

Smart Glass Market Report by Technology (Thermochromic, Photochromic, Electrochromic, Suspended Particle Device (SPD), Polymer Disperse Liquid Crystal (PDLC), and Others), Control Mode (Dimmers, Switches, Remote Control, and Others), Application (Architectural, Transportation, Consumer Electronics, Power Generation), and Region 2024-2032

https://marketpublishers.com/r/SE1D805BAD55EN.html

Date: April 2024

Pages: 137

Price: US\$ 3,899.00 (Single User License)

ID: SE1D805BAD55EN

Abstracts

The global smart glass market size reached US\$ 6.2 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 14.8 Billion by 2032, exhibiting a growth rate (CAGR) of 9.9% during 2024-2032.

Smart glass is a superior-grade glazing glass that is manufactured by arranging and laminating switchable acrylic polycarbonate films. These layers include liquid crystals that filter the level of brightness, heat, and voltage entering through lenses. Smart glass provides instant privacy and enough natural light, prevents ultraviolet (UV) radiations, reduces glare, allows easy cleaning, and enhances the aesthetic appearance of the infrastructure. Along with this, it is secured, easy to install, aesthetically appealing, and requires minimal operational costs; therefore, it is used as electrochromic and envelope glass across various power generation and commercial buildings. Currently, smart glass is available in varying technologies, including thermochromic, photochromic, and suspended particle devices (SPD).

Smart Glass Market Trends:

One of the key factors driving the market growth is the ongoing construction activities and the increasing infrastructural projects, which, in turn, have facilitated the widespread installation of smart glass in various residential and commercial complexes.



Such products exhibit energy-saving capacity, which further helps reduce the energy consumption on heating, ventilation, and air conditioning (HVAC) systems. In line with this, the implementation of various green building initiatives by governments, owing to the rising environmental concerns, has further supplemented the product demand to reduce overall carbon footprints. Additionally, considerable expansion in the automotive industry and the escalating need for luxurious vehicles have prompted manufacturers to incorporate smart glass in sun visors, sunroofs, windshields, and rearview mirrors, which is contributing to the market growth. Moreover, the extensive utilization of suspended particle devices (SPD) glass in the aerospace industry to offer improved aircraft performance, acoustic insulation, and superior heat rejection is impelling the market growth. Apart from this, the advent of floor-to-ceiling glass windows and the uptake of three-dimensional (3D) designs prepositions to ensure optimum thermal insulation are creating a positive outlook for the market.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global smart glass market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on technology, control mode and application.

Breakup by Technology:

Thermochromic

Photochromic

Electrochromic

Suspended Particle Device (SPD)

Polymer Disperse Liquid Crystal (PDLC)

Others

Breakup by Control Mode:

Dimmers

Switches

Remote Control

Others

Breakup by Application:

Architectural



Transportation
Consumer Electronics
Power Generation

Breakup by Region:

North America

United States

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being AGC Inc., Asahi India Glass Limited, ChromoGenics AB, Compagnie de Saint-Gobain S.A., Diamond Glass Limited, Gauzy Ltd, Gentex Corporation, Halio Inc., Polytronix Inc., Research Frontiers Inc. and View Inc.

Key Questions Answered in This Report



- 1. What was the size of the global smart glass market in 2023?
- 2. What is the expected growth rate of the global smart glass market during 2024-2032?
- 3. What are the key factors driving the global smart glass market?
- 4. What has been the impact of COVID-19 on the global smart glass market?
- 5. What is the breakup of the global smart glass market based on the technology?
- 6. What is the breakup of the global smart glass market based on the application?
- 7. What are the key regions in the global smart glass market?
- 8. Who are the key players/companies in the global smart glass market?



Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL SMART GLASS MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY TECHNOLOGY

- 6.1 Thermochromic
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Photochromic
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
- 6.3 Electrochromic



- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4 Suspended Particle Device (SPD)
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
- 6.5 Polymer Disperse Liquid Crystal (PDLC)
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast
- 6.6 Others
 - 6.6.1 Market Trends
 - 6.6.2 Market Forecast

7 MARKET BREAKUP BY CONTROL MODE

- 7.1 Dimmers
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 Switches
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
- 7.3 Remote Control
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast
- 7.4 Others
 - 7.4.1 Market Trends
 - 7.4.2 Market Forecast

8 MARKET BREAKUP BY APPLICATION

- 8.1 Architectural
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 Transportation
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Consumer Electronics
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
- 8.4 Power Generation



- 8.4.1 Market Trends
- 8.4.2 Market Forecast

9 MARKET BREAKUP BY REGION

- 9.1 North America
 - 9.1.1 United States
 - 9.1.1.1 Market Trends
 - 9.1.1.2 Market Forecast
 - 9.1.2 Canada
 - 9.1.2.1 Market Trends
 - 9.1.2.2 Market Forecast
- 9.2 Asia-Pacific
 - 9.2.1 China
 - 9.2.1.1 Market Trends
 - 9.2.1.2 Market Forecast
 - 9.2.2 Japan
 - 9.2.2.1 Market Trends
 - 9.2.2.2 Market Forecast
 - 9.2.3 India
 - 9.2.3.1 Market Trends
 - 9.2.3.2 Market Forecast
 - 9.2.4 South Korea
 - 9.2.4.1 Market Trends
 - 9.2.4.2 Market Forecast
 - 9.2.5 Australia
 - 9.2.5.1 Market Trends
 - 9.2.5.2 Market Forecast
 - 9.2.6 Indonesia
 - 9.2.6.1 Market Trends
 - 9.2.6.2 Market Forecast
 - 9.2.7 Others
 - 9.2.7.1 Market Trends
 - 9.2.7.2 Market Forecast
- 9.3 Europe
 - 9.3.1 Germany
 - 9.3.1.1 Market Trends
 - 9.3.1.2 Market Forecast
 - 9.3.2 France



- 9.3.2.1 Market Trends
- 9.3.2.2 Market Forecast
- 9.3.3 United Kingdom
 - 9.3.3.1 Market Trends
 - 9.3.3.2 Market Forecast
- 9.3.4 Italy
 - 9.3.4.1 Market Trends
 - 9.3.4.2 Market Forecast
- 9.3.5 Spain
 - 9.3.5.1 Market Trends
 - 9.3.5.2 Market Forecast
- 9.3.6 Russia
 - 9.3.6.1 Market Trends
 - 9.3.6.2 Market Forecast
- 9.3.7 Others
 - 9.3.7.1 Market Trends
 - 9.3.7.2 Market Forecast
- 9.4 Latin America
 - 9.4.1 Brazil
 - 9.4.1.1 Market Trends
 - 9.4.1.2 Market Forecast
 - 9.4.2 Mexico
 - 9.4.2.1 Market Trends
 - 9.4.2.2 Market Forecast
 - 9.4.3 Others
 - 9.4.3.1 Market Trends
 - 9.4.3.2 Market Forecast
- 9.5 Middle East and Africa
 - 9.5.1 Market Trends
 - 9.5.2 Market Breakup by Country
 - 9.5.3 Market Forecast

10 SWOT ANALYSIS

- 10.1 Overview
- 10.2 Strengths
- 10.3 Weaknesses
- 10.4 Opportunities
- 10.5 Threats



11 VALUE CHAIN ANALYSIS

12 PORTERS FIVE FORCES ANALYSIS

- 12.1 Overview
- 12.2 Bargaining Power of Buyers
- 12.3 Bargaining Power of Suppliers
- 12.4 Degree of Competition
- 12.5 Threat of New Entrants
- 12.6 Threat of Substitutes

13 PRICE ANALYSIS

14 COMPETITIVE LANDSCAPE

- 14.1 Market Structure
- 14.2 Key Players
- 14.3 Profiles of Key Players
 - 14.3.1 AGC Inc.
 - 14.3.1.1 Company Overview
 - 14.3.1.2 Product Portfolio
 - 14.3.1.3 Financials
 - 14.3.1.4 SWOT Analysis
 - 14.3.2 Asahi India Glass Limited
 - 14.3.2.1 Company Overview
 - 14.3.2.2 Product Portfolio
 - 14.3.2.3 Financials
 - 14.3.3 ChromoGenics AB
 - 14.3.3.1 Company Overview
 - 14.3.3.2 Product Portfolio
 - 14.3.3.3 Financials
 - 14.3.4 Compagnie de Saint-Gobain S.A.
 - 14.3.4.1 Company Overview
 - 14.3.4.2 Product Portfolio
 - 14.3.4.3 Financials
 - 14.3.4.4 SWOT Analysis
 - 14.3.5 Diamond Glass Limited
 - 14.3.5.1 Company Overview



- 14.3.5.2 Product Portfolio
- 14.3.6 Gauzy Ltd
 - 14.3.6.1 Company Overview
 - 14.3.6.2 Product Portfolio
- 14.3.7 Gentex Corporation
- 14.3.7.1 Company Overview
- 14.3.7.2 Product Portfolio
- 14.3.7.3 Financials
- 14.3.8 Halio Inc.
 - 14.3.8.1 Company Overview
 - 14.3.8.2 Product Portfolio
- 14.3.9 Polytronix Inc.
 - 14.3.9.1 Company Overview
 - 14.3.9.2 Product Portfolio
- 14.3.10 Research Frontiers Inc.
 - 14.3.10.1 Company Overview
 - 14.3.10.2 Product Portfolio
 - 14.3.10.3 Financials
- 14.3.11 View Inc.
 - 14.3.11.1 Company Overview
 - 14.3.11.2 Product Portfolio



List Of Tables

LIST OF TABLES

Table 1: Global: Smart Glass Market: Key Industry Highlights, 2023 and 2032

Table 2: Global: Smart Glass Market Forecast: Breakup by Technology (in Million US\$),

2024-2032

Table 3: Global: Smart Glass Market Forecast: Breakup by Control Mode (in Million

US\$), 2024-2032

Table 4: Global: Smart Glass Market Forecast: Breakup by Application (in Million US\$),

2024-2032

Table 5: Global: Smart Glass Market Forecast: Breakup by Region (in Million US\$),

2024-2032

Table 6: Global: Smart Glass Market: Competitive Structure

Table 7: Global: Smart Glass Market: Key Players



List Of Figures

LIST OF FIGURES

Figure 1: Global: Smart Glass Market: Major Drivers and Challenges

Figure 2: Global: Smart Glass Market: Sales Value (in Billion US\$), 2018-2023

Figure 3: Global: Smart Glass Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 4: Global: Smart Glass Market: Breakup by Technology (in %), 2023

Figure 5: Global: Smart Glass Market: Breakup by Control Mode (in %), 2023

Figure 6: Global: Smart Glass Market: Breakup by Application (in %), 2023

Figure 7: Global: Smart Glass Market: Breakup by Region (in %), 2023

Figure 8: Global: Smart Glass (Thermochromic) Market: Sales Value (in Million US\$),

2018 & 2023

Figure 9: Global: Smart Glass (Thermochromic) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 10: Global: Smart Glass (Photochromic) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 11: Global: Smart Glass (Photochromic) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 12: Global: Smart Glass (Electrochromic) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 13: Global: Smart Glass (Electrochromic) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 14: Global: Smart Glass (Suspended Particle Device (SPD)) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 15: Global: Smart Glass (Suspended Particle Device (SPD)) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 16: Global: Smart Glass (Polymer Disperse Liquid Crystal (PDLC)) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 17: Global: Smart Glass (Polymer Disperse Liquid Crystal (PDLC)) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 18: Global: Smart Glass (Other Technologies) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 19: Global: Smart Glass (Other Technologies) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 20: Global: Smart Glass (Dimmers) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 21: Global: Smart Glass (Dimmers) Market Forecast: Sales Value (in Million US\$), 2024-2032



Figure 22: Global: Smart Glass (Switches) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 23: Global: Smart Glass (Switches) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 24: Global: Smart Glass (Remote Control) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 25: Global: Smart Glass (Remote Control) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 26: Global: Smart Glass (Other Control Modes) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 27: Global: Smart Glass (Other Control Modes) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 28: Global: Smart Glass (Architectural) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 29: Global: Smart Glass (Architectural) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 30: Global: Smart Glass (Transportation) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 31: Global: Smart Glass (Transportation) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 32: Global: Smart Glass (Consumer Electronics) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 33: Global: Smart Glass (Consumer Electronics) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 34: Global: Smart Glass (Power Generation) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 35: Global: Smart Glass (Power Generation) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 36: North America: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 37: North America: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 38: United States: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 39: United States: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 40: Canada: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023 Figure 41: Canada: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032



Figure 42: Asia-Pacific: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 43: Asia-Pacific: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 44: China: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 45: China: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 46: Japan: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 47: Japan: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 48: India: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 49: India: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 50: South Korea: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 51: South Korea: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 52: Australia: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 53: Australia: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 54: Indonesia: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 55: Indonesia: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 56: Others: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 57: Others: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 58: Europe: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 59: Europe: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 60: Germany: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 61: Germany: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 62: France: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 63: France: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 64: United Kingdom: Smart Glass Market: Sales Value (in Million US\$), 2018 &

2023

Figure 65: United Kingdom: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 66: Italy: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 67: Italy: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 68: Spain: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023



Figure 69: Spain: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 70: Russia: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 71: Russia: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 72: Others: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 73: Others: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 74: Latin America: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 75: Latin America: Smart Glass Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 76: Brazil: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 77: Brazil: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 78: Mexico: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 79: Mexico: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 80: Others: Smart Glass Market: Sales Value (in Million US\$), 2018 & 2023

Figure 81: Others: Smart Glass Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 82: Middle East and Africa: Smart Glass Market: Sales Value (in Million US\$),

2018 & 2023

Figure 83: Middle East and Africa: Smart Glass Market: Breakup by Country (in %),

2023

Figure 84: Middle East and Africa: Smart Glass Market Forecast: Sales Value (in Million

US\$), 2024-2032

Figure 85: Global: Smart Glass Industry: SWOT Analysis

Figure 86: Global: Smart Glass Industry: Value Chain Analysis

Figure 87: Global: Smart Glass Industry: Porter's Five Forces Analysis



I would like to order

Product name: Smart Glass Market Report by Technology (Thermochromic, Photochromic,

Electrochromic, Suspended Particle Device (SPD), Polymer Disperse Liquid Crystal (PDLC), and Others), Control Mode (Dimmers, Switches, Remote Control, and Others), Application (Architectural, Transportation, Consumer Electronics, Power Generation), and

Region 2024-2032

Product link: https://marketpublishers.com/r/SE1D805BAD55EN.html

Price: US\$ 3,899.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/SE1D805BAD55EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

| Last name: | |
|---------------|---------------------------|
| Email: | |
| Company: | |
| Address: | |
| City: | |
| Zip code: | |
| Country: | |
| Tel: | |
| Fax: | |
| Your message: | |
| | |
| | |
| | |
| | **All fields are required |
| | Custumer signature |
| | |

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html



To place an order via fax simply print this form, fill in the information below and fax the completed form to $+44\ 20\ 7900\ 3970$