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Global Flat Glass

March 2020



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About This Report

Scope

This report forecasts to 2023 global demand for flat glass by market in square meters and nominal US dollars at the manufacturer level, and by major world region in US dollars.

Reported markets encompass:

- residential buildings
- nonresidential buildings
- motor vehicle original equipment manufacturer (OEM)
- motor vehicle aftermarket
- other markets such as solar energy, electronic display screens, and aerospace equipment glass

Major world regions include North America, Western Europe, Asia/Pacific, and all other regions.

To illustrate historical trends, world, market, and regional demand (including market segments) are provided for 2008, 2013, and 2018. Finally, global production in square meters is segmented by major world region and provided for 2008, 2013, 2018, and 2023.

Production data reflect primarily float glass, but also include sheet glass, rolled glass, plate glass, and specialty types of flat glass such as patterned glass.

Demand by market for fabricated flat glass is presented in US dollars. Fabricated flat glass includes both basic glass as well as processed and value-added products such as laminated, tempered, and insulating glass. Thus, the dollar values presented per square meter of flat glass include the inherent value added by fabrication.

Other various topics, including profiles of pertinent leading companies, are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Global Flat Glass (FW60062) is based on a [comprehensive industry study](#) published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources, such as:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental and non-governmental organizations
- trade associations and their publications

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- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 9 | NAICS & SIC Codes Related to Flat Glass

| NAICS/SCIAN 2017 | | SIC | |
|---|--------------------------|------------------------------------|------------|
| North American Industry Classification System | | Standard Industrial Classification | |
| 327211 | Flat glass manufacturing | 3211 | Flat glass |

Source: US Census Bureau

Table 10 | HS Codes Related to Flat Glass

| HS Code | Definition |
|---------|---|
| 7005 | Float glass and surface ground or polished glass, in sheets |

Source: United Nations Statistics Division

Table 11 | NACE Codes Related to Flat Glass

| NACE Code | Definition |
|-----------|---------------------------|
| 23.11 | Manufacture of flat glass |

Source: European Commission

Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a variety of quantitative and qualitative techniques to present the best overall picture of a market's current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both

About This Report

top-down and bottom-up) and then triangulate those results to come up with the most accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research, consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

Freedonia quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

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Global Flat Glass

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Global Construction Aggregates

Global Construction Chemicals

Global Housing

Global Hybrid & Electric Vehicles

Global Industrial Silica Sand

Global Insulation

Global Siding (Cladding)

Global Windows & Doors

Insulation

Siding

Solar Roofing in the US

Windows & Door Components

Windows & Doors

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Automotive Repair & Maintenance Services: United States

Commercial Building Construction: United States

Construction: United States

Countertops: United States

Flat Glass: United States

Global Housing

Global Windows & Doors

Motor Vehicles: United States

Prefabricated Housing: United States

Recovered Glass: United States

Renewable Energy: United States

Roofing Accessories: United States

Windows & Doors: United States

Freedonia Custom Research

Trade Publications

Glass International

Glass Magazine

USGlass

Agencies & Associations

British Glass Manufacturers' Confederation

Eurostat

Federal State Statistics Service (Russia)

Flat Glass Manufacturers Association of Japan

Glass Alliance Europe

Glass for Europe

Instituto Brasileiro de Geografia e Estatística

Instituto Nacional de Estadística y Geografía (Mexico)

International Monetary Fund

Ministry of Economy, Trade and Industry (Japan)

National Glass Association

Organisation for Economic Co-operation and Development

Statistics Canada

Statistisches Bundesamt (Destatis – Germany)

UN Comtrade

United States Census Bureau

United States International Trade Commission

World Bank