

ClimaVision®

Energetic Renovation for Your Windows.

Two Paths to Maximum Efficiency –
Without Complete Window Replacement.



Reduce heating costs, increase comfort, and meet ESG goals. With Sionic's innovative solutions, you can modernize your existing windows to new-build standards – fast, clean, and cost-effective.

Heating Cost Savings



Up to 33% per year

Savings vs. Replacement



Up to 70% cheaper

Funding



Up to 20% BAFA subsidy*

*Funding subject to conditions – details on page 7

Your Windows: The Unrecognized Weak Point.



Millions of square meters of windows in existing buildings are energetically outdated. They are often the biggest weak point in the building envelope, causing enormous energy losses that can account for up to 30% of a building's total heating demand.

The Problem with Old Windows (Typical double-glazing without coating):

- **High Heat Loss in Winter:** A U-value of $2.7 \text{ W/m}^2\text{K}$ or higher leads to significant heat loss, creating cold zones near windows and a noticeable increase in energy consumption.
- **Strong Overheating in Summer:** A high g-value of over 70% allows most of the solar energy to pass through unfiltered, leading to uncomfortable overheating of rooms and increasing the need for energy-intensive air conditioning.



The consequences are high costs, a poor CO₂ balance, and a lack of comfort for users.

The ClimaVision® Solution: Two Paths to a Modern Building Envelope.



A complete window replacement is expensive, time-consuming, and involves construction noise. ClimaVision® offers two intelligent alternatives to bring your existing windows up to the latest energy standards – without replacing the frame, without a construction site, and without dust.

Option 1: ClimaVision® Film

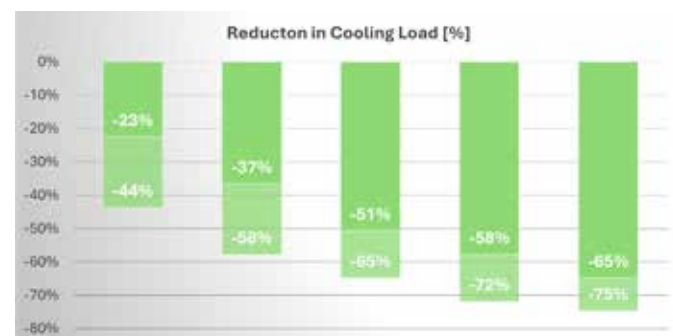
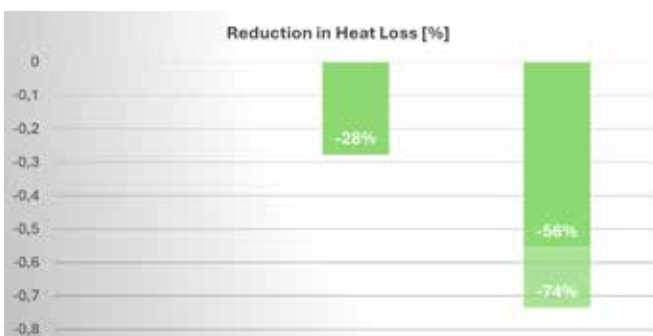
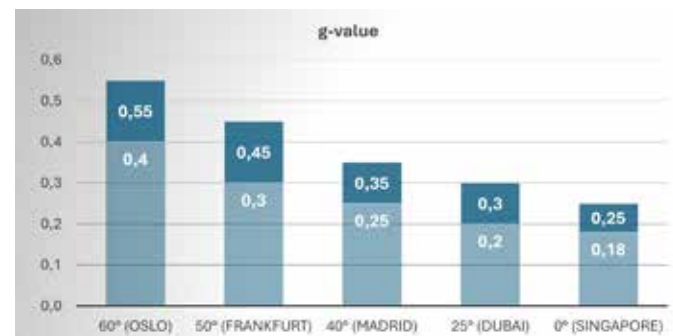
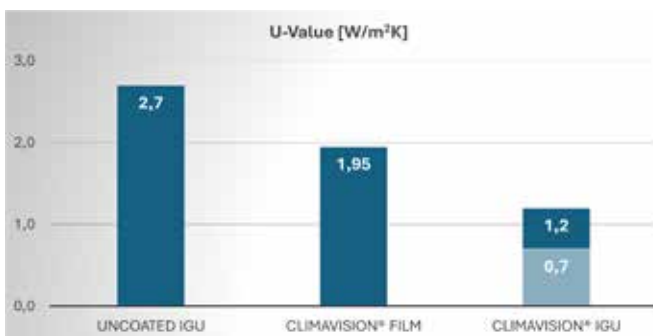
The fast and flexible solution.

A high-performance heat and sun protection film is applied directly to the existing glazing. Ideal for immediate and cost-effective efficiency improvement.

Option 2: ClimaVision® Insulating Glass

The maximum efficiency solution.

The insulating glass unit is replaced by a new, highly efficient unit with an integrated ClimaVision® film. Maximum savings, long-term value retention, and eligible for funding for window refurbishment.



Option 1: The ClimaVision® Functional Film

Instant Impact. Minimal Investment.

The ClimaVision® functional film is the fastest and most economical method to significantly improve the energy efficiency of your windows. The special low-emissivity coating is applied directly to the inside of your existing glazing and takes effect immediately.



Your Advantages at a Glance:

- **Effective Thermal Insulation in Winter:** The film reflects long-wave heat radiation back into the room and lowers the U-value of your windows to under $2.0 \text{ W/m}^2\text{K}$. This leads to a reduction in heat loss through the insulating glass of about 28%.
- **Pleasant Heat Protection in Summer:** The film reduces solar heat gain (g-value) depending on latitude and facade orientation to an optimal level – in Central Europe typically below 0.45, in Southern Europe below 0.35. This lowers the cooling load from the insulating glass by more than 50%, and the rooms remain noticeably cooler and more comfortable.
- **Fast and Clean Installation:** The installation is done without removing the windows and without construction site dirt. A window is retrofitted in about 10 minutes.
- **High Economic Efficiency:** The measure pays for itself in about 6 to 8 years, depending on the energy price.
- **Additional UV Protection:** Over 99% of harmful UV radiation is blocked, which prevents the fading of furniture, floors, and artwork.



Key Figure	Before Renovation	With ClimaVision® Film
U-value (U _g)	2.7 W/m²K	1,95 W/m²K
g-value	0,75	0,18 – 0,55
Reduction in Heat Loss	–	up to 28 %
Reduction in Cooling Load	–	up to 75 %
CO ₂ -Savings (10 Y.)*	–	ca. 2,7 tons
Amortization	–	6 – 8 years

**Calculation based on an 80 m² apartment with 20 m² of window area.*

Ideal for rapid renovation projects, rental properties, and listed buildings where the intervention in the building fabric must be minimal.

Option 2: The ClimaVision® Insulating Glass Unit

Maximum Efficiency. Eligible for Funding as Part of Window Refurbishment.

Our groundbreaking innovation for sustainable renovation. We replace your old insulating glazing with a new, highly efficient unit with a factory-integrated ClimaVision® functional film. The new insulating glass unit has the same overall thickness as the existing glass, but achieves the performance values of a modern triple-glazing. This allows the glass to be replaced quickly and easily – without adapting the window sashes and without any intervention in the frame. You get the performance of a modern window for a fraction of the cost of a complete replacement.



Your Advantages at a Glance:

- **Excellent Thermal Insulation:** The replacement achieves a U-value of only 0.7 – 1.2 W/m²K for the glazing. This achieves the efficiency values of modern triple-glazing.
- **Optimal Sun Protection:** The g-value is reduced to a value of 18% to 55% as required. This keeps rooms cool in summer and can reduce the cooling energy demand by up to 40%.
- **Eligible for Funding as Part of Window Refurbishment:** This measure can be funded in Germany as „Refurbishment of Windows“ by the BAFA. The funding is linked to additional conditions (see info box page 7). Upon fulfillment of all requirements, a subsidy of up to 20% is possible.
- **Enormous Cost Savings:** Compared to a complete window replacement, you save up to 70% of the investment costs.
- **Long-Term Value Retention:** You are investing in a sustainable, future-proof solution that increases the value of your property and meets ESG requirements.

Key Figure	Before Renovation	With ClimaVision® Insulating Glass Unit
U-value (U _g)	2,7 W/m²K	0,7 – 1,2 W/m²K
g-value	0,75	0,18 – 0,55
Reduction in Heat Loss	–	up to 74 %
Reduction in Cooling Load	–	up to 75 %
CO ₂ -Savings (10 Y.)*	–	ca. 4,8 tons
Funding (BAFA)	–	up to 20%**

*Calculation based on an 80 m² apartment with 20 m² of window area.

**Funding for Option 2 as part of the „window refurbishment“ measure. Conditions apply: frame renovation, airtightness improvement, U_w-value of the overall window $\leq 1.3 \text{ W/m}^2\text{K}$, confirmation by energy efficiency experts.

The perfect solution for property owners who strive for maximum energy savings, state subsidies, and a long-term increase in the value of their property – with a realistic assessment of the funding conditions.



BAFA Funding – What’s Important

The replacement of the insulating glass unit can be eligible for funding as „Refurbishment of Windows“. It is crucial that the entire window meets the specified requirements after the measure.

1. Overall U_w-value $\leq 1.3 \text{ W/m}^2\text{K}$

The funding always applies to the complete window system (new glass unit + existing frame).

2. In addition to the glass replacement, the following work must be carried out:

- Overhaul of frame and sash
- Securing of joint and connection tightness
- Improvement of joint and closing tightness

3. Energy Efficiency Expert Required

- An officially certified EEE must:
- Calculate the new U_w-value
- Create the technical project description (TPB)
- Confirm the implementation

4. Application before commissioning

The funding must be applied for before the work begins.

We are happy to support you:

Upon request, we coordinate the next steps and provide all technical data for the energetic assessment.

The ClimaVision®-Solutions in Direct Comparison

Choose the perfect solution for your requirements and your budget. Both paths lead to more efficiency and comfort – without the disadvantages of a complete window replacement.

Feature	Before Renovation	Option 1: Film	Option 2: IGU	Complete Replacement
U-value (Glass)	2,7 W/m²K	1,95 W/ m²K	0,7 – 1,2 W/m²K	0,6 – 0,7 W/m²K
Reduction Heat Loss	–	up to 28 %	up to 74 %	up to 78 %
Reduction Cooling Load	–	up to 75 %	up to 75 %	up to 75 %
CO ₂ -Savings (10 Y.)	–	ca. 2,7 t	ca. 4,8 t	ca. 5,0 t
Funding (BAFA)	–	No	Yes, up to 20 %*	Yes, up to 20 %
Intervention in Building	–	No	No (glass only)	Yes (construction)
Installation Time	–	ca. 10 min	ca. 30 min	3 – 4 hours

**Funding for Option 2 as part of the „window refurbishment“ measure. Conditions apply.*

Start your energetic window renovation now.

Let us find the best solution for your building together. We offer a free and non-binding analysis of your windows and create a customized offer – including a realistic assessment of the funding opportunities based on the condition of your existing window frames.

We support you with:

- Free window analysis
- Mediation of certified energy efficiency experts
- Coordination with executing specialist companies

Contact us for a personal consultation:

Sionic Smart Glass GmbH Intelligent films and glass solutions for energy-efficient buildings.