

Press Release

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<u>Tomorrow's heat supply: Geothermal energy as a sustainable solution for new housing development in Schrobenhausen</u>

Schrobenhausen, Germany – What is the one of the most important aspects of future-oriented development areas? It's quite clear: heat supply. And the new "Kellerbergbreite" housing development in Schrobenhausen is a prime example of this. Especially when it comes to sustainability. On behalf of the company Bürger-Energie-Genossenschaft Neuburg-Schrobenhausen-Aichach-Eichstätt eG, Bauer Resources collaborated with the local city administration and public utilities to construct a geothermal probe system and cold district heating network over an area of 5.5 ha for a total of 64 residential buildings and a kindergarten – drawing on all the company's expertise in the process. "This flagship project clearly demonstrates our hand in hand, holistic approach to working with geothermal heat. And this is truly our greatest strength," says Marcel Moesslang, Operations Manager at BAUER Resources GmbH.

119 geothermal probes

Starting in March 2023, a total of three drilling teams worked simultaneously on site to install the three geothermal probe fields. Step by step, they drilled one hole after another – some of which reached down to a depth of 60 m. In the next stage, 119 geothermal probes were inserted into the boreholes and grouted with a backfill material that enables efficient exchange of heat with the subsoil. One of the biggest challenges here, according to equipment operator Stefan Baciu, were the tough weather conditions: "Continuous rain made our work considerably more difficult. As an equipment operator, you have to be persistent. After all, the equipment has to be operated manually, that is, via remote control – regardless of the weather. And that's not nearly as comfortable as sitting in an operator's cab." But the work has paid off: in the end, the geothermal probe fields will generate lots of green energy.

50 km pipelines

But before green energy can start to flow, the connection lines for the geothermal probes and cold district heating network have to be installed. In other words: Excavating trenches, constructing a sand bed and laying pipes. The last step in particular was an extremely difficult task for the team on site. "We're talking about 50 km of pipeline here. The laying work alone took more than two months," reports Marcel Moesslang, adding: "With dimensions like that, it's essential to have an experienced team to complete the work smoothly." In addition, two tried-and-trusted digital helpers were used to precisely document the pipe route: a drone and a rover rod. "Using the surveying data we collected, an audit plan was established in which every detail can be consulted and monitored at any time," continues Marcel Moesslang. Once this stage was complete, the pipe trenches were sealed off and the site was flushed and backfilled. More than 30,000 l of glycol mixture were used for this task.



Power Trio

For such a major project, a great deal of experience is necessary. And Bauer Resources has what it takes. "All the same, we know: Expertise alone is not enough. Without the right equipment and high-quality construction materials, it would all come to nothing," emphasizes Marcel Moesslang. It's helpful to have specialists in the "family": the geothermal probes were delivered by the subsidiary GWE. And the powerful drilling rigs for probe drilling? These came from KLEMM Bohrtechnik GmbH, which has been part of the BAUER Maschinen Group for more than a quarter of a century. "This project was an optimal chance for us to present our extensive range of services," concludes the Operations Manager proudly.

A **Video** about the project is available at https://youtu.be/tWoVwl9me0o

Photos:



(1) New "Kellerbergbreite" housing development in Schrobenhausen: Bauer Resources constructed a geothermal probe system and cold district heating network for a total of 64 residential buildings.



(2) 119 geothermal probes in total were installed down to a depth of 60 m.





(3) Roughly 50 km of pipeline were laid over more than two months.

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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 GERMAN WATER and ENERGY GROUP (GWE), SCHACHTBAU NORDHAUSEN GmbH and SPESA Spezialbau und Sanierung GmbH. More at bre.bauer.de

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 2022, it employed about 12,000 people and achieved total Group revenues of EUR 1.7 billion worldwide. More information can be found at www.bauer.de. Follow us on Facebook, LinkedIn and YouTube!