

# Flat Glass: Market Research Report

<https://marketpublishers.com/r/FF2A4065B11EN.html>

Date: March 2018

Pages: 408

Price: US\$ 5,800.00 (Single User License)

ID: FF2A4065B11EN

## Abstracts

This report analyzes the worldwide markets for Flat Glass in Thousand Metric Tons by the following Product and End-Use Segments: Product Segments - Float Glass, and Rolled Glass; End-Use Segments - Construction (Residential, & Commercial), Automotive (OE Glazing, & Automotive Glass Replacement), and Others.

The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin America. Annual estimates and forecasts are provided for the period 2016 through 2024.

Also, a five-year historic analysis is provided for these markets. Market data and analytics are derived from primary and secondary research.

Company profiles are primarily based on public domain information including company URLs. The report profiles 94 companies including many key and niche players such as -

Asahi Glass Co., Ltd.

Compagnie De Saint-Gobain

Central Glass Co., Ltd.

Guardian Industries

Nippon Sheet Glass Co., Ltd.

Trakya Cam Sanayii A.S.

## Contents

### I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

### II. EXECUTIVE SUMMARY

#### 1. INDUSTRY OVERVIEW

Flat Glass Market: A Prelude

Growth Drivers for Flat Glass Industry: On a Scale 1 -10 (10 - High Impact; 1 - Low Impact)

Growth Dampeners for Flat Glass Industry: On a Scale 1 -10 (10 - High Impact; 1 - Low Impact)

Rising Demand from End-use Application Segments Propel Flat Glass Market

Flat Glass Products – Laminated and Tempered Glass Markets Hold Promise

Developing Regions Continue to Power Flat Glass Demand, Saturation Hits Developed Markets

**Table 1.** Worldwide Flat Glass Market (2016-2024): Ranked by (%) CAGR by Geographic Region/Country (includes corresponding Graph/Chart)

China: A Major Influencing Market

Production Scenario

**Table 2.** Global Flat Glass Market (2016): Percentage Breakdown of Production Volume by Region (includes corresponding Graph/Chart)

**Table 3.** World Flat Glass Market (2016): Percentage Breakdown of Production Capacity by Type - Float Glass, Rolled Glass and Sheet Glass (includes corresponding Graph/Chart)

Float: The Predominant Flat Glass Manufacturing Technique

Rolled Glass: A Small Market

Corning Develops Thin Rolled Glass Stored Using Spools

Fabricated Flat Glass: Driving Force in the Flat Glass Market

**Table 4.** Global Fabricated Flat Glass Market (2016): Percentage Breakdown of Demand (Value) by Region (includes corresponding Graph/Chart)

## 2. COMPETITIVE LANDSCAPE

Intense Competition Characterizes Flat Glass Market

**Table 5.** Leading Players in the Global Flat Glass Market (2016): Percentage Breakdown of Production Capacity for Asahi, Guardian, NSG Pilkington, Saint Gobain, Siseam Flat Glass and Others (includes corresponding Graph/Chart)

Automotive Glass - A Highly Concentrated Market

**Table 6.** Leading Players in the Global Automotive Glass Market (2016): Percentage Breakdown of Demand for Asahi Glass, Fuyao Glass, Guardian, Nippon Sheet Glass, Saint Gobain/Central Glass, Xinyi Glass and Others (includes corresponding Graph/Chart)

Architectural Glass Market

**Table 7.** Leading Players in the Global Architectural Sheet Glass Market (2016): Percentage Breakdown of Demand for Asahi Glass, Farun Group, Guardian, Kibing Group, Nippon Sheet Glass, Saint Gobain, Xinyi Glass and Others (includes corresponding Graph/Chart)

Solar Glass – Xinyi Solar Leads the Market

**Table 8.** Leading Players in the Global Solar PV Glass Market (2016): Percentage Breakdown of Demand for AVIC Sanxin, CSG, Flat Glass, Henan Ancai, Xinyi Solar and Others (includes corresponding Graph/Chart)

## 3. NOTEWORTHY TRENDS & ISSUES

Construction Industry: The Largest End-Use Market for Flat Glass

**Table 9.** Global Float Glass Use in Building Construction Sector (2016): Percentage Share Breakdown of Demand (Volume) for Interior Design, New Constructions, and Refurbishment Projects (includes corresponding Graph/Chart)

Construction Sector Activity Influences Market Growth

**Table 10.** World Construction Output (in US\$ Trillion) for the Years 2010, 2016 & 2022 (includes corresponding Graph/Chart)

**Table 11.** World Construction Output by Country/Region (2016 vs 2022) (in US\$ Trillion) (includes corresponding Graph/Chart)

Increasing Usage of Glass in Building Construction

Glass Use in Automotive Industry: Value-Added Features Find Favor

**Table 12.** World Production of Passenger Cars (2015 & 20120): Breakdown of Production Figures in Thousand Units by Geographic Region/Country (includes corresponding Graph/Chart)

**Table 13.** World Production of Commercial Vehicles (2015 & 2020) - Breakdown of Production Figures in Thousand Units by Geographic Region (includes corresponding Graph/Chart)

Automotive Industry Dynamics Affects Flat Glass Demand

Glazing Used for Styling and Differentiation of Automobiles

Flat Glass in Solar Power Generation: Opportunity in Store

**Table 14.** Top 10 Countries Worldwide by Annual PV Installed Capacity (2016) (includes corresponding Graph/Chart)

Frameless Panels: A Game Changing Technology to Drive Flat Glass Demand

Potential for Rolled Glass Makers in Solar PV Market

Tempered Low Iron Glass: Threat to Rolled Glass Usage in Solar PV Units?

Value-Added Products to Drive Flat Glass Market

Innovative Frequency-Selective Solar Glazing Material

Coated Flat Glass Market – An Insight  
Regulations Drive Demand for Fire-Resistant Glass  
Smart Automotive Glass Market – A Review  
A glance at some types of smart automotive glass and their benefits  
Plastics - Are They a Threat?  
High Capital Investments – A Major Entry Barrier  
Energy & Raw Material: Major Cost Components

**Table 15.** Float Glass Composition: Percentage Breakdown by Major Raw Materials (includes corresponding Graph/Chart)

Rapid Urbanization Worldwide: A Key Growth Driver

**Table 16.** World Urban Population in Thousands: 1950-2050P (includes corresponding Graph/Chart)

**Table 17.** Degree of Urbanization Worldwide: Urban Population as a % of Total Population by Geographic Region for the Years 1990, 2014 & 2050 (includes corresponding Graph/Chart)

Rising Population & Middle Class Segment Bodes Well for Market Growth

**Table 18.** Global Middle Class Population (in Millions) and as a Percentage of Total Population: 2005, 2015, 2025 & 2035 (includes corresponding Graph/Chart)

**Table 19.** Middle Class & Upper Class Population Growth - % CAGR for the Period 2000-2015 by Region (includes corresponding Graph/Chart)

#### **4. PRODUCT OVERVIEW**

#### **5. END-USE MARKETS OF FLAT GLASS**

Construction: A Major End-Use Market  
Building Products Market  
Automotive Sector  
OEM Applications

Automotive Glass Replacement (AGR)  
Types of Automotive Glazing  
Design Requirements  
Toughened and Laminated Glazing Parameters - A Comparison  
Features for Future  
Specialty Applications

## **6. REGULATORY ENVIRONMENT**

Stringent Production Standards in the US  
Maximum Allowable Contaminant Levels in Float Cullet  
Automotive Regulations  
Safety Glazing Legislations  
BS Codes  
Building Regulations

## **7. PRODUCT INTRODUCTIONS/INNOVATIONS**

Fives Introduces New Float Glass Line  
AGC Unveils LUXCLEAR Protect Anti-corrosion Glass  
AGC Unveils Energy Select 20 High-Performance Low-E Coating

## **8. RECENT INDUSTRY ACTIVITY**

Guardian to Invest in Float & Coated Glass Plant  
Saint-Gobain to Construct New Flat Glass Production Line  
AGC to Divest TQMP Glass Company  
Saint-Gobain to Inaugurate New Flat Glass Production Facility  
Asahimas to Construct Flat Glass Plant in CIKAMPEK  
Vitro Takes Over Pittsburgh Glass Works  
Bangkok Glass Forays into Flat Glass Market  
Saint-Gobain Takes Over Pietta Glass Working  
Sisecam Takes Over Sangalli  
AGC to Build New Float Glass Production Facility in Brazil  
Fuyao Glass to Establish New Float Glass Unit  
Vitro Takes Over Flat Glass Operations  
Saint-Gobain to Invest in Flat Glass Production Facility

## **9. FOCUS ON SELECT PLAYERS**

Asahi Glass Co., Ltd. (Japan)  
AGC Glass Company North America (USA)  
AGC Glass Europe (Belgium)  
Asahi India Glass Ltd. (India)  
PT Asahimas Flat Glass Tbk (Indonesia)  
Compagnie De Saint-Gobain (France)  
Saint-Gobain Glass India Ltd (India)  
Saint-Gobain SEFPRO (France)  
Central Glass Co., Ltd. (Japan)  
Carlex Glass America, LLC (USA)  
Guardian Industries (USA)  
Gujarat Guardian Limited (India)  
Nippon Sheet Glass Co., Ltd. (Japan)  
Trakya Cam Sanayii A. S. (Turkey)  
Taiwan Glass Group (Taiwan)  
Viridian Glass (Australia)  
Xinyi Glass Holdings Limited (China)

## 10. GLOBAL MARKET PERSPECTIVE

**Table 21.** World Recent Past, Current and Future Analysis for Flat Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 22.** World Historic Review for Flat Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 23.** World 14-Year Perspective for Flat Glass by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

By Product Segment

**Table 24.** World Recent Past, Current and Future Analysis for Float Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 25.** World Historic Review for Float Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 26.** World 14-Year Perspective for Float Glass by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 27.** World Recent Past, Current and Future Analysis for Rolled Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 28.** World Historic Review for Rolled Glass by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 29.** World 14-Year Perspective for Rolled Glass by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

By End-Use Segment

**Table 30.** World Recent Past, Current and Future Analysis for Flat Glass in Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific



(excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 31.** World Historic Review for Flat Glass in Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 32.** World 14-Year Perspective for Flat Glass in Construction Sector by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 33.** World Recent Past, Current and Future Analysis for Flat Glass in Construction Sector by Segment - Residential Construction and Commercial Construction Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 34.** World Historic Review for Flat Glass in Construction Sector by Segment - Residential Construction and Commercial Construction Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 35.** World 14-Year Perspective for Flat Glass in Construction Sector by Segment - Percentage Breakdown of Volume Consumption for Residential Construction and Commercial Construction Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 36.** World Recent Past, Current and Future Analysis for Flat Glass in Residential Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 37.** World Historic Review for Flat Glass in Residential Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual

Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 38.** World 14-Year Perspective for Flat Glass in Residential Construction Sector by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 39.** World Recent Past, Current and Future Analysis for Flat Glass in Commercial Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 40.** World Historic Review for Flat Glass in Commercial Construction Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 41.** World 14-Year Perspective for Flat Glass in Commercial Construction Sector by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 42.** World Recent Past, Current and Future Analysis for Flat Glass in Automotive Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 43.** World Historic Review for Flat Glass in Automotive Sector by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 44.** World 14-Year Perspective for Flat Glass in Automotive Sector by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada,

Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 45.** World Recent Past, Current and Future Analysis for Flat Glass in Automotive Sector by Segment - OE Glazing and AGR Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 46.** World Historic Review for Flat Glass in Automotive Sector by Segment - OE Glazing and AGR Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 47.** World 14-Year Perspective for Flat Glass in Automotive Sector by Segment - Percentage Breakdown of Volume Consumption for OE Glazing and AGR Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 48.** World Recent Past, Current and Future Analysis for Flat Glass in Automotive OEM Glazing by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 49.** World Historic Review for Flat Glass in Automotive OEM Glazing by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 50.** World 14-Year Perspective for Flat Glass in Automotive OEM Glazing by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 51.** World Recent Past, Current and Future Analysis for Flat Glass in Automotive Glass Replacement (AGR) by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 52.** World Historic Review for Flat Glass in Automotive Glass Replacement (AGR) by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 53.** World 14-Year Perspective for Flat Glass in Automotive Glass Replacement (AGR) by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 54.** World Recent Past, Current and Future Analysis for Flat Glass in Other End-Use Sectors by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 55.** World Historic Review for Flat Glass in Other End-Use Sectors by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 56.** World 14-Year Perspective for Flat Glass in Other End-Use Sectors by Geographic Region - Percentage Breakdown of Volume Consumption for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

### **III. MARKET**

#### **1. THE UNITED STATES**

##### A. Market Analysis

###### Market Overview

Construction: Mainstay of Float Glass Market

Energy Efficient Glass Finds Increased Demand in Building Construction

Improvement in Construction Sector to Support Growth

**Table 57.** US Construction Spending by Sector (2008-2020) (in US\$ Billion) (includes corresponding Graph/Chart)

**Table 58.** Residential Construction in the US (2009-2017E): Number of Housing Starts by Type - Single-Family Units and Multi-Family Units (in '000) (includes corresponding Graph/Chart)

Automotive Industry: A Major End-Use Market

**Table 59.** North American Aftermarket Automotive Glass Market (2016): Percentage Breakdown by Leading Manufacturers (includes corresponding Graph/Chart)

High-Performance Flat glass in the US  
Consumption of Advanced Flat Glass Gains Momentum  
Capacity Issues Impact North American Float Glass Market  
Import-Export Scenario

**Table 60.** US Exports of Float, Surface Ground or Polished Glass (2016): Percentage Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)

**Table 61.** US Imports of Float, Surface Ground or Polished Glass (2016): Percentage Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)

Product Introductions/Innovations  
Strategic Corporate Developments  
Key Players  
B. Market Analytics

**Table 62.** US Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 63.** US Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric

Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 64.** US 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 65.** US Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 66.** US Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 67.** US 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **2. CANADA**

### A. Market Analysis

#### Outlook

#### Construction Market: An Overview

**Table 68.** Housing Starts in Canada (2009-2016) (in '000 Units) (includes corresponding Graph/Chart)

**Table 69.** Canada Investment in Non-Residential Sector (2012-2017) (in \$ Billion) (includes corresponding Graph/Chart)

#### Import-Export Scenario

**Table 70.** Canadian Exports of Float, Surface Ground or Polished Glass (2016): Percentage Breakdown of Value Exports by Destination Country (includes

corresponding Graph/Chart)

**Table 71.** Canadian Imports of Float, Surface Ground or Polished Glass (2016): Percentage Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)

## B. Market Analytics

**Table 72.** Canadian Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 73.** Canadian Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 74.** Canadian 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 75.** Canadian Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 76.** Canadian Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 77.** Canadian 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 3. JAPAN

## A. Market Analysis

Outlook

Competitive Scenario

**Table 78.** Leading Suppliers in the Japanese Flat Glass Market (2016): Percentage Market Share Breakdown for Asahi Glass, Central Glass, Nippon Sheet Glass and Others (includes corresponding Graph/Chart)

Key Players

## B. Market Analytics

**Table 79.** Japanese Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 80.** Japanese Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 81.** Japanese 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 82.** Japanese Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 83.** Japanese Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 84.** Japanese 14-Year Perspective for Flat Glass by End-Use Segment -



Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 4. EUROPE

### A. Market Analysis

#### Flat Glass Market in Europe: An Overview

**Table 85.** Europe Flat Glass Market by Product Type (2016): Percentage Breakdown of Demand for Basic Float Glass, Insulating Glass, Laminated Glass, Tempered Glass and Others (includes corresponding Graph/Chart)

#### Flat Glass Production in the EU – An Overview

**Table 86.** Glass Market in the EU (2016): Percentage Breakdown of Production Volume by Type of Glass - Container Glass, Flat Glass and Others (includes corresponding Graph/Chart)

**Table 87.** Flat Glass Production in the EU-27 (2012-2014) (In Million Tonnes) (includes corresponding Graph/Chart)

**Table 88.** Flat Glass Production in the EU (2016): Percentage Breakdown of Production Volume by Country (includes corresponding Graph/Chart)

Buildings Sector: Achieving Energy Efficiency through Glazing  
Legislation and Safety Concerns Result in Enriched Product Mix  
Recovery in Construction Sector Supports Demand for Flat Glass

**Table 89.** Europe Construction Sector (2012-2018): Percentage Change of Construction Output YoY (in %) (includes corresponding Graph/Chart)

**Table 90.** Construction Industry in Europe (2010-2017E): Percentage Change of Construction Output by Segment (includes corresponding Graph/Chart)

**Table 91.** Construction Industry in Europe (2017E): Percentage Breakdown of

Construction Output by Sector (includes corresponding Graph/Chart)

EU Legislations Drive Demand for Energy Efficient Products in Buildings

Automotive Industry Recovery Augurs Well for Float Glass Market

Slow Down Hits Solar Energy Glass Market

Import-Export Scenario

**Table 92.** EU-28 Market for Float, Surface Ground or Polished Glass (2016):  
Percentage Breakdown of Imports Value by Country of Origin (includes corresponding Graph/Chart)

**Table 93.** EU-28 Market for Float, Surface Ground or Polished Glass (2016):  
Percentage Breakdown of Imports Volume by Country of Origin (includes corresponding Graph/Chart)

**Table 94.** EU-28 Market for Float, Surface Ground or Polished Glass (2016):  
Percentage Breakdown of Export Value by Country of Origin (includes corresponding Graph/Chart)

**Table 95.** EU-28 Market for Float, Surface Ground or Polished Glass (2016):  
Percentage Breakdown of Export Volume by Country of Origin (includes corresponding Graph/Chart)

## B. Market Analytics

**Table 96.** European Recent Past, Current and Future Analysis for Flat Glass by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 97.** European Historic Review for Flat Glass by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 98.** European 14-Year Perspective for Flat Glass by Geographic Region - Percentage Breakdown of Volume Consumption for France, Germany, Italy, UK, Spain,

Russia and Rest of Europe Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 99.** European Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 100.** European Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 101.** European 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

Table 102: European Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 103.** European Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 104.** European 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **4A. FRANCE**

A. Market Analysis

Outlook

Strategic corporate development

Key Players

## B. Market Analytics

**Table 105.** French Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 106.** French Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 107.** French 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 108.** French Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 109.** French Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 110.** French 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 4B. GERMANY

### Market Analysis

**Table 111.** German Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding

Graph/Chart)

**Table 112.** German Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 113.** German 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 114.** German Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 115.** German Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 116.** German 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **4C. ITALY**

A. Market Analysis

Market Overview

Strategic Corporate Development

B. Market Analytics

**Table 117.** Italian Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 118.** Italian Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 119.** Italian 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 120.** Italian Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 121.** Italian Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 122.** Italian 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4D. THE UNITED KINGDOM**

##### A. Market Analysis

Flat Glass Market in the UK – An Overview

Construction Industry in the UK – An Overview

Regulatory Environment

New Car Security Rating Scheme (NCSR)

Implications of Safety Glazing Legislations

BS Codes

Building Regulations

##### B. Market Analytics

**Table 123.** UK Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding

Graph/Chart)

**Table 124.** UK Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 125.** UK 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 126.** UK Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 127.** UK Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 128.** UK 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4E. SPAIN**

Market Analysis

**Table 129.** Spanish Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 130.** Spanish Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 131.** Spanish 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 132.** Spanish Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 133.** Spanish Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 134.** Spanish 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 4F. RUSSIA

### A. Market Analysis

#### Outlook

#### Market Overview

### B. Market Analytics

**Table 135.** Russian Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 136.** Russian Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 137.** Russian 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass



Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 138.** Russian Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 139.** Russian Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 140.** Russian 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4G. REST OF EUROPE**

A. Market Analysis

Outlook

Strategic Corporate Developments

Key Players

B. Market Analytics

**Table 141.** Rest of Europe Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 142.** Rest of Europe Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 143.** Rest of Europe 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass

Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 144.** Rest of Europe Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 145.** Rest of Europe Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 146.** Rest of Europe 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 5. ASIA-PACIFIC

### A. Market Analysis

Outlook

Competition

**Table 147.** Asian Float Glass Market (2016): Percentage Breakdown of Production Capacity by Company - AGC, Guardian, NSG, and Others (includes corresponding Graph/Chart)

### B. Market Analytics

**Table 148.** Asia-Pacific Recent Past, Current and Future Analysis for Flat Glass by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 149.** Asia-Pacific Historic Review for Flat Glass by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Demand in

Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 150.** Asia-Pacific 14-Year Perspective for Flat Glass by Geographic Region - Percentage Breakdown of Volume Consumption for China, India and Rest of Asia-Pacific Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 151.** Asia-Pacific Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 152.** Asia-Pacific Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 153.** Asia-Pacific 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 154.** Asia-Pacific Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 155.** Asia-Pacific Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 156.** Asia-Pacific 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **5A. CHINA**

## A. Market Analysis

### Market Overview

**Table 157.** Fabricated Flat Glass Market in China (2016): Percentage Breakdown of Demand (Value) by End-Use Segment (includes corresponding Graph/Chart)

### China – The World’s Leading Float Glass Market

#### Competitive Landscape

**Table 158.** Raw Flat Glass Production (in Million Square Meters) and Float Glass as % of Raw Flat Glass Production in China for the Years 2012 through 2016 (includes corresponding Graph/Chart)

**Table 159.** Leading Producers of Float Glass in China (2016): Percentage Breakdown of Sales for Qibin, Xinyi, Yinxin, Zhebo, Zhongbo and Others (includes corresponding Graph/Chart)

**Table 160.** Number of Float Glass Production Lines in China (includes corresponding Graph/Chart)

### Construction Sector – A Major End User

#### Automotive Glass Market Benefits from Expanding Auto Sales

**Table 162.** Motor Vehicle Population per Capita in Select Countries (2016) (In Units Per 1000 People) (includes corresponding Graph/Chart)

### Major Suppliers of Automotive Glass in China

**Table 163.** Leading Players in the Chinese Automotive Glass Market (2016): Percentage Breakdown of Capacity for Asahi, Fuyao, PGW, Saint-Gobain and Others (includes corresponding Graph/Chart)

**Table 164.** Leading Producers of Automotive Glass in China (2016): Percentage Breakdown of Sales for AGC, Fuyao Glass, NSG, Saint Gobain, Shanghai Yaopi, Xinyi and Others (includes corresponding Graph/Chart)

## Promising Solar Energy Sector: Flat Glass Market to Benefit

**Table 165.** PV Glass Production Capacity in Thousand Tons per Day in China for the Years 2012, 2014 & 2016 (includes corresponding Graph/Chart)

**Table 166.** Leading Players in the Chinese Solar PV Glass Market (2016): Percentage Breakdown of Capacity for AVIC Sanxin, CNBM, CSG, Flat Glass, IRICO, Xinyi and Others (includes corresponding Graph/Chart)

**Table 167.** Capacity Expansion Plans of Select Solar PV Glass Manufacturers in China (includes corresponding Graph/Chart)

## Increasing Demand for Low-E Glass

**Table 168.** Penetration Rate (%) of Low-E Glass in China Vs Poland, South Korea and Germany for the Year 2016 (includes corresponding Graph/Chart)

**Table 169.** Leading Players in the Chinese Low-E Construction Glass Market (2016): Percentage Breakdown of Volume Sales for CSG, Kibling, Taiwan Glass, Xinyi and Others (includes corresponding Graph/Chart)

## Patterned Glass Market Benefits from Improving Techniques & Diversifying Needs Strategic Corporate Development

Xinyi Glass Holdings Limited (China) – A Key Player

### B. Market Analytics

**Table 170.** Chinese Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 171.** Chinese Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 172.** Chinese 14-Year Perspective for Flat Glass by Product Segment -

Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 173.** Chinese Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 174.** Chinese Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 175.** Chinese 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **5B. INDIA**

A. Market Analysis

Outlook

Flat Glass Industry – Positioned for Strong Growth

**Table 176.** Indian Glass Market (2016): Percentage Breakdown of Production Volume by Type of Glass - Container, Float, and Others (includes corresponding Graph/Chart)

Construction Sector: The Primary End-Use Market

Promising Opportunities for Float Glass in Architectural Sector

Saint-Gobain India: The Leading Producer of Float Glass in India

**Table 177.** Leading Manufacturers of Float Glass in India (2016): Percentage Breakdown of Daily Production Capacity for Asahi India, Gold Plus Glass, Gujarat Guardian, HNG Float Glass and Saint-Gobain India (includes corresponding Graph/Chart)

Rising Imports of Float Glass Present a Challenge for Indian Producers

Strategic Corporate Development

Key Players

B. Market Analytics

**Table 178.** Indian Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 179.** Indian Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 180.** Indian 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 181.** Indian Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 182.** Indian Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 183.** Indian 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## **5C. REST OF ASIA-PACIFIC**

A. Market Analysis

Outlook

Strategic Corporate Developments

## Key Players

### B. Market Analytics

**Table 184.** Rest of Asia-Pacific Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 185.** Rest of Asia-Pacific Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 186.** Rest of Asia-Pacific 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 187.** Rest of Asia-Pacific Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 188.** Rest of Asia-Pacific Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 189.** Rest of Asia-Pacific 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 6. MIDDLE EAST & AFRICA

### A. Market Analysis

#### Market Overview

#### Large Scale Construction Projects Continue to Drive Demand



## B. Market Analytics

**Table 190.** Middle East & Africa Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 191.** Middle East & Africa Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 192.** Middle East & Africa 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 193.** Middle East & Africa Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 194.** Middle East & Africa Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 195.** Middle East & Africa 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## 7. LATIN AMERICA

### A. Market Analysis

#### Market Overview

#### Strategic Corporate Developments

#### Cebrace Cristal Plano Ltda. (Brazil) – A Key Player

## B. Market Analytics

**Table 196.** Latin American Recent Past, Current and Future Analysis for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 197.** Latin American Historic Review for Flat Glass by Product Segment - Float Glass and Rolled Glass Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 198.** Latin American 14-Year Perspective for Flat Glass by Product Segment - Percentage Breakdown of Volume Consumption for Float Glass and Rolled Glass Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 199.** Latin American Recent Past, Current and Future Analysis for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 200.** Latin American Historic Review for Flat Glass by End-Use Segment - Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets Independently Analyzed with Annual Demand in Thousand Metric Tons for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 201.** Latin American 14-Year Perspective for Flat Glass by End-Use Segment - Percentage Breakdown of Volume Consumption for Construction (Residential and Commercial), Automotive (OE Glazing and AGR) and Others Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

## IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 94 (including Divisions/Subsidiaries - 137)

The United States (10)

Japan (5)

Europe (55)

France (7)  
Germany (12)  
The United Kingdom (6)  
Italy (5)  
Spain (2)  
Rest of Europe (23)  
Asia-Pacific (Excluding Japan) (53)  
Middle East (9)  
Latin America (3)  
Africa (2)

## I would like to order

Product name: Flat Glass: Market Research Report

Product link: <https://marketpublishers.com/r/FF2A4065B11EN.html>

Price: US\$ 5,800.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/FF2A4065B11EN.html>

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

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer 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