

**Global and China Low-E Glass Industry
Report, 2014-2017**

Dec. 2014

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

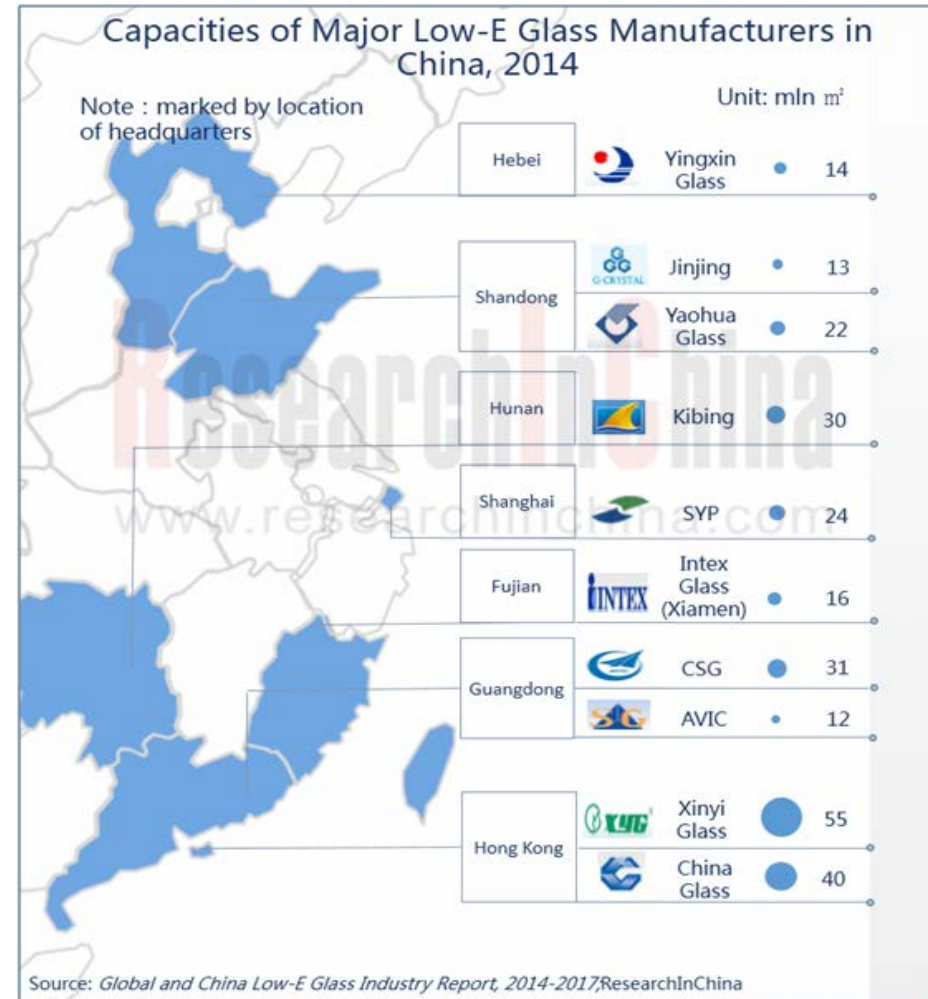
The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Low-emissivity glass (low-E glass) is a type of energy-saving glass with low rate of thermal radiation, high heat-resistance performance, good light- and thermal-control abilities, mainly used in building, electronics, automobile and other fields.

Influenced by positive factors such as technological improvement, energy conservation and emission reduction, China's low-e glass production rose from 6 million square meters in 2005 to 134 million square meters in 2013 at a CAGR of roughly 47%, and is expected to further increase to 152 million square meters in 2014.

Although low-e glass can realize large-scale production in China, yet its penetration rate is only around 11%, still lagging behind Germany, South Korea, the United States and other developed countries (mostly over 80%), leaving large room for growth. It is expected that China's demand for low-e glass will increase at a CAGR of 23.5% or so during the period 2014-2017.



The Chinese mainland low-e glass industry was highly concentrated prior to 2009: six big enterprises including CSG Holding Co., Ltd., Taiwan Glass Group and Shanghai Yaohua Pilkington Glass Group Co., Ltd. (SYP Group) accounted for a combined 70 percent of total capacity. However, with the increasing number of enterprises involved, the industry concentration began to decline: the proportion occupied by the top 6 enterprises there was merely 47.4% in 2014. Currently, key industry players in China are actively continuing with their capacity expansion to enhance competitiveness.

Taiwan Glass Group invested USD240 million in the construction of a low-e glass factory in Shenyang in September 2013. The project is to be finished in two phases, of which, the first phase concerns a low-e laminated glass production line and two low-e vacuum glass production lines expected to be completed and put into production by the end of 2015.

CSG Holding has 5 low-e glass production bases respectively in Tianjin, Dongguan, Wujiang, Xianning and Chengdu. In 2014, production bases in Xianning and Wujiang each saw additional capacities of 3 million square meters per year and 1.2 million square meters per year. The company's low-e glass capacity thus far has been 30.6 million square meters per year.

Global and China Low-E Glass Industry Report, 2014-2017 focuses on the following:

- ➔ Status quo, market size, and others of global low-e glass industry;
- ➔ Policy environment, social environment, technological environment, and others of China's low-e glass industry;
- ➔ Low-e glass supply, demand, competition, etc. in China;
- ➔ Operation, revenue structure, layout-in-China, and others of 4 foreign low-e glass manufacturers;
- ➔ Operation, revenue structure, competitive advantage, and others of 13 Chinese low-e glass manufacturers.

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