CONVERLIGHT®

Dynamic Glass for Buildings,
People and the Planet



ChromoGenics

THE FUTURE IS DYNAMIC

ConverLight® is an intelligent dynamic glass system designed for modern architecture and sustainable building envelopes. It blocks excess heat in summer and embraces warmth in winter – minimising energy use while creating luminous indoor environments with unobstructed views. Welcome to the next generation of solar protection.

ConverLight® dynamic glass brings architectural freedom, climate performance and indoor comfort together. At its core is a second-generation electrochromic foil that adjusts its tint in response to sunlight, reducing the need for mechanical cooling while preserving natural light, views and architectural integrity.

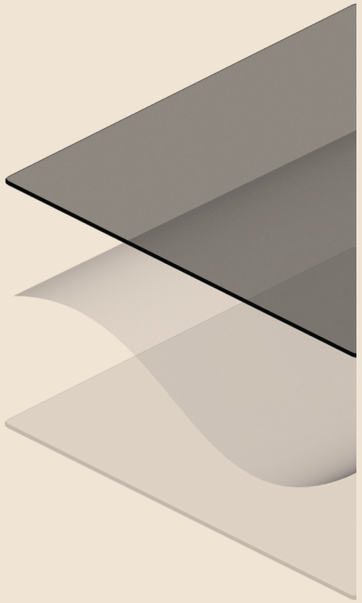
The result is vibrant spaces that balance sustainability, comfort and beauty. ConverLight® can contribute towards credits under leading environmental schemes, including LEED, WELL, BREEAM and GreenBuilding, helping create buildings that work for both the environment and their occupants.

Stay true to your vision. Explore the possibilities.



ADVANCED TECHNOLOGY INTUITIVE CONTROL

ConverLight® dynamic glass merges Swedish material science with intelligent automation to master solar radiation. More than just smart glass, it sets a new standard of sustainable architecture.



THE GLASS LAMINATE

ConverLight® dynamic glass features a sophisticated electrochromic foil laminated between glass panes. By applying a low electrical voltage, ions migrate between layers to trigger a seamless transition from high transparency to a darkened state. This creates a responsive barrier that precisely regulates the influx of light and solar heat. Thanks to our FreeForm® technology, the foil can be cut into virtually any shape and integrated into any glass configuration to meet specific requirements.

Indoor Comfort

ConverLight® dynamic glass combines natural daylight, uninterrupted views and controlled solar heat gain to create a comfortable indoor environment. By helping reduce overheating and the need for mechanical cooling, it supports a stable indoor climate throughout the day.

Tailored Performance

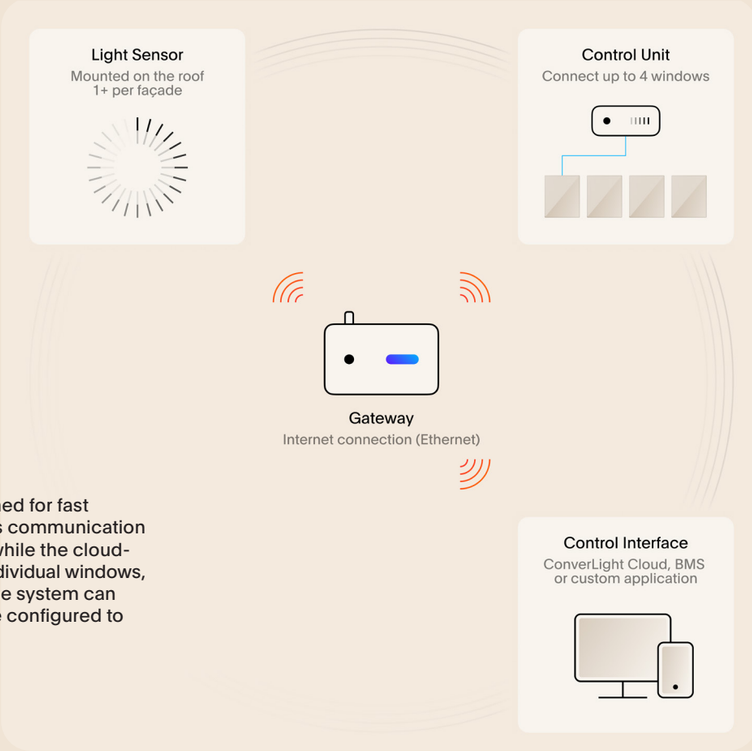
ConverLight® dynamic glass can be integrated into a range of glass configurations to meet project-specific requirements for acoustic performance, wind loads, safety and thermal insulation.

Natural Daylight

With high light transmission and excellent colour rendering (CRI >90), ConverLight® dynamic glass preserves the quality of natural light indoors. Dynamic tinting helps balance light levels throughout the day while maintaining a clear connection to the outdoors.

Solar Heat Control

The glass unit blocks up to 90% of incoming solar energy when needed, reducing cooling demand while allowing beneficial solar gains during colder periods.



THE CONTROL SYSTEM

The ConverLight® control system is designed for fast installation and flexible operation. Wireless communication minimises cabling and installation costs, while the cloud-based platform makes it easy to manage individual windows, groups of panes or entire façade zones. The system can integrate with major BMS platforms and be configured to meet project-specific requirements.

Easy Installation Wireless communication reduces cabling and simplifies installation.

Easy Integration Designed for integration with major building management systems.

Flexible Control Cloud-based control via sensors, schedules and mobile devices, with individual or grouped façade zones.

Solar-Powered Option Solar power makes the window fully self-sufficient, further simplifying installation.

Energy Efficient Extremely low energy consumption – approximately 0.05 W/m² during operation.

WHEN COMFORT MEETS PERFORMANCE

80%

Lower CO_2 Footprint

ConverLight® dynamic glass delivers the lowest carbon footprint among solar shading solutions on the market.[1]

40%

Reduction in Cooling Energy Savings

By blocking unwanted solar heat, ConverLight® dynamic glass can reduce cooling energy loads by 20–40% and, in some cases, eliminate the need for active cooling.[2]

75%

Light Transmittance

As the brightest dynamic glass available, ConverLight® dynamic glass maintains unmatched daylight entry and natural color rendering (CRI >90).[3]

90%

Heat Rejection

Dynamically adapts its tint to block solar heat gains, easing the load on HVAC systems and maintaining a stable indoor climate.[3]

0.33

W/m²K Insulation

When integrated into advanced triple or quadruple IGUs, ConverLight® dynamic glazing provides excellent thermal insulation, with U-values sometimes as low as a brick wall.[3]

99.9%

UV Protection

Prevents interior fading, protecting materials and furnishings by completely blocking harmful UV radiation in all tint states.[3]

Sources:

[1] ChromoGenics AB. (2026). ConverLight® EPD Comparative Analysis, based on third-party verified Environmental Product Declarations (EPD).
[2] US Department of Energy / Lawrence Berkeley National Laboratory. Dynamic Glass: Energy Savings and Comfort Improvements in Commercial Buildings.
[3] ChromoGenics AB. ConverLight® Dynamic Glass Product Guide.

THE IMPORTANCE OF DAYLIGHT AND VIEWS

We spend nearly ninety per cent of our lives indoors[1], yet access to natural daylight and views is often overlooked in the design process. Large glass facades can bring the outdoors in, but controlling solar heat gain without compromising daylight or views remains a challenge. ConverLight® dynamic glass offers a different approach, helping architects balance solar control with bright, open interiors.

SPACES THAT INSPIRE AND HEAL

Human-centric design puts people's needs and well-being at the heart of the built environment. Natural daylight is an important part of this approach, helping regulate our circadian rhythms and influencing sleep, alertness and overall well-being. In schools and offices, access to daylight contribute to comfortable environments that improves concentration, support learning and everyday work[2].

In healthcare and elderly care settings, daylight can help maintain healthy sleep-wake cycles, while views of the outdoors offer a valuable connection to the world beyond. Ultimately, good lighting design is about more than the space itself. It's about creating environments where people can feel better, find balance and perform at their best.

Sources:

[1] Boverket. (2022). Hälsosamma inomhusmiljöer (Healthy indoor environments).
[2] Heschong Mahone Group. (2003). Windows and offices: A study of office worker performance and the indoor environment (Technical Report P500-03-082-A-9). California Energy Commission.

BECOME THE PREMIUM CHOICE

For property owners, investing in occupant well-being also creates commercial value. Natural daylight and attractive views are increasingly important features in the property market, making bright, comfortable spaces more appealing to tenants.

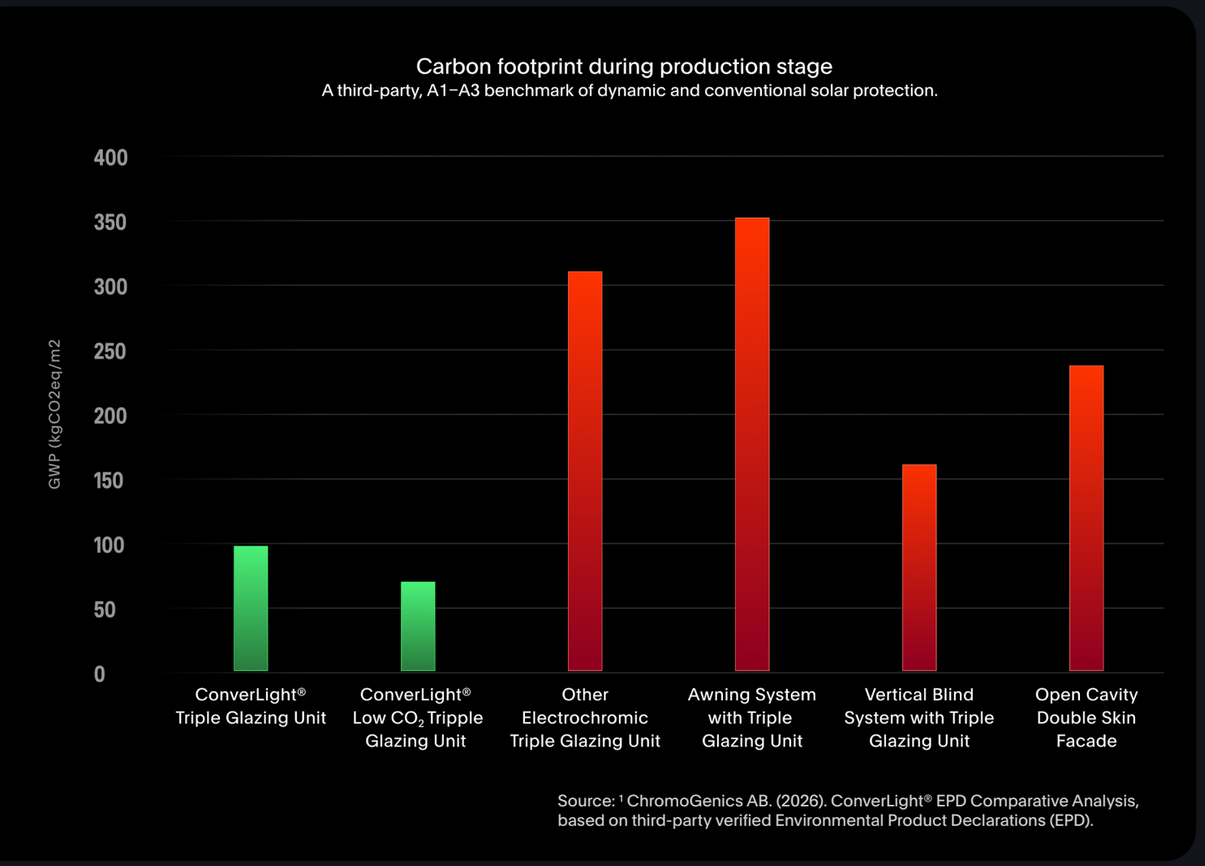
ConverLight® dynamic glass brings daylight deeper into the building, creating opportunities to use the available floor space more effectively. By reducing solar heat gain and eliminating the need for bulky shading systems, it optimizes comfort near the façade, enabling more workstations to be placed near the windows.

As an intelligent, integrated solar control solution, ConverLight® blocks up to 90 percent of solar radiation in its darkened state while keeping natural daylight and views as part of the interior experience. By managing solar heat gain and cooling demand, it lowers operating costs and supports a building's wider sustainability goals.

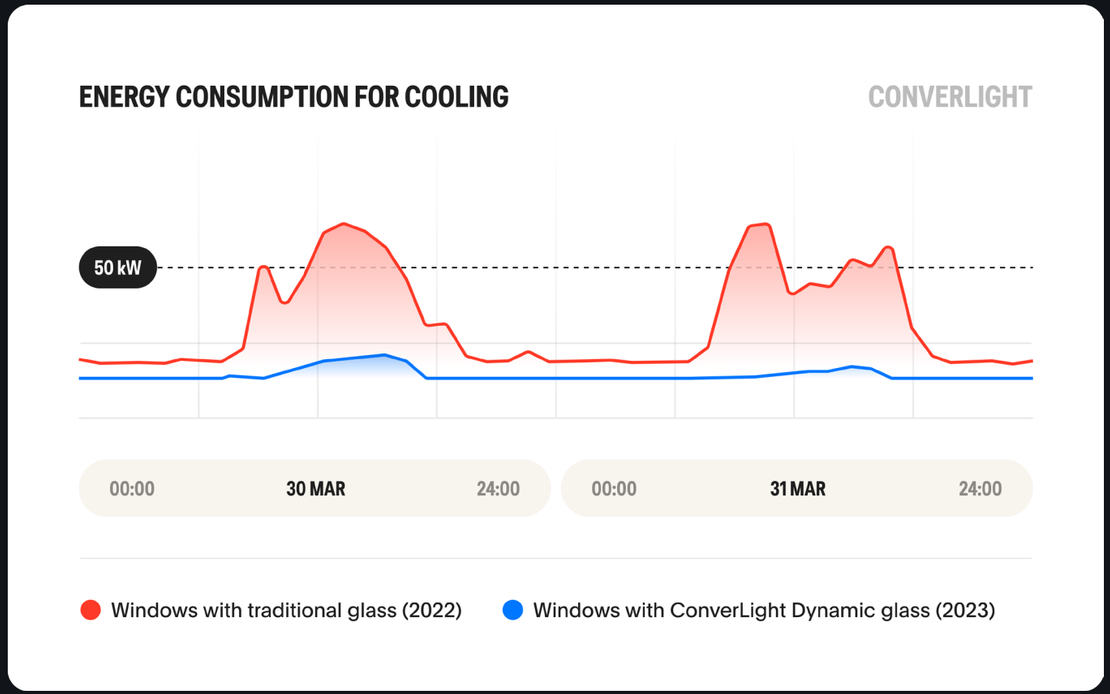


DESIGNED TO CUT CARBON

Low CO_2 emissions are no longer a bonus – they are a requirement. ConverLight® dynamic glass is engineered with carbon reduction at its core. By optimising every stage during production, we deliver up to 80% lower carbon footprint compared to traditional solar shading. All data is independently verified in our Environmental Product Declaration (EPD), ensuring full transparency for green building certifications.



Source: [1] ChromoGenics AB. (2026). ConverLight® EPD Comparative Analysis, based on third-party verified Environmental Product Declarations (EPD).



REDUCING COOLING DEMAND

In the EU-funded Switch2Save project, real-world installations proved that replacing conventional glass with ConverLight® dynamic glass reduced cooling demand by up to 80% in Nordic climates. By mitigating solar heat gain during peak hours, ConverLight® lowers maximum power loads, enabling property owners to downsize mechanical HVAC infrastructure, and in some cases even eliminate the need for active cooling. The result is lower operational costs and improved indoor climate, supporting EU 2030 zero-emission standards, LEED, and BREEAM certifications.

TRUE DESIGN FREEDOM

A Play With Light

Architecture is the fusion of art, technology, and light. ConverLight® empowers you to elegantly illuminate your buildings with the full spectrum of the sun's brilliance. By integrating dynamic solar control directly into the glass, you preserve the visual integrity of your façade, keeping it clear, open, and perfectly aligned with your original sketches.

Beyond the Rectangle

At the heart of this freedom is our proprietary FreeForm® technology. Because the dynamic foil is flexible, it can be precision-cut into virtually any shape. It remains the only commercially available electrochromic solution that can be supplied in curved forms, with dimensions up to 1550 mm in width and unlimited height.

Bring Your Vision to Life

Whether specified as a single laminated pane or a high-performance insulating unit, ConverLight® adapts to your architectural intent. It creates a healthy indoor environment that fosters creativity and cognitive function by balancing natural daylight with unobstructed views. The result is architecture that looks exactly as intended, supporting both a sustainable future and the well-being of those inside.





DEFINING THE NEW STANDARD

Second Generation Dynamic glass that create brighter, more comfortable indoor environments with natural daylight, stable temperatures, and uninterrupted views.

Proven performance: ISO Certified by RISE

Reliability is non-negotiable. ConverLight® has successfully passed the rigorous ISO 18543:2021 standard, enduring 5,000 hours of intense UV radiation and 30,000 switching cycles. Tested by the independent Swedish research institute RISE, these results correspond to over 20 years of operation under extreme conditions, confirming consistent performance and long-term durability.

Quality assured: French DTA Certification

In addition to the ISO certification, ConverLight® has obtained the French DTA certification (Document Technique d'Application) from CSTB. This prestigious approval confirms that our technology meets the highest technical requirements for the French construction market. The certification covers everything from thermal stability to mechanical strength, validating ConverLight® as a robust solution for energy-efficient architecture.



Minimal Energy Use. No Moving Parts.

Adapting its tint to changing sunlight, ConverLight® dynamic glass uses minimal electricity, consuming power only during brief tint transitions. With optional solar power, it can operate entirely off-grid. Free from moving mechanical parts, the system combines an open architectural expression with reliable, low-maintenance solar control.

Open Views. Maximised Daylight.

ConverLight® dynamic glass helps maximise access to natural daylight throughout the day, creating bright, comfortable interiors while reducing reliance on artificial lighting. Maintain a clear connection to the outdoors without conventional external shading obstructing the view.

Simple Installation. Flexible Control.

Designed for established façade workflows and standard glass processing, ConverLight® can be installed by your preferred façade contractor without specialist expertise. Open BMS integration and flexible zoning allow the system to adapt to most buildings and façade configurations.

Flexible Configuration. Lower Carbon Footprint.

The ConverLight® technology offers total flexibility in glass configuration, geometry and supplier choice, supported by local processing in selected markets. With up to 80% lower production-stage CO_2 footprint than traditional solar shading, it supports ESG objectives and contributes towards green building certification goals, including LEED, BREEAM and WELL.







MADE IN SWEDEN, DELIVERED EVERYWHERE

ChromoGenics is a Swedish proptech company founded in 2003, rooted in decades of materials science research at Uppsala University. Today, we operate one of Europe's largest industrial roll-to-roll sputtering facilities, bringing research, development and precision foil production together under one roof. Backed by long-term ownership through Färna Invest, we develop and manufacture ConverLight® dynamic glass technology for a global building industry.

Our Swedish production combines advanced materials science with industrial precision and quality control. To ensure a sustainable and efficient supply chain, we ship our smart film directly to local glass processors worldwide for lamination close to the project site. This significantly reduces transport emissions and ensures fast, reliable delivery – giving ConverLight® one of the lowest carbon footprints on the market.

Curious to find out more?

Visit us at
converlight.com

CONVERLIGHT®