



Global and China Electrochromic Materials and Devices Industry Report, 2014-2018

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

Electrochromism is the phenomenon of optical properties (reflectivity, transmissivity, absorptivity) of materials changing color reversibly and steadily with the action of applied electric field. The optical device made from electrochromic materials is called electrochromic device. The product, theoretically, can be used in various fields, including automotive auto-dimming rearview mirror, electrochromic smart glass, sun glass & goggles, military camouflage gear, electrochromic display, sensor, optical shutter or optical modulator.

Since foreign scholar Plant put forward the concept of electrochromism for the first time in the 1960s, electrochromic materials and devices have been a hot area of research globally. SCI database shows that the number of research papers on electrochromism has been growing year after year at a CAGR of 9.5% during 2010-2014, reaching 174 in 2014, up 10.1% over the previous year. By December 23, 2015, there were 159 research papers on electrochromism in SCI, a slight decline compared with that in 2014 but basically on a par with 2013 level.

Despite several decades of R&D and expansion, global commercial application of electrochromic materials is still in the primary stage of development with a market size of only around USD1.8 billion. Electrochromic materials find mature application in only two fields: automotive auto-dimming rearview mirror and electrochromic smart glass.

U.S. Gentex is the first company that materializes automotive auto-dimming rearview mirror. Because of first-mover advantage of Gentex and cost & performance limits of other companies, Gentex has always been an oligopoly in global automotive auto-dimming rearview mirror market, producing 29 million sets in 2014, about 90% of global market share.

In electrochromic smart window field, against the background of energy conservation and environmental protection and due to low barriers of auto industry, the number of companies getting involved in the field is relatively large. Front-runners include Sage Glass (a subsidiary of Saint-Gobain), View, E-control Glas, and Gesimat. However, the electrochromic smart window market size is small, estimated at around USD100 million-200 million, only roughly 10% of global smart glass market.

China has started research into the variety, preparation techniques, color-changing mechanism, performance, and application of electrochromic materials since the 1980s. However, there are few Chinese all-solid-state electrochromic glass companies that achieve commercial operation. Ningbo Miro Electronic Technology claims that it is capable of producing 30,000-40,000 pieces of electrochromic glass lenses per month, while other companies, like Zhuhai Kaivo Optoelectronic Technology, Changzhou Yapu Smart Variable Color Optics, and Tintable Smart Material (just acquired by Kibing Group), are still in the stage of R&D or intermediate test.

Copyright 2012ResearchInChina

Global and China Electrochromic Materials and Devices Industry Report, 2014-2018 focuses on the followings:

- Classification and application of electrochromic materials and devices;
- Development status, competitive landscape and applications of electrochromic materials and devices in the world;
- Development status, competitive landscape and applications of electrochromic materials and devices in China;
- Operation and electrochromism business of 3 global and 4 Chinese companies.

1 Concepts of Electrochromic Materials and Devices

- 1.1 Definition and Classification of Electrochromic Materials
- 1.2 Definition and Classification of Electrochromic Devices

2 Development of Global Electrochromic Materials and Devices Industry

- 2.1 Development History
- 2.2 Market Size
- 2.3 Competitive Landscape
- 2.4 Applications
 - 2.4.1 Automotive Auto-dimming Rear-view Mirror Market
 - 2.4.2 Electrochromic Smart Window Market
 - 2.4.3 Others

3 Development of Electrochromic Materials and Devices Industry in China

- 3.1 Status Quo
- 3.2 Automotive Auto-dimming Rear-view Mirror Market
- 3.3 Electrochromic Smart Window Market

4 Key Players

- 4.1 Gentex Corporation
 - 4.1.1 Profile
 - 4.1.2 Operation
 - 4.1.3 Revenue Structure
 - 4.1.4 Electrochromic Automotive Auto-dimming Rear-view Mirror Business
 - 4.1.5 Business in China
- 4.2 SAGE Electrochromics, Inc.
- 4.3 View, Inc.
- 4.4 Zhuzhou Kibing Group Co., Ltd.
 - 4.4.1 Profile
 - 4.4.2 Operation
 - 4.4.3 Electrochromic Materials Business
- 4.5 Ningbo Miro Electronic Technology Co., Ltd.
- 4.6 Zhuhai Kaivo Optoelectronic Technology Co., Ltd.
- 4.7 Changzhou Yapu Smart Variable Color Optics Co., Ltd.

- Classification, Nature, and Preparation Methods of Inorganic and Organic Electrochromic Materials
- Performance Comparison of Inorganic and Organic Electrochromic Materials
- Structural Diagram of Electrochromic Devices
- Classification of Electrochromic Devices by Electrolyte
- Applications of Electrochromic Devices
- Number of Research Papers on Electrochromism, 2010-2015
- Global Electrochromic Materials Market Size and YoY Growth, 2011-2015
- Major Global Electrochromic Devices Manufacturers
- Global Auto-dimming Rear-view Mirror Market Size and YoY Growth, 2011-2014
- Global Auto Output and YoY Growth, 2010-2018E
- Global Auto-dimming Rear-view Mirror Shipments, 2014-2018E
- Global Auto-dimming Rear-view Mirror Market Capacity, 2014-2018E
- Energy-saving Principle Diagram of Electrochromic Glass Window
- Energy-saving Effect Comparison of Electrochromic and Other Color-changing Technologies in Building Energy-saving Window Field
- Major Global Electrochromic Smart Window Companies and Performance Comparison of Their Products
- Global Smart Glass Market Size and YoY Growth, 2011-2015
- Chinese Automotive Rear-view Mirror OEM Market Demand, 2010-2018E
- Penetration of Interior Auto-dimming Rear-view Mirror for Passenger Vehicle and OEM Demand in China, 2012-2014
- Configuration of Interior Auto-dimming Rear-view Mirror for Passenger Vehicle in China by Price, 2015
- Penetration of Exterior Auto-dimming Rear-view Mirror for Passenger Vehicle and OEM Demand in China, 2012-2015
- Configuration of Exterior Auto-dimming Rear-view Mirror for Passenger Vehicle in China by Price, 2015
- Policies and Regulations on Building Energy Efficiency in China, 2011-2015
- Share of Various Sectors in Total Energy Consumption in China
- Energy Consumption Structure of Residential Building in Northern China
- Building Curtain Wall Output and YoY Growth in China, 2008-2015

- Building Curtain Wall Consumption Structure in China, 2014
- Chinese Electrochromic Glass Market Space, 2014-2018E
- Product Line of Gentex
- Revenue and Net Income of Gentex, 2009-2014
- Gross Margin and Net Profit Margin of Gentex, 2009-2014
- Revenue Breakdown of Gentex by Product, 2009-2014
- Revenue Structure of Gentex by Product, 2009-2014
- Rearview Mirror Shipments of Gentex, 2009-2014
- Rearview Mirror Shipments Breakdown of Gentex by Region, 2009-2014
- Automotive Products Revenue Breakdown of Gentex by Region, 2009-2014
- Automotive Products Revenue Structure of Gentex by Region, 2009-2014
- Financing of View in Recent Years
- Revenue and Net Income of Kibing Group, 2009-2015
- Revenue Breakdown of Kibing Group by Product, 2009-2015
- Main Products of Tintable Smart Material

You can place your order in the following alternative ways:

1. Order online at www.researchinchina.com
2. Fax order sheet to us at fax number: +86 10 82601570
3. Email your order to: report@researchinchina.com
4. Phone us at +86 10 82600828/ 82601561

Party A:			
Name:			
Address:			
Contact Person:		Tel	
E-mail:		Fax	

Party B:			
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)		
Address:	Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080		
Contact Person:	Liao Yan	Phone:	86-10-82600828
E-mail:	report@researchinchina.com	Fax:	86-10-82601570
Bank details:	Beneficial Name: Beijing Waterwood Technologies Co., Ltd Bank Name: Bank of Communications, Beijing Branch Bank Address: NO.1 jinxiyuan shijicheng, Landianchang, Haidian District, Beijing Bank Account No #: 110060668012015061217 Routing No #: 332906 Bank SWIFT Code: COMMCNSHBJG		

Title	Format	Cost
<i>Total</i>		

Choose type of format

- PDF (Single user license)1,300 USD
- Hard copy 1,500 USD
- PDF (Enterprisewide license)..... 2,000 USD

※ Reports will be dispatched immediately once full payment has been received.
Payment may be made by wire transfer or credit card via PayPal.

About ResearchInChina

ResearchInChina (www.researchinchina.com) is a leading independent provider of China business intelligence. Our research is designed to meet the diverse planning and information needs of businesses, institutions, and professional investors worldwide. Our services are used in a variety of ways, including strategic planning, product and sales forecasting, risk and sensitivity management, and as investment research.

Our Major Activities

- *Multi-users market reports*
- *Database-RICDB*
- *Custom Research*
- *Company Search*

RICDB (<http://www.researchinchina.com/data/database.html>), is a visible financial data base presented by map and graph covering global and China macroeconomic data, industry data, and company data. It has included nearly 500,000 indices (based on time series), and is continuing to update and increase. The most significant feature of this base is that the vast majority of indices (about 400,000) can be displayed in map.

After purchase of our report, you will be automatically granted to enjoy 2 weeks trial service of RICDB for free.

After trial, you can decide to become our formal member or not. We will try our best to meet your demand. For more information, please find at www.researchinchina.com

For any problems, please contact our service team at: