBC BCI dynamics, 2015

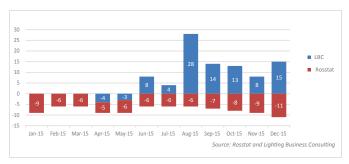


Diagram 2. Comparing dynamics of Rosstat and LBC Business Confidence Indexes in 2015

Comparison with the Rosstat BCI

Throughout 2015, Rosstat processing industry BCI (exclusive of small enterprises) showed a steadily negative trend.

LBC BCI showed a positive trend which gives reason to believe that, despite the adverse external influences, the lighting equipment enterprises managed to adapt themselves to the new economic environment.

A review of Russian legislation regarding technical regulation of lighting equipment manufacturing

The Russian legislation in the area of technical regulation of lighting equipment manufacturing is a multilevel structure comprising five sets of legal norms with the Customs Union Regulations and the Russian Law On Energy Saving and Improvement of Energy Efficiency on top of the structure.

EEC Intergovernmental Agreements

Customs Union Technical Regulations

Law No. 261-FZ "On Energy Saving and Greater Energy Efficiency and on Amendments to Certain Legislative Acts of the Russian Federation" dated November 23, 2009

Resolution of the Government of the Russian Federation № 602 "About accepting of requirements for lighting devices and electric lamps useding in AC circuits for lighting", dated July 20, 2011 Order of the Russian Ministry of Industry and Trade No.769 "On Categories of Goods for which the Information on their Energy Efficiency Class Must Be Contained in Technical Documents Supplied with these Goods, their Labels and Tags as well as on the Characteristics of Goods, with Indication of Such Product Categories... to which the Requirements on Including the Information on their Energy Efficiency Class in Technical Documents Supplied with these Goods, their Labels and Tags Do Not Apply", dated September 7, 2010.

Resolution of the Government of the Russian Federation No. 1222 "On the Types and Characteristics of Goods for which the Information on their Energy Efficiency Class Must Be Contained in Technical Documents Supplied with these Goods, their Labels and Tags, and on the Rules for Producers and Importers in Determining the Energy Efficiency Class of the Good", dated December 31, 2009

Resolution of the Government of the Russian Federation No. 1221 "On the Approval of the Rules of Setting Energy Efficiency Requirements for Goods, Works, Services Ordered for State or Municipal Needs", dated December 31, 2009 Order of the Russian Ministry of Industry and Trade No. 357 "On Approval of Rules for Producers and Importers in Determining the Energy Efficiency (2ass of the Good or Other Information on its Energy Efficiency", dated April 29, 2010

Law No. 184-FZ "On Technical Regulations", dated December 27, 2002

Law No. 2300-1 "On Protection of Consumer Rights", dated February 7, 1992

Code of Administrative Offences of the Russian Federation No. 195-FZ, dated December 30, 2001

Russian lighting market analytics

Table 1. Lighting equipment market capacity in the Russian Federation in 2011-2014, thousand USD

		2011	2012	2013	2014	
Production	Lamps	207,123	187,492	174,997	103,077	
	Lighting Fixtures	852,983	1,061,756	1,159,292	1,143,757	
	SCD	30,490	29,880	35,464	19,931	
	Total	1,090,596	1,279,128	1,369,753	1,266,765	
Import	Lamps	468,526	562,148	687,420	813,201	
	Lighting Fixtures	204,269	236,629	226,570	280,233	
	SCD	65,500	75,153	65,022	52,792	
	Total	738,294	873,930	979,013	1,146,225	
Export	Lamps	21,780	18,867	18,389	18,112	
	Lighting Fixtures	6,847	10,073 11,437		10,661	
	SCD	2,399	4,529	6,103	6,902	
	Total	31,026	33,469	35,930	35,675	
Market capacity	Lamps	653,869	730,773	844,028	898,167	
	Lighting Fixtures	1,050,404	1,288,313	1,374,425	1,413,329	
	SCD	93,590	100,504	94,383	65,820	
	Total	1,797,864	2,119,589	2,312,836	2,377,315	

Source: Assessment by Lighting Business Consulting

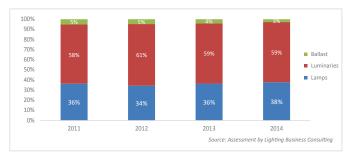


Diagram 3. Russian lighting equipment market structure in terms of value in 2011-2014, %

(Russian Government Resolutions, Resolutions and Orders by the Ministries and Agencies concerned).

IV. Generall laws and regulations containing specific standards applicable to energy saving and energy efficiency, including lighting equipment manufacturing (Code of Administrative Offenses, Law on Technical Regulation, Law on Protection of Consumer Rights etc.)

V. National technical standards that regulate lighting equipment manufacturing (Russian Federation Standards and Recommended Practices, GOST, GOST R, SP, SNiP, SanPiN).

Lighting equipment market review (2011-2014¹)

Throughout 2011-2014, the lighting equipment market in Russia grew by 32%, from USD 1,798 million to USD 2,377 million. Generally, the market growth was driven by growth in the lighting fixtures and lamps markets that increased by 37% and 35%, respectively.

Start-control device (SCD) market capacity decreased by 30%.

Lamp market in 2011-2014

In 2011-2014, the Russian lamps market capacity grew by 3% in quantitative terms (from 777.8 million pieces in 2011 to 800.4 million pieces in 2014) and by 37%, in terms of value (from USD 653.9 million in 2011 to USD 989.2 million in 2014) which is mainly due to an increase in imports.

In quantitative terms, the market capacity growth was mainly caused by growth in compact fluorescent lamps (from 88.9 million pieces in 2011 to 105.8 million pieces in 2014) and LED lamps (from 12.2 million pieces in 2011 to 123.7 million pieces in 2014). Compact fluorescent lamp market grew throughout 2011-2013, whereas in 2014 it began shrinking.

Incandescent lamp market decreased by 17.3% (from 508.7 million pieces in 2011 to 420.5 million pieces in 2014).

While analyzing the market capacity structure by the types of lamps, we identified the following key trend: incandescent lamps tend to be replaced by LED ones. In 2011, incandescent lamps accounted for 65% of market in quantitative terms and 24% of market in terms of value, whereas in 2014, these shares decreased to 53% and 8%, respectively.

At the same time, the share of LED lamps increased from 2% to 15% in quantitative terms and from 22% to 57% in terms of value.

Lighting fixtures market in 2011-2014

The Russian lighting fixtures market capacity grew by 62% in quantitative terms (from 24.7 million pieces in 2011 to 37.5

Table 2. Russian lamp market capacity both in quantitative terms and in terms of value in 2011-2014

Lowertone	In quantitative terms, thousand pieces			In terms of value, thousand USD				
Lamp type	2011	2012	2013	2014	2011	2012	2013	2014
Incandescent lamps	508,727	453,015	436,424	420,486	156,346	142,065	139,656	75,687
Halogen bulbs	48,830	77,860	53,039	52,229	32,515	52,903	36,773	27,974
Compact fluorescent lamps	88,914	110,756	124,523	105,757	159,400	202,610	232,442	152,501
LED	12,217	20,833	53,869	123,737	146,606	149,995	259,650	514,405
Double capped fluorescent lamps	106,172	118,895	121,744	88,462	71,511	81,715	81,163	52,487
Sodium lamps	1,892	2,356	2,363	2,211	16,048	21,161	21,932	19,900
Mercury lamps	9,637	10,504	8,652	6,142	40,722	45,292	38,068	26,755
Metal-Halide Lamps (MHL)	1,387	1,550	1,489	1,378	30,721	35,032	34,343	28,458
Market capacity	777,776	795,768	802,103	800,401	653,869	730,773	844,028	898,167

Source: Assessment by Lighting Business Consulting

I. Intergovernmental Agreements and Customs Union Technical Regulations within the Eurasian Economic Community.

II. Special Federal Law On Energy Saving and Energy Efficiency.

III. Special legal acts regulating energy saving and energy efficiency, including in lighting equipment manufacturing

million pieces in 2014) and by 37% in terms of value (from USD 1,288 million in 2011 to USD 1,413 million in 2014).

¹ The 2015 data will become available in Q2 2016

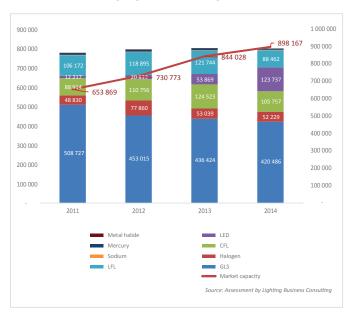
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Russian lighting market analytics

Table 3. Lighting fixtures market capacity in Russia in 2011-2014, thousand pieces and thousand USD

Lamp type	In quantitative terms, thousand pieces			In terms of value, thousand USD				
	2011	2012	2013	2014	2011	2012	2013	2014
LED lighting fixtures	1,361	3,614	7,076	9,791	337,683	483,415	512,943	572,600
Traditional lighting fixtures	23,367	26,355	29,398	27,678	712,721	804,898	861,482	840,729
Total	24,728	29,969	36,473	37,468	1,050,404	1,288,313	1,374,425	1,413,329

Source: Assessment by Lighting Business Consulting



 $\textbf{Diagram 4.} \ \text{Russian lamp market capacity both in quantitative terms and in terms of value in 2011-2014}$

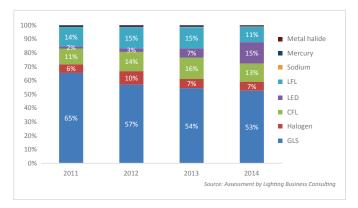


Diagram 5. Russian market capacity structure segregated by types of lamps in quantitative terms (thousands of pieces) throughout 2011-2014, %

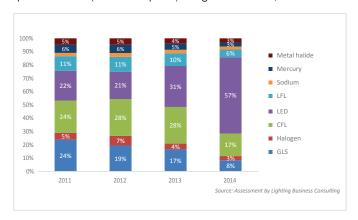


Diagram 6. Russian market capacity structure segregated by types of lamps in terms of value (thousand USD) throughout 2011-2014, %

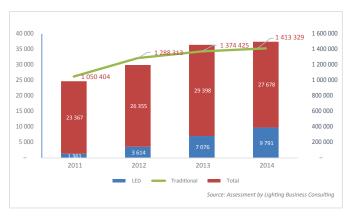


Diagram 7. Russian lighting fixtures market capacity throughout 2011-2014 in quantitative terms and in terms of value

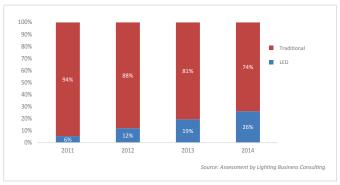


Diagram 8. Russian lighting fixtures market structure in quantitative terms (segregated by types) in 2011-2014, %

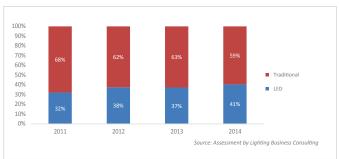


Diagram 9. Russian lighting fixtures market structure in terms of value (segregated by types) in 2011-2014, %

The overall market growth was mainly due to growth in LED lighting fixtures market. In 2011-2013 the traditional lighting fixtures market grew, but in 2014 it began to shrink.

In 2011-2014, the LED lighting fixtures market capacity grew by 619.4% in quantitative terms and by 69.6% in terms of value. Traditional lighting fixtures market capacity grew by 18.4% in quantitative terms and by 18.0% in terms of value.

In 2011-2014, the share of LED lighting fixtures grew from 6% to 26% (in quantitative terms) and from 32% to 41% (in terms of value).

Thus, LED lighting fixtures have been replacing traditional ones on the Russian market. □

