

## Press Release

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### **A touch of sustainability: Geothermal probe system revolutionizes Regensburg university campus**

- Bauer Resources built a geothermal plant on the university campus in Regensburg within nine months.
- 24 geothermal probes were installed and 1.3 km of pipelines were laid.
- The plant is used as a heating and cooling supply.
- Limited space and a lively construction site environment required precise planning and special protective measures.

**Regensburg, Germany** – The first rays of sunshine cast their warm light on the huge glass buildings of Regensburg University. Students flock to the site. Some are in a hurry, some walk more leisurely. And right in the middle of the action for nine months: the team from BAUER Resources GmbH, which built a geothermal probe system on the campus on behalf of CMS Container Modul Systeme GmbH for the modular building planned by meuer - planen beraten Architekten GmbH – from A to Z and despite the limited space.

#### **Small, but powerful!**

On site, the geothermal specialists offered their complete services: From preliminary exploration including test drillings to detailed planning and the complete implementation of the geothermal probe system – everything from a single source. And they also provided the right equipment and finishing materials from Bauer. Since September 2023, the team led by site manager Tobias Sailer from BAUER Resources GmbH has been working tirelessly. Step by step, they drilled their way through the construction site with a KLEMM KR 805-3GW rig and installed 24 geothermal probes. "Then it was time to lay the pipes, which was manageable compared to other projects – it was only 1.3 km," says Tobias Sailer and adds: "The geothermal plant is small, but powerful." Despite its compact size, it ultimately produces up to 85 MWh of thermal energy per year, which is roughly equivalent to the energy requirements of 17 modern residential buildings.

#### **Between the laboratory and the parking lot**

Enough options to maneuver equipment and enough space for storing finishing materials? Wrong! All work had to be carried out in a very confined space. Some of the drilling rigs even had a working radius of less than 6 m. "Every move had to be right – and it was," emphasizes senior site manager Marcel Moesslang from Bauer Resources. The storage areas were also precisely defined so that all building materials had their allocated place. And that's not all: Things were also buzzing with activity all around the construction site. More than 11,000 people move around in the immediate vicinity every day, including visitors to a public parking lot and the laboratory building for microsystems technology.

Specially insulated equipment was therefore used to reduce noise. "Precautions to protect residents are always our top priority," says Marcel Moesslang.

### **Warms in winter, cools in summer**

The new modular building on campus sets new standards in terms of sustainability and meets almost all the criteria of the Passive House standard. The central heart and absolute novelty is the innovative geothermal probe system. What makes it unique: The energy stored in the ground is used in two ways – for heating in winter and for cooling in summer. "In winter, the system absorbs heat from the ground to heat the building. In summer, on the other hand, the excess heat from the building is released into the ground to cool it," explains Marcel Moesslang. In addition to the environmentally friendly geothermal system, the flat roof will be a green roof, a ventilation system with heat recovery will be integrated and a photovoltaic system will be installed to cover the energy demand sustainably. A prime example of environmentally conscious construction.

**Images: [press-images-geothermal-energy-campus-regensburg-bauer-resources...](#)**



(1) Bauer Resources built a geothermal probe system for the new modular building on the Regensburg University campus in nine months.



(2) 24 geothermal probes were installed in a very confined space.



(3) The plant supplies about 32 kW of environmental heat.

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### **About BAUER Resources Group**

The regionally organized BAUER Resources GmbH is aligned to projects around the world with its subsidiaries in Germany, Africa, the Middle East and South America and has extensive expertise in the areas of drilling services and water wells, environmental services, constructed wetlands, mining and rehabilitation. With more than 30 years of experience, BAUER Resources GmbH's Bauer Umwelt business division is one of the leading specialists in site remediation, soil remediation and waste disposal, both in the domestic market and internationally. As an expert in pollution reduction, Bauer Umwelt offers a diverse range of services for all environmental issues. Other companies of the BAUER Resources Group are GWE GmbH, SCHACHTBAU NORDHAUSEN GmbH and SPESA Spezialbau und Sanierung GmbH. More at <https://resources.bauer.de/en>.

### **About Bauer**

The BAUER Group is a leading provider of services, equipment and products dealing with ground and groundwater. The Group can rely on a worldwide network on all continents. The Group's operations are divided into three forward-looking segments with high synergy potential: Geotechnical Solutions, Equipment and Resources. Bauer profits enormously from the collaboration of its three business segments, enabling the Group to position itself as an innovative, highly specialized provider of products and services for demanding projects in specialist foundation engineering and related markets. Bauer therefore offers suitable solutions to the world's greatest challenges, such as urbanization, the growing infrastructure needs, the environment, as well as water. The BAUER Group was founded in 1790 and is based in Schrobenhausen, Bavaria. In 2023, it employed about 12,000 people and achieved total Group revenues of EUR 1.8 billion worldwide. More information can be found at <https://www.bauer.de/en>. Follow us on [Facebook](#), [LinkedIn](#), [Instagram](#) and [YouTube](#)!