

Pressemitteilung**Technische Universität Berlin****Stefanie Terp**

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<http://idw-online.de/de/news749669>Forschungsprojekte, Kooperationen
Bauwesen / Architektur, Gesellschaft
überregional**TU Berlin: Bauhütte 4.0 – a new cluster for sustainable wood construction in Berlin****Sustainable Construction with Wood Bauhütte 4.0 is a new cluster for innovative wood construction in Berlin**

The Berlin Senate has approved an innovative research and industry park for urban technologies as well as an urban quarter to house more than 10,000 inhabitants. Both are to be constructed on the site of Tegel airport immediately after its closure. One area of focus is sustainable construction. "The long-term goal is to promote the construction of urban quarters using wood as a construction material in response to rising greenhouse gas emissions in conurbations," says Professor Raoul Bunschoten, head of the CHORA conscious city academic chair for urban planning and sustainable urban development at TU Berlin. The Bauhütte 4.0 project is to be put into practice on the Tegel airport site in cooperation with the Fraunhofer Institute for Production Systems and Design Technology (IPK), represented by Professor Dr.-Ing. Holger Kohl, and Tegel Projekt GmbH, represented by Professor Dr. Philipp Bouteiller. Bauhütte 4.0 is a cluster for innovative wood construction bringing together representatives from the civil society, forestry, the construction industry and urban planning to advance sustainable urban development.

Berlin commits to the use of wood in construction

In September 2019, the Berlin house of representatives published a report on the use of wood in sustainable construction. The official decision to make use of wood in construction states that "wood will be used to a much greater extent as a construction material. As a storer of carbon dioxide, wood also contributes to climate protection and resource efficiency." The aim is to send a clear signal across Europe by creating future urban quarters such as the Schumacher Quartier on the site of Berlin Tegel airport or the Buckower Felder development as carbon-neutral districts.

Testing technologies for networked intelligent production

The starting signal for the Bauhütte 4.0 project is the investigation of the potential of Industry 4.0 for the "urban wood construction" value chain. The aim of this feasibility study is to develop recommendations for planners, architects, the wood industry, the building sector, researchers and politicians for measures which could be deployed in the construction of the Schumacher Quartier. "In particular, these measures include the successful development and introduction of technologies for intelligent networked production in terms of Industry 4.0," says Professor Dr.-Ing. Holger Kohl, deputy director of Fraunhofer IPK and head of the Chair of Sustainable Corporate Development at Technische Universität Berlin.

Developing new architectural concepts

Other goals include the examination of the feasibility of implementing Bauhütte 4.0 at the Tegel airport site and exploring how scalable Bauhütte 4.0 is and how effectively it can be transferred to other locations. "Sustainable urban development requires a holistic examination of the entire value chain of urban wood construction as well as innovative architectural concepts. Bauhütte 4.0 seeks to do so taking account of the life cycle of buildings, from the 'forest to the city' so to speak," says Professor Bunschoten.

100 years of the "Bauhütten" movement

The name Bauhütte 4.0 refers to the 100-year history of the movement of the same name and revisits the ideals of the first Bauhütte social housing association founded by Martin Wagner on 18 October 1919. The term Bauhütte translates into English as mason's guild.

The construction of the Hufeisensiedlung in the 1930s (so called due to its horseshoe shape) finally saw Wagner's ideas realized in the context of a social housing project. Due to its groundbreaking contribution to architecture, the Hufeisensiedlung was declared a UNESCO world heritage site in 2008. It also provides a strong role model for the sustainable development of the Schuhmacher Quartier.

Further information:

www.bauhuetten40.com

<https://www.instagram.com/bauhuetten40/>

Further information can be obtained from:

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