



**Global and China Low-E Glass Industry
Report, 2015-2018**

Dec. 2015

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Low-E glass, a new type of energy-saving glass, is mainly used in the field of building energy conservation. Chinese Government has introduced policies to support the development of the building energy efficiency industry since the 1990s, which propels the advancement of Low-E glass. The annual Low-E glass capacity jumps from 25 million m² in 2005 to 660 million m² in 2015, presenting a CAGR of 38.7%.

Although China's Low-E glass capacity grows rapidly, the constraint of production technologies (especially online coating technology) leads to a low capacity utilization rate. In 2014, China's Low-E glass output ascended 11.9% year on year to 150 million m², while the capacity utilization rate was only 25.1%.

In 2015, the capacity utilization rate is expected to hit 25.8% amid the stable glass market. In addition, China's Low-E glass penetration rate is less than 15%, still lagging far behind 80% in Europe, Japan, South Korea, the United States and other developed countries.

In the past two years, the adjustment in real estate market has incurred fluctuations in the Low-E glass price. For example, the price of 6mm single-silver Low-E glass dropped from RMB210 /weight case in 2012 to RMB120/weight case in mid-2015.

The world's leading Low-E glass manufacturers include the US-based PPG, Japan-based NSG and AGC, France-based Saint-Gobain, China-based CSG, Taiwan Glass Group, Kibing Group and so on.

These players have taken measures in response to falling commodity prices and downward market trends, like PPG develops higher value-added new products; Taiwan Glass Group and Kibing Group set up new production bases in target markets.

PPG is enthusiastic about R & D of new-type Low-E glass. In September 2014, it launched SOLARBAN67 featured with excellent flexibility, transparency and other merits; in August 2015, it collaborated with Walker Glass to develop new-type high-performance anti-bird-strike solar control Low-E glass.

Following Japan NSG, **Taiwan Glass Group** is the world's second producer boasting Low-E glass plants. Its production base is located in Changbin, Taiwan. At the end of 2015, a Low-E glass factory consisting of a Low-E laminated glass production line and two Low-E vacuum glass production lines in Shenyang invested by USD240 million is expected to be completed and put into production.

CSG Holding has Low-E glass production bases in Tianjin, Dongguan, Wujiang, Xianning and Chengdu. It shows strong competitiveness in the high-end Low-E glass market -- its triple-silver Low-E glass seizes about 30% shares of the international market and 60% shares of Chinese market.

In May 2015, **Kibing Group** decided to invest RMB1.17 billion in a 600t/d Low-E online coated glass production line and a 600t/d high-end diversified glass production line in Negeri Sembilan, Malaysia to meet the market demand in Southeast Asia, Central Asia, the Middle East and other regions.

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Manufactures	Production Bases	Capacity (Million tons)
 TAIWANGGLASS GROUP	Taiwan Qingdao Chengdu Tianjin Wuhan Taicang Xianyang	66
 CNG	Weihai Dongtai Linyi Wuhai	50
 平湖艾迪	Pinghu Zhangzhou Liling	50
 LYG	Dongguan Wuhu Tianjin Jiangmen Yingkou	36
 中国玻璃行业龙头企业 CNC WANGGLASS	Dongguan Tianjin Wujiang Chengdu Xianning	28
 Dongyue Yuhua/Pingyuan Glass Group Co., Ltd.	Changsu Jiangmen Tianjin	18
 G-CRYSTAL	Beijing Zibo Shizuishan	13
 CAS	Huizhou Hainan	12

Source: Global and China Low-e Glass Industry Report, 2015-2018; ResearchInChina

Global and China Low-E Glass Industry Report, 2015-2018 focuses on the followings:

- Development environments, market size, penetration rate and others of global Low-E glass industry;
- Policies, technologies, etc. of China's Low-E glass industry;
- Supply, demand, competition pattern, market prices, applications, etc. of China's Low-E glass industry;
- Operation, revenue structure, Low-E glass business, etc. of 4 foreign and 13 Chinese Low-E glass manufacturers.

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