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# The Global Market for Smart Glass and Smart Windows 2021-2031

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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.

With a potential trillion dollar global addressable market, 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 (a trend that is continuing in 2021) and the technology is gaining wider commercial traction, driven by demands for privacy, adaptability, information, improved safety, energy savings and living comfort. Numerous large corporations have installed smart glass in office buildings in the United States, BMW (electric vehicles glazing) and LG Display (transparent displays) have recently launched products and application in increasing in aerospace and marine sectors.

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)

Market growth is driven by energy efficiency, regulations, health and comfort and smart buildings. The Global Market for Smart Glass and Smart Windows 2021-2031 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 glass and 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. Companies profiled include View, Halio, SageGlass, Nodis Pte Ltd., Gauzy, Research Frontiers, Miru Smart Technologies and many more.

Historical data, and forecasts (from 2015 to 2031) 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

photochromic

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 smart windows industry.

Regional analysis of smart glass and smart windows industry.

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