

# The Global Market for Smart Glass and Windows

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## Abstracts

Advances in materials science and technology are leading to better buildings and transportation with improved energy efficiency and indoor conditions. A main focus is on improving windows and glass facades for enhanced comfort, privacy and sustainability. Current practices often lead to huge energy expenditures related to excessive inflow or outflow of energy which need to be balanced by energy-intensive cooling or heating.

Smart/switchable/dynamic glass or smart windows are increasingly utilized for thermal management, energy efficiency, and privacy applications that by modulating light transmittance when voltage, light, or heat is applied.

These technologies allow for the state of the glass to switch from transparent to translucent, or vice versa. This transition can occur passively or actively depending upon the device technology.

The smart glass and windows market is growing fast, and has been installed in the commercial aircraft, automobiles and corporate buildings of companies such as Google, Disney, Merck, eBay, Microsoft, Progressive, IBM, Fox News etc. Producers have raised over \$1 billion in funding over the last few years and the technology is gaining wider commercial traction, driven by demands for privacy, adaptability, information, improved safety, energy savings and living comfort. Despite a rise in market adoption, cost and scalability still remain general challenges for the smart glass industry

Commercial buildings are the main current market for smart glass, but is also being increasingly adopted in residential. Main markets covered include:

Construction glass.

Residential and retail.

Aerospace/aircraft windows.

Automotive (mirrors, sunroofs, glazing)

The Global Market for Smart Glass and Windows provides comprehensive analysis the latest innovations and products in Smart Glass and Windows, developed by large companies and start-ups.

Report contents include:

Analysis of smart windows technologies and supply chain

Analysis of routes to market for film and glass manufacturers

Industry collaborations and licence agreements

Profiles of >50 companies including products, customers, collaborations, target markets, contact details.

Historical data, and 12 years forecasts (from 2015 to 2027) by smart window type, region and revenues.

Analysis by smart glass and windows technology types: ELECTROCHROMIC, THERMOCHROMIC, SUSPENDED PARTICLE DEVICE (SPD), POLYMER DISPERSED LIQUID CRYSTAL SMART GLASS, PHOTOCROMIC SMART GLASS, MICRO-BLINDS, ELECTROKINETIC GLASS.

Analysis by application markets: Residential and commercial windows, Automotive, Mirrors, Aerospace., Sunglasses and visors, Flexible displays and wearables, Aviation, Healthcare, Projection

Challenges in the smart glass and windows industry.

Regional analysis of smart glass and windows industry.

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