**Eavor Erdwärme Geretsried GmbH**

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Eavor-Loop™ in Geretsried
FAQ

**Why does the Eavor-Loop™ technology have the potential to become the energy supply gamechanger in Germany and worldwide?**

Previous forecasts expected only a relatively small share of deep geothermal energy in the renewable energy mix of the future. But these forecasts did not yet have the Eavor-Loop™ technology on their radar and assumed the requirement of hydrothermal deposits for geothermal to be successful. Eavor does not require thermal water to be present underground; therefore, an Eavor-Loop™ can be created practically anywhere and supply energy exactly where it is needed, for example in residential areas and industrial plants. In Geretsried, we are demonstrating that an Eavor-Loop™ is now a feasible base-load capable supplement to solar and wind - in other words, the missing link for the energy transition. Controllable energy from an Eavor-Loop™ can be available in all regions in a few years. Moreover, an Eavor-Loop™ does not require the construction of transmission lines or storage facilities.

**What is the significance of the Eavor-Loop™ in Geretsried for municipal heating planning in the region?**

As soon as the first loop is operational, the city of Geretsried will be able to draw energy as early as 2024, with full capacity available from 2026. The region will then have a safe, clean, powerful and also base-load-capable renewable energy source in its municipal heating network. This could supply both the nearby industrial park and the entire heating requirements of the residential area. The capacity is also sufficient for the neighboring town of Wolfratshausen, which is considering a connection. In addition, electrical energy can be fed into the grid via the power plant. However, Geretsried and Wolfratshausen have not yet decided on the expansion of their district heating networks. Therefore, after completing the first loop, Eavor will initially only supply electrical energy.

**All attempts with geothermal energy in Geretsried have failed. Why should it be different now?**

Until now, attempts have been made to find deep, hot water that is suitable for energy production. This did not succeed, which is why these hydrothermal projects were discontinued. Eavor is now pursuing a completely different approach that does not require hydrothermal deposits at all. Instead, an underground heat exchanger is drilled into the deep rock. This eliminates the risk of discovery. Eavor has wisely started the project in Geretsried to demonstrate that an Eavor-Loop™ works independently of hydrothermal deposits.

**Why does Eavor work with two drilling rigs?**

In Geretsried, Eavor is drilling an underground heat exchanger that functions like a loop, hence the name 'Eavor-Loop™'. Two vertical boreholes are drilled in parallel to a depth of about 4500 meters. Then, the boreholes turn 90 degrees and split into 12 laterals per borehole. Each of the 12 laterals from the upper borehole will then connect to their respective lateral on the lower borehole, completing the loop at 12 points. Two drilling rigs are used to drill both vertical boreholes and their respective laterals simultaneously to save on construction time, but also to physically complete their connection of the laterals as the drill heads use location sensing technology to identify each other's location in order to make the connection of the laterals.

**How will the Eavor-Loop™ integrate into the landscape after completion?**

After the drilling phase, the drilling towers will be dismantled and all tanks and technical equipment from this process will also be removed. What will remain is an operations building for connection to the district heating network and a small power plant that converts thermal energy into electricity. In terms of its power output, an Eavor-Loop™ requires much less space than other renewable energy sources, such as solar and wind.

**About Eavor:**

*Eavor GmbH is the subsidiary of the technology-based, Canadian energy company Eavor Technologies Inc. Eavor is dedicated to creating a clean, reliable and economical energy supply on a global scale. In the Eavor-Loop™, a working fluid circulates in a closed loop and as it circulates, the working fluid absorbs heat from the surrounding rock and transports it to the surface for energy production. Since the Eavor-Loop™ does not require thermal water, it is free of discovery risk. In Geretsried, Eavor is implementing the first commercial geothermal power plant with an Eavor-Loop™.*

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