



# Statement on Window Replacement and Efficient, Long-Lasting Windows

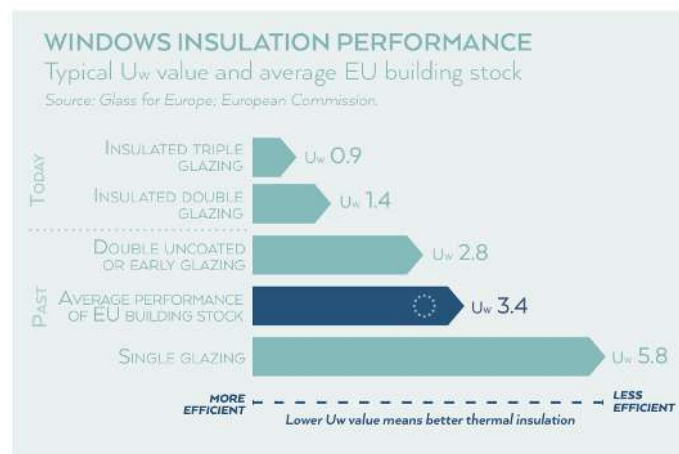
Adopted by the EWFA Council – 23 June 2025

## The European Window Stock: Old and Thermally Inefficient

Europe’s buildings contain hundreds of millions of windows, many of which still feature outdated single or early-generation double glazing. For example, double glazing installed prior to 2002 is estimated to be up to 50 % less energy efficient than modern high-performance glazing that meets current EU standards<sup>1</sup>.

Despite growing attention to building energy retrofits, inefficient windows remain widespread around Europe, particularly in residential buildings constructed before thermal performance requirements were introduced. In a recent report, the Glass and Glazing Federation (GGF), the national trade association for the glazing industry in the United Kingdom, estimates that around 80 million windows in the UK are over 20 years old and no longer meet energy efficiency standards<sup>2</sup>.

Figure 1 – Insulation Performance of EU Windows



Source: Glass for Europe, “Glazing Potential - Energy Savings & CO2 Emission Reduction”, 2019.

<sup>1</sup> Source: [Glass and Glazing Federation](#), 2023.

<sup>2</sup> Source: [Glass and Glazing Federation](#), 2023.

## Thermal Efficiency Is Important, But It Comes as a Cost

Windows typically account for 15-25 % of total heat loss in buildings. Therefore, upgrading the thermal performance of glazing is essential to reduce greenhouse gas emissions, improve energy performances, and lower energy bills. In colder climates, this could mean saving up to € 150-€ 300 per year on heating costs in a typical single-family home<sup>3</sup>. In warmer regions, better windows can reduce cooling demand by 20-30 %<sup>4</sup>, lowering electricity bills and strain on national energy grids during peak summer months.

However, the upfront cost of full window replacement remains a major barrier. Depending on the size, frame material, glazing performance, and installation conditions, replacing a single window can cost between € 500 to € 1,000 or more<sup>5</sup>. For a three-bedroom home with 10-12 windows, this adds up to € 5,000 to € 12,000, a figure beyond the reach of many households.

Moreover, installation itself can introduce additional costs, including permits, scaffolding in multi-storey buildings, interior disruption, and disposal or recycling of old windows, further increasing the real cost of a replacement project. In some cases, particularly in heritage or historic buildings, full replacement is not even permitted due to preservation rules, making high-performance, cost-effective retrofit alternatives even more necessary.



*An Example of Window Film for Heritage Buildings.*

## Window Film as a Sustainable Solution for Existing Windows

Seen the low average replacement of windows in European Union countries (an estimated 2 % per year)<sup>6</sup>, window film offers a cost-effective and environmentally responsible solution to upgrade their performance while extending their useful life. Thin, multi-layered window film can be applied directly to existing glazing, delivering significant benefits:

- **Energy Efficiency:** Studies show that energy consumption used to cool buildings could be reduced by over 27 % across Europe in 2050 by adequately using high-performance solar-control glazing<sup>7</sup>. Window film reduces solar heat gain in the summer and helps retain indoor heat during winter, contributing to the glazing's efficiency and reducing energy consumption. This further translates into lower carbon emissions and utility bills.

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<sup>3</sup> Source: EWFA calculations, based on 1,500–2,250 kWh/year saved at €0.10–€0.15 per kWh.

<sup>4</sup> Source: International Window Film Association (IWFA).

<sup>5</sup> Source: EWFA consolidated estimates from various European sources: [Checkatrade](#), 2025; [Zoofy](#), 2025 ; [Fenbro](#), 2024.

<sup>6</sup> Source: [Glass for Europe](#), 2019.

<sup>7</sup> Source: [Glass for Europe](#), 2019.

- **Waste Reduction:** In the EU in 2022, construction and demolition activities accounted for 38.4 % of the total waste generated<sup>8</sup>. Avoiding premature window replacement through retrofit strategies such as window film can help reduce this waste stream by extending the life of existing building components like glazing.
- **Embodied Carbon Savings:** Manufacturing and transporting new windows involve substantial carbon emissions. According to research, the embodied carbon from construction materials can account for 10-20 % of a building's total lifecycle emissions<sup>9</sup>. By extending window life thanks to window film, these emissions are substantially avoided.
- **Cost Efficiency:** Window film typically costs 10-20 % of a full window replacement, making it financially accessible while delivering a strong return on investment<sup>10</sup>.

## Enhancing the Lifecycle of Windows

Modern window film can extend the functional life of existing windows by 10-15 years or even more, delaying the need for costly, carbon-intensive replacements. This aligns with the European Union's Renovation Wave Initiative and Circular Economy goals, where prolonging product life and maximising resource efficiency are central tenets.

By helping retain functional windows longer, window film reduces the burden on both natural resources and household budgets, a critical feature for mass-scale renovation strategies, especially in older housing stock and public buildings where replacement is economically unviable.

In addition to enhancing energy performance, window film can simultaneously upgrade the properties of existing glazing by adding functionalities such as privacy, design and aesthetics, UV filtering, safety, and security.

In commercial buildings, window film provides an interesting flexible and reversible solution. Although window film installations are installed to be long-lasting, in the rare situation when a building tenant has a specific colour change or amount of light admitted, installers can safely remove previously installed window film and install a different film product which has the requested properties.



*Natural Light Filtering and UV Blocking with Window Film.*

<sup>8</sup> Source: [European Commission](#), 2022.

<sup>9</sup> Source: International Energy Agency, 2020.

<sup>10</sup> Source: IWFA, Industry cost surveys, 2023.