

ClimaVision[®]/low-e

Save energy without replacing your windows
Low-e films for existing buildings



Reduce heating costs and heat stress

Heating cost savings



up to 118 kWh/m²/year

Reduction overheating



up to 316 kWh/m²/year

Eligible for subsidies



up to 20%

Conventional windows waste energy

High heating costs in winter, overheated indoor spaces in summer

Many existing buildings – especially those built before 1995 still have uncoated glazing. Without a *low-e* coating, valuable heat is lost in winter, and in summer the interiors become uncomfortably hot.

Replacing the windows is expensive, but there's a smart alternative:

ClimaVision®*low-e* films

Our *low-e* films restore thermal balance to your building envelope.

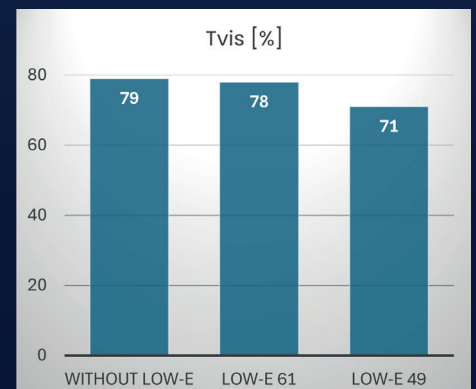
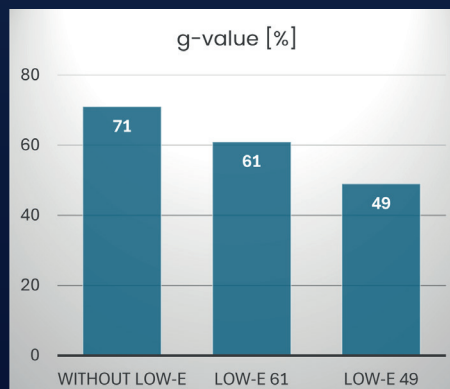
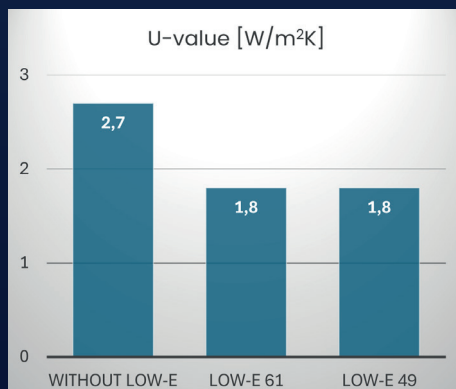
In winter, they reflect heat radiation back into the room, significantly reducing heating losses.

In summer, they block a large portion of incoming solar radiation – for noticeably cooler interiors and lower cooling energy demand.

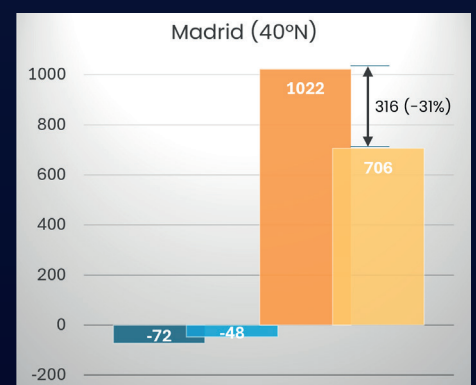
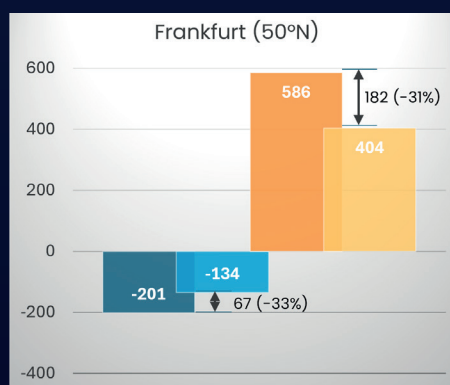
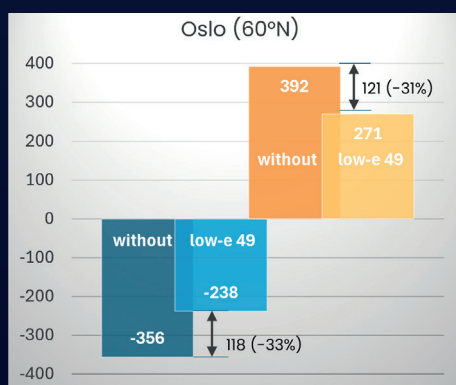
- Significantly lower heating costs in winter through reduced U-value
- Cooler rooms in summer thanks to lower g-value
- Blocks UV radiation protects furniture from fading
- Easy retrofit no window replacement needed
- Cost-effective & subsidy-eligible sustainable energy savings

Over 30 % less heat loss and solar gain – proven impact

Our *low-e* films reduce both U-value and g-value by more than 30 %, while maintaining high visible light transmission (Tvis).



The site analyses show how *low-e* films can reduce heat loss in winter and heat input in summer – depending on the climate and orientation of the building.



Heat loss (kWh/m²/year)

Solar gain (kWh/m²/year)

Maximum Efficiency – minimal effort

Efficient thermal insulation without replacing windows

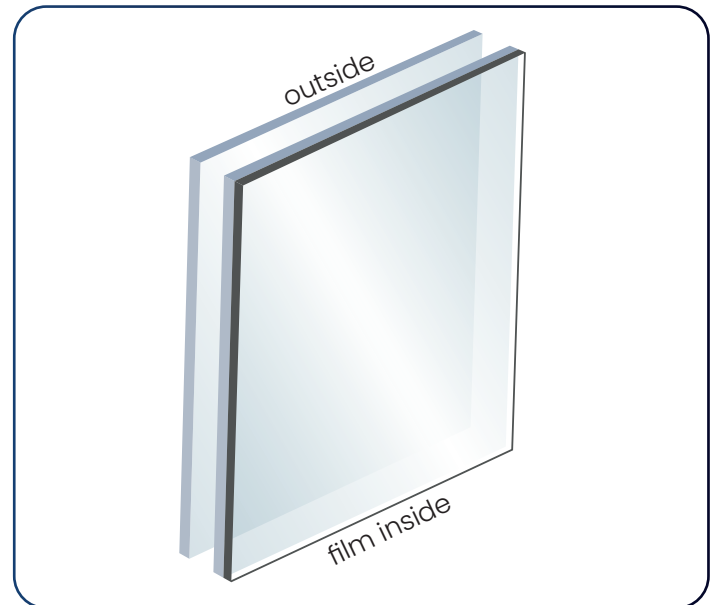
Low-e coatings in insulating glass units were not widely introduced in Europe until the mid-1990s. A significant share of existing windows – covering several hundred million square meters of glass surface, still have U-values above $2.7 \text{ W/m}^2\text{K}$ and g-values above 0.7.

These windows allow valuable heat to escape in winter and let in excessive solar heat in summer.

By applying **ClimaVision®low-e** films, the U-value can be reduced to below $1.8 \text{ W/m}^2\text{K}$, and the g-value to below 0.49.

These window films offer an attractive and cost-effective alternative to window replacement. This enables energy savings of well over $100 \text{ kWh/m}^2/\text{year}$.

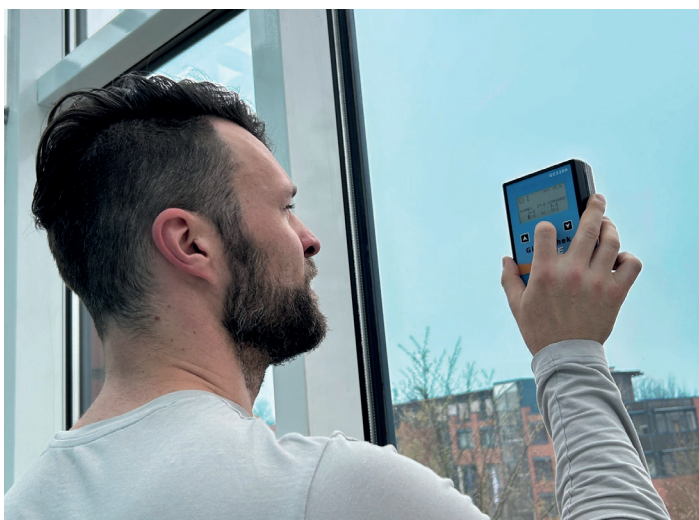
The films are applied to the interior side of the windows and sustainably improve the energy performance of existing glazing.



Typical application areas for ClimaVision®low-e films

- **Public buildings**
Schools, universities, administrative buildings, hospitals, care facilities, sports halls
- **Commercial buildings**
Office buildings, retail spaces, hotels, banks, conference centers
- **Residential buildings**
Single-family and multi-family homes
- **Historic buildings**
Listed buildings, castles, museums, cultural sites, and other properties with valuable architectural heritage

Free window analysis for greater energy efficiency



We offer a free assessment of your windows' energy performance, provide non-binding optimization proposals, and advise you on suitable subsidy programs.

Get informed now and start saving energy!

Film width: up to 1.5 m	UV protection [300–380 nm]: > 99 %
Film length: unlimited	Film material: coated PET
Scratch resistance: 3H	Adhesive: single-sided, protective liner
Film thickness: 70 µm	Color rendering index (CRI): 92–98

High renovation demand in buildings

Millions of square meters of glazing in pre-1995 buildings remain uncoated, resulting in significant heat losses and summer overheating

An alternative to window replacement

ClimaVision®low-e films offer a cost effective retrofit solution, with no structural intervention and a long-lasting effect

Sustainable energy savings

Savings of over 100 kWh/m² per year are achievable, simply by applying the film to the interior side of existing windows

Improved indoor climate all year round

In winter, the film reflects radiant heat back into the room. In summer, it reduces incoming solar heat, for noticeably greater comfort

Proven performance

U-values & g-values are reduced by >30 %, while visible light transmission (Tvis) remains nearly unchanged

Additional UV protection

More than 99 % of harmful UV radiation [300–380 nm] is reliably blocked, protecting people, interiors, and materials