

Coal and Oil Free University Building

at Technical University Ulm



This new "Passivhaus-Plus" building at THU's Campus Eselsberg

- **Generates 126% of its power demands**
- **Through a 420 kWp PV-system**, that powers the heat pumps and building operations excess energy fed into a power storage system.



GOING THE FINAL STEP

While the central infrastructure is 100 % renewable, **fossil gas** is still used in the laboratories.

Replacing this dependency is a feasible **final step** to become a completely **Fossil Free Zone.**



GOVERNANCE & MANAGEMENT

Owner & Planning: The building is owned by the State of Baden-Württemberg, with planning and execution managed by the VBV.

Academic Operation: Following completion, the building was handed over to TH Ulm for teaching and research.

Scientific Monitoring: The first two years of operation were scientifically accompanied by Fraunhofer, ensuring that the theoretical energy targets (the 26% surplus) were met in practice.

A MODEL FOR OTHERS

It proves that even high-tech laboratory buildings can be climate-positive. It provides a replicable blueprint for any university or public institution aiming for real fossil freedom rather than just accounting-based “climate neutrality”.





Sources:

- Ersatzneubau für Technische Hochschule Ulm am Oberen Eselsberg. (o. D.). Baden-Württemberg.de. <https://www.baden-wuerttemberg.de/de/service/presse/pressemitteilung/pid/ersatzneubau-fuer-technische-hochschule-ulm-am-oberen-eselsberg>
- Frank Tuschla, Dipl.-Ing., Matthias Binder, Dipl.-Ing. & Vermögen und Bau Baden-Württemberg. (2022). Das neue Campusgebäude der TH Ulm. In HIS - Forum Gebäudemanagement [Conference-proceeding]. https://www.his-he.de/fileadmin/user_upload/Vortrag_Tuschla_Binder.pdf



Fossil Free Zones, a project by Lingo - Leave It In The Ground



@fossilfreezones or @fossilfreezones1



fossilfreezones.org