

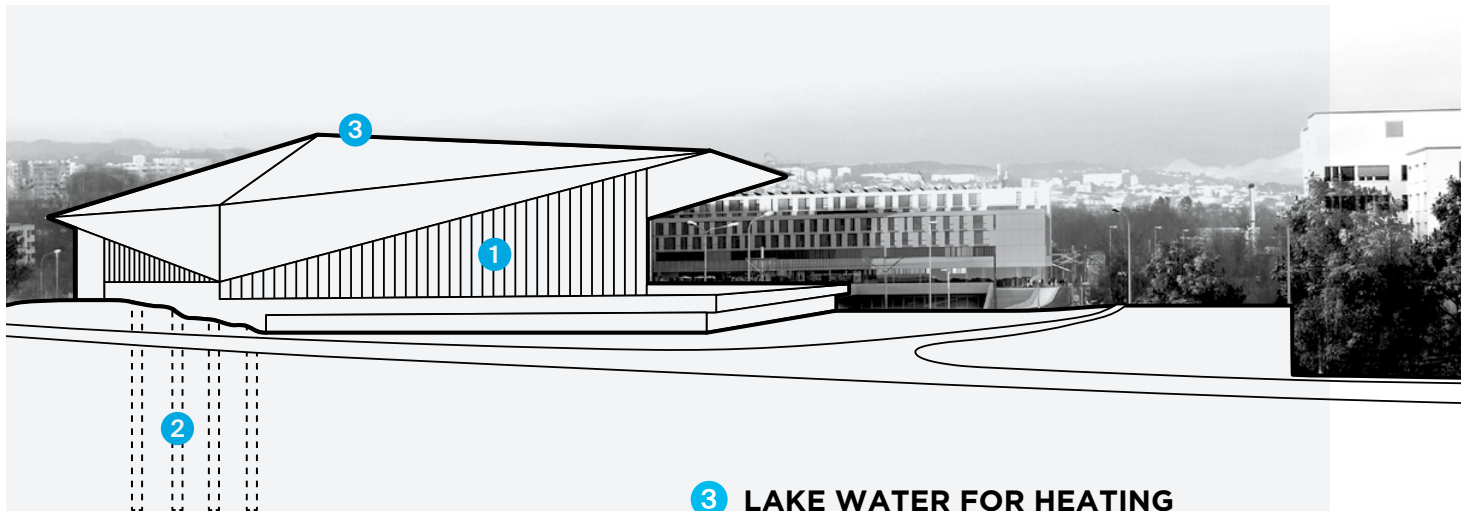
# A congress centre among the most sustainable in the world



**The SwissTech Convention Center is located on the campus of the Ecole polytechnique fédérale de Lausanne (EPFL). For decades, EPFL has been committed to sustainable development on its campus.**

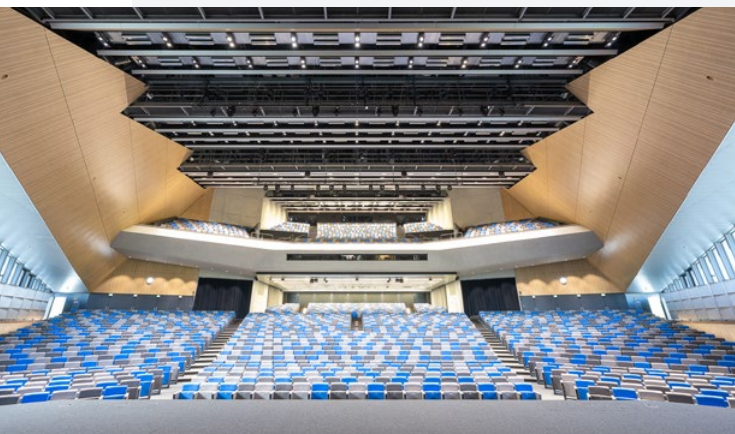
This is evidenced by the use of water from Lake Geneva to cool and heat its buildings, the installation of 15,000 m<sup>2</sup> of photovoltaic panels on its roofs, and the encouragement of soft mobility with nearly 80% of commuters travelling on foot, by bicycle or by public transport.

The creation of the SwissTech Convention Center has taken EPFL's systemic and innovative thinking even further by providing a showcase for emerging energy technologies.



## 1 NATURAL LIGHT

For the comfort of users as well as for energy savings, the STCC makes maximum use of natural lighting. Almost all of the rooms have bay windows, even the plenary room that can accommodate 3,000 people. Artificial lighting uses the latest available technologies and offers remarkable energy performance.

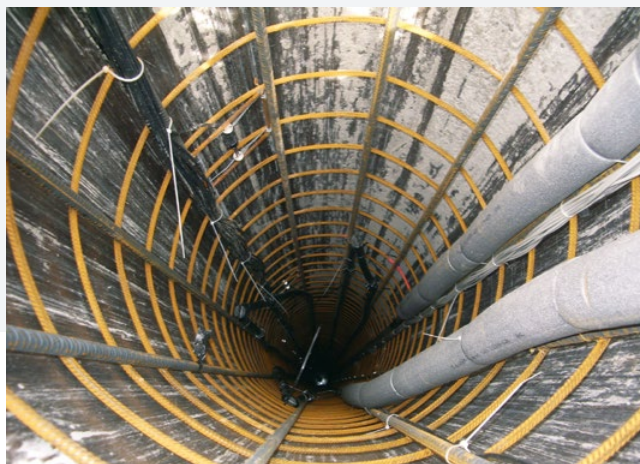
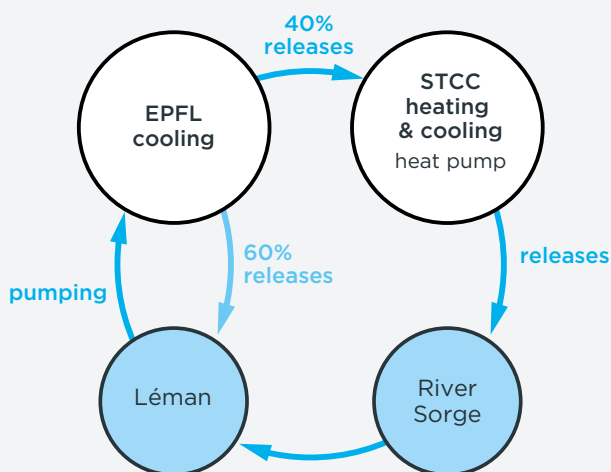


## 2 GEOTHERMAL PILES

Built on very unstable soils, the STCC rests on piles 30 meters deep. The EPFL Soil Mechanics Laboratory took advantage of this project to install four geothermal piles equipped with absorber tubes, in which a heat transfer fluid circulates to allow heat exchange with the soil. Thanks to this installation, the laboratory is studying the potential to heat a building in winter and cool it in summer, but also the movements of the ground at depth.

## 3 LAKE WATER FOR HEATING AND COOLING

The entire campus is cooled and heated with water from Lake Geneva, thanks to a distribution network of cold water and low temperature hot water produced by heat pumps. The main idea of the STCC energy concept, conceived by the EPFL operating department, was to use the heat from the water used to cool the EPFL buildings to heat the STCC, thanks to a heat pump. This use of EPFL's cooling water waste allows to produce again heat in winter and cold in summer. At the end of this cold and hot journey, the water returns to the lake via the Sorge River, which flows nearby, without harming the environment.



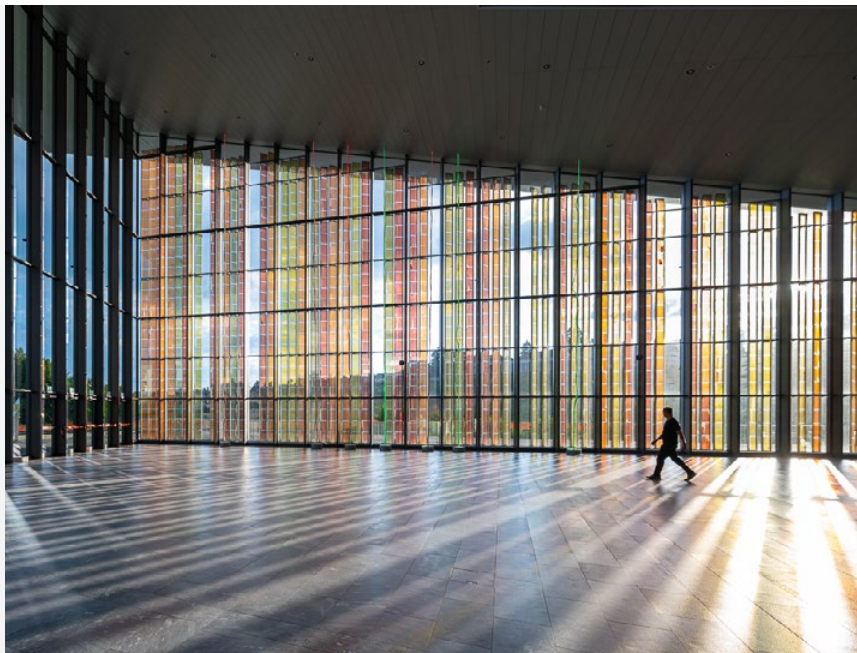


#### 4 SUSTAINABILITY IN DAY-TO-DAY LIFE

The SwissTech Convention Center uses energy produced by solar panels on the neighboring student housing and businesses, as well as by heat pumps that recover waste air from the ventilation system or heat produced by the refrigerators.

The STCC achieves sustainability in the following ways:

- Proposing to carry out carbon balances of the events and compensating the surplus.
- Encouraging the organizers to distribute low environmental impact materials (paper, promotion, badges, etc.).
- Exemplary recycling of waste (60% recycling rate and regional production of biogas with organic waste).
- Sustainable catering (origin and dietetics).



#### 5 SUSTAINABLE MOBILITY

The SwissTech Convention Center is perfectly located in a metro loop with its own “EPFL” stop. The center has well-developed pedestrian and bicycle access.

Self-service bicycles are also available and are the ideal complement to private or public transportation. Also, in front of the door, users will find all the necessary services and businesses: stores, bars, restaurants, hotels, beauty and wellness centers, medical and dental offices.

