

Project period:
04/20 – 03/23
Contribution Velux
Stiftung:
CHF 552,000
Funding area:
Daylight & Human
Project type:
Structural project

Daylight in Sustainable Urban Design



Project portrait “Daylight in Sustainable Urban Design”

It is estimated that by 2050, up to six billion people will be living in urban areas, which will accelerate urban growth and increase densification. This could mean fewer open spaces, more heat islands, and higher energy demands. Integrating daylight – a basic human need essential for our health and well-being – into future urban design should be part of the solution. Tomorrow’s cities could then offer higher standards of environmental sustainability and enhanced liveability.



Hubert Klumpner,
Professor of
Architecture and
Urban Design



Arno Schlueter,
Professor of
Architecture and Building
Systems



Dr Marie Antoinette Glaser, Director
ETH Center
for Research
on Architecture,
Society
and the Built
Environment

At ETH Zurich at the Department of Architecture, three researchers from different institutes have initiated a multidisciplinary research platform to address questions such as:

“How can sustainable urban design and innovative energy technologies better include aspects of daylight to support human wellbeing, living comfort, and health?”

The research platform is aimed at architects, urban planners, engineers, data scientists, sociologists, anthropologists, and policy makers. The goal is help them find sustainable solutions by critically analysing and creatively rethinking the interdependencies of daylight and the built environment in the context of academic research and its application, from the perspectives of architecture, planning, and health. This knowledge cluster is expected to develop outcomes with high relevance for policy recommendations in the field of integrated urban planning and active approaches for its transformation.

The platform will offer a fellowship program, with two positions for outstanding Post Doc researchers, and its activities will promote exchange and collaboration. It will inform the teaching curriculum of the Department of Architecture and build capacity in the ETH research context by integrating aspects of daylight as a natural source of living quality and energy into sustainable urban and architectural design.

“The vision of a long-lasting research platform where daylight is at the center and the connecting element between interlinked questions has convinced us. Not only does the sustainable and transdisciplinary introduction of daylight [in the curriculum] help to address the UN Sustainable Development Goals (SDG 11), but it also holds the potential to mitigate the climate change”

**Foundation Board
Velux Stiftung**