

TCP on Energy in Buildings and Communities (EBC TCP)

The EBC TCP, created in 1977, carries out research and development efforts towards near-zero energy and carbon emissions in the built environment. Activities under the EBC TCP focus on the integration of energy-efficient and sustainable technologies into healthy buildings and communities.

Main areas of work

- Integrated planning and building design
- Building energy systems
- Building envelope
- Community-scale methods
- Real building energy use

Key activities and accomplishments (2017-2018)

- [Deep energy retrofit of public buildings](#)
- [Ventilative cooling](#)
- [Occupant behaviour in buildings](#)
- [Energy strategies in communities](#)
- [Energy performance of energy supply systems](#)
- [Performance of super-insulating materials](#)
- [Energy flexible buildings](#)
- [Thermal comfort in low energy buildings](#)

Priorities and projects (2019 – 2020)

- [Air Infiltration and Ventilation Center](#)
- [Indoor air quality in low energy residential buildings](#)
- [Building energy epidemiology: analysis of real building energy use](#)
- [Building energy performance assessment based on in-situ measurements](#)
- [Assessing environmental impacts caused by buildings](#)
- [Towards net zero energy communities](#)
- [Competition and living lab platform](#)
- [Cost-effective building renovation with energy efficiency and renewables](#)
- [Deep renovation of historic buildings towards low energy and emissions](#)
- [Integrated solutions for daylighting and electric lighting](#)
- [Energy impacts of supplementing ventilation with gas-phase air cleaning](#)
- [Occupant-Centric Building Design and Operation](#)
- [Resilient Cooling](#)



ENERPOS, a net zero energy building in Reunion Island, a tropical climate. (Photo courtesy of Francois Garde)

Multilateral collaborations

- Deep renovation of historic buildings towards lowest possible energy demand and CO₂ emissions (with the TCP on Solar Heating and Cooling)
- Integrated solutions for daylight and electric lighting (with the TCP on Solar Heating and Cooling)
- Optimised performance of community energy supply systems with exergy principles (with TCPs on District Heating and Cooling and Solar Heating and Cooling)
- Joint Technical Day and meetings of the EBC TCP and SHC TCP Executive Committees in 2017 and 2018

Membership



Why should your organisation become a member of the EBC TCP?

The EBC TCP is an international energy research and innovation programme in the buildings and communities field. It enables collaborative R&D projects leading to high quality scientific reports and summary information for policy makers. EBC TCP guidance, methodologies and tools have, over time, led to step-changes in support for practitioners, researchers and policy makers.

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