Sächsisches Textilforschungsinstitut e.V.

Affiliated institute of the University of Technology Chemnitz

Managing Director: Dr. Heike Illing-Günther
Annaberger Straße 240 | 09125 Chemnitz | Germany | Phone: +49 371 5274-0 | Email: stfi@stfi.de | www.stfi.de

GreenOasis – Optimising the urban climate: sustainable greening island combining a graduation tower, vertical greening and energy self-sufficiency

Co-funded by the European Union

This project is co-financed from tax revenues on the basis of the budget adopted by the Saxon State Parliament.

Problem / Motivation

- Climate change poses major challenges for cities
- The urban space is characterised by overheating due to lack of evaporation
- Sealed surfaces overload the sewerage system and require drainage to prevent flooding
- Urban biodiversity declines as diverted water is no longer available for urban plants

Solution

- Construction of lightweight greening islands as modern street furniture
- Self-sufficient water reservoir and supplier for plants, retreat and shelter for people
- Use of plant mats for the greening of buildings and control of the water balance
- Textile-technological adaptation of classic graduation towers

Project Partner

Technische Universität Chemnitz, Professur Strukturleichtbau und Kunststoffverarbeitung

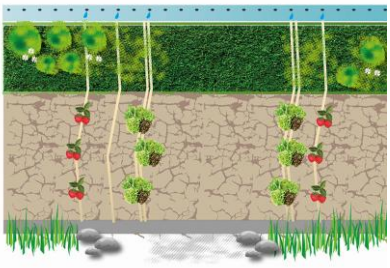
Hansel Garten- und Landschaftsbau GmbH

predEVOLUTION technologies GmbH

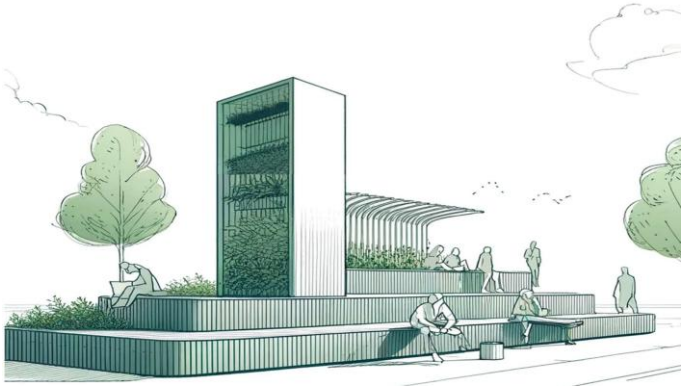
Technitex Sachsen GmbH

Project Launch

01/2025



Vertical greening solutions for "green oasis" by means of textiles



Concept design sketch of a "green oasis" (© TU Chemnitz)

Acknowledgement

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Contact: Dipl.-Biol. Jens Mählmann Phone: +49 371 5274-240 Email: jens.maehlmann@stfi.de
Dipl.-Ing. (FH) Franz Klötzer Phone: +49 371 5274-281 Email: franz.kloetzer@stfi.de