

PARTNERS KEY FACTS

Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP (DE)

4 years project

Fraunhofer Institute for Silicate Research ISC (DE)

6.4 M€ overall budget

ChromoGenics AB (SE)

5.5 M€ requested EU contribution

School of Mechanical Engineering @ National Technical University of Athens (EL)

10 partners

University of West Bohemia (CZ)

6 European countries

SIA AGL Technologies (LV)

FASADGLAS BÄCKLIN AB (SE)

Vasakronan AB (SE)

General State Hospital of Nikaia "Agios Panteleimon" (EL)



VAN ROMPAEY SARA (BE)

AMIRES s.r.o. (CZ)

Switch2Save

Lightweight switchable smart solutions for energy saving large windows and glass façades

The main goal of Switch2Save is to improve the availability and affordability of electrochromic and thermochromic smart glass solutions.



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www.switch2save.eu

CONTACTS

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In modern architecture, large-area glazing is a continuing trend because of its appearance and design variety. Large southwards-oriented windows help to reduce the energy demand for heating in winter. However, large-area glazing may significantly increase the energy demand for cooling and air-conditioning in hot summers. Smart Glass Solutions – such as electrochromic (EC) and thermochromic (TC) windows and glass façades – control the radiation energy transfer with the “touch of a button” and thus can drastically reduce the energy demands for heating and air conditioning of large buildings. In addition, they allow superior indoor lighting comfort in contrast to conventional mechanical window blinds.

OBJECTIVES

- Develop a combination of EC and TC cells – with optimized maximum energy saving potential – based on a switchable total energy transmittance (g-value)
- Scale the manufacturing technologies for increased availability and cost effectiveness
- Assess the performance of the innovative insulating glass units
- Demonstrate the heating and cooling energy saving potential and the lighting comfort in two operational buildings in Greece and Sweden
- Replace 50 windows and 200 m² glass façade area with the smart glass solution and perform a full “beforeafter” comparison of the energy demand for a one-year cycle

IMPACT

Switch2Save will accelerate the widespread implementation of energy smart glass and significantly contribute to the goal of a CO₂-neutral building stock in the EU before 2050.

