



SUSTAINABLE SYSTEMS

Fields of Expertise TU Graz

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Urs Leonhard Hirschberg,
Sustainable Systems

Source: Lunghammer – TU Graz

In October 2020 the president of the European Commission, Ursula von der Leyen, announced the New European Bauhaus initiative, creating a link between the EU's efforts to combat climate change and the famous Bauhaus, a school that derived its holistic mission from a belief in design. "Situated at the crossroads between art, culture, social inclusion, science and technology," von der Leyen says the New European Bauhaus "aims to make the EU a leader in the circular economy." What is most remarkable about the initiative, though, is that it talks about beauty: "It calls on all Europeans to imagine and build together a sustainable and inclusive future that is beautiful for our eyes, minds, and souls."

That beauty and questions of culture and social inclusion are now part of the political discussion about sustainability is a welcome development. As is the decision to award this year's Pritzker Prize, also known as the Nobel Prize in architecture, to the French architecture couple Anne Lacaton and Jean-Philippe Vas-

sal, who are famous for never having demolished a building in order to construct a new one. Instead they have throughout their 34-year career pursued the idea that every structure can be repurposed and reinvented. "Through their ideas, approach to the profession and the resulting buildings," the Pritzker jury said in its citation, "they have proven that a commitment to a restorative architecture that is at once technological, innovative and ecologically responsive can be pursued without nostalgia."

At TU Graz we also value innovation and ecological responsiveness over nostalgia, as is apparent from our initial funding program. In the 14th round of the program, the following five young researchers were awarded seed funding:

Nayari Castillo-Rutz, project assistant at the Institute of Spatial Design, proposed a project for FWF PEEK, the program for artistic research of the Austrian Science Foundation. Under the title Urban Assemblages – Architectural Experiments in Coexistence Castillo-Rutz's project is based on the premise that "the future city can no longer be an anthropocentric vision." She plans to create experiments in public space, inspired by ecological and social issues around coexistence.

Christina Hopfe, newly appointed professor at the Institute of Building Construction, was successful with CoVent, to be submitted to

FWF. Hopfe proposes to develop effective indoor ventilation guidance for naturally ventilated office spaces as part of the COVID-19 risk reduction strategy.

Robert McLeod from the Institute of Technology and Testing of Construction Materials will apply for EU funding with ReWiBE, a Marie Curie International Training Network for doctoral researchers in Resilience and Well-being in the Built Environment.

Pablo Bastidas Erazo from the Institute of High Voltage Engineering and System Performance, wants to develop a Battery Energy Storage System (BESS) for Medium-Voltage Direct Current Grids in an FFG Bridge project. Direct current (DC) manages long-distance transmissions with lowest energy loss. The BESS, in turn, is meant to stabilize the grid performance and enable the integration of different renewable energy sources.

The project with the most beautiful acronym is by Rupert Preßmair from the Institute of Electrical Measurement and Sensor Systems. HeIDEn (German for heroes) stands for "Helio-stat for Desert Environments." Based on a patent he earned for his Master's thesis Preßmair is set to apply for EU funding under the program Solar-ERA.Net

We wish all successful applicants the best of luck with their proposals and hope that the resulting projects can one day be presented on these pages, just like the project Urban Move on page 30. ●

