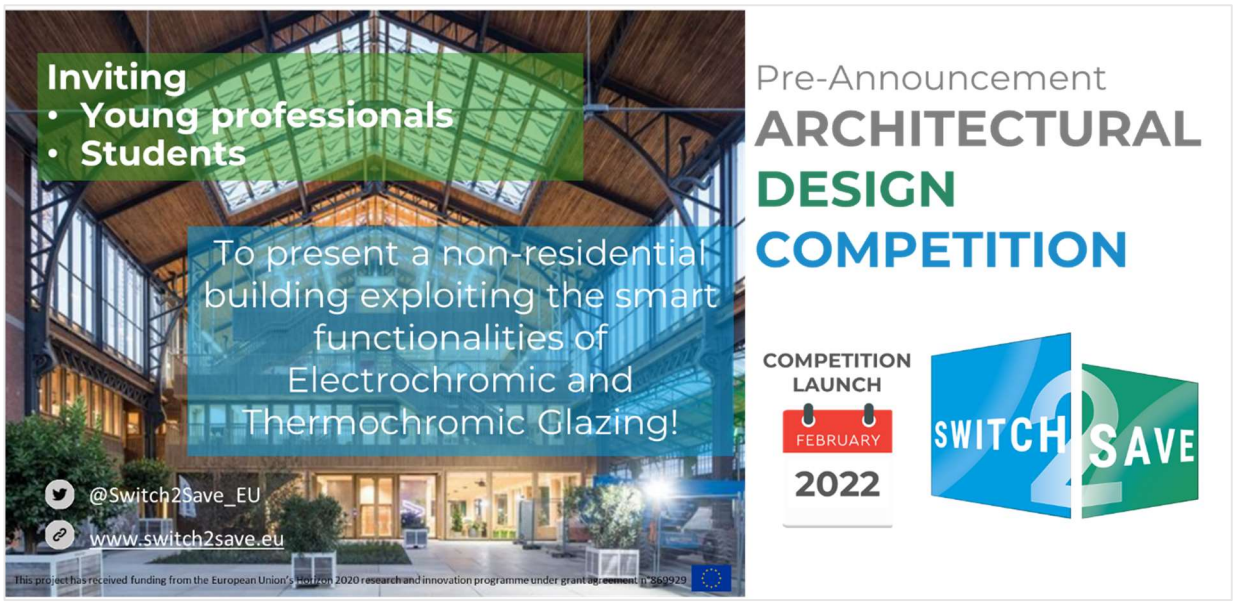

Glass forms an integral part in the field of architecture. Its' clarity and aesthetic nature are unmatched. With its many forms, types and applications, glass can enhance the architectural value of a building. With the use of glass in architecture having remarkably increased over the last few decades, large glass facades and roofs are now a major design element in commercial office buildings, airport terminals, train stations, shopping centres etc.

As a material, glass presents many advantages with the main functions of glass components being allowing daylight into buildings and ensuring a visual connection with the exterior. Compared to opaque materials, glass is associated with increased heat gains and losses. Therefore, glazing selection plays a key role in determining a building's overall thermal performance: In modern buildings, up to more than 60% of energy transfer through the building envelope is related to glazing components.

With careful consideration of the orientation and the use of exterior shading, the integration of large transparent façade and roof elements can become an integral part of an energy saving strategy.

CHALLENGE:
When an energy saving strategy is absent, glass facades can lead to excess solar radiation gains and losses: Over a full year, total energy consumption of modern buildings with large glass facades and roofs is up to 100% higher compared to buildings with small windows. At the same time, window blinds used to control solar radiation into buildings, compromise interior daylight conditions and block the view to the exterior. As an answer to these challenges, high performance glazing can contribute to the insulation of a building and deliver energy savings, while ensuring comfort conditions for users.

OPPORTUNITY:
Switch2Save project proposes advanced, low-weight solutions suitable for direct integration to windows and glass facades for the control of radiation energy transfer, without any impact on the building structure, while enhancing occupants' comfort.

The Switch2Save Architectural Design Competition aims to collect design concepts of non-residential buildings (new or renovation projects), featuring glass facades, roofs, or large window to wall areas, in any climatic context. We invite you to present a design concept in which there is an optimum exploitation of the Switch2Save EC/TC smart functionalities, supported by a clear energy saving concept towards meeting the EU energy saving targets for buildings, while considering occupants' comfort and wellbeing. In addition, the successful aesthetic integration of the IGUs will be evaluated, as well as the replication potential of the design approach.

BUILDING USE AND SITE SELECTION:
The S2S architectural design competition focuses on non-residential uses. There is no other restriction regarding the size, location or use of the proposed building concept. Project designs can be set within any hypothetical site of any size, in either a city or countryside location anywhere in Europe and in any climate.

Awards:
1st prize 1000 EUR + a demo kit of a fully functional energy smart EC/TC window + Possibility to present the winning projects during prize ceremony (travel expenses covered) + Offer of internship at NTUA HMCS+ Publication at EU wide channels

2nd prize 500 EUR + a demo kit of a fully functional energy smart EC/TC window + Possibility to present the winning projects during prize ceremony (travel expenses covered) + Offer of internship at NTUA HMCS+ Publication at EU wide channels. To show our appreciation, all the participants will receive a digital participation certificate.

Schedule

- Competition launch and training event: 28th February 2022
- Registration: 28th February 2022 to 31st May 2022
- Last Day for Queries: 31st May 2022
- Submission: 31st July 2022
- Winners Announcement: 21st September 2022

Eligibility: The competition is open to young architects (<5 years since graduation)/students and/or multi-disciplinary teams (including building physicists, engineers) led by young architects/ students enrolled in an academic programme (bachelor, master etc.) from an accredited educational institution. There is a limit of 3 members per team. The competition is open to all nationalities.

- Title: Switch2Save Architectural Design Competition
- Type: Competition Announcement (design concept)
- Website: https://switch2save.eu/design-competition/Organizers
- Registration Deadline: May 31, 2022 11:59 PM
- Submission Deadline: July 31, 2022 11:59 PM
- Price: Free of charge