

Sustainable energy from below the surface

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Gas, coal, oil - fossil energy has long been out of date.
Geothermal energy is a sustainable alternative. And PORR is an expert in this field.

When Anita Angerer and her team drill into the earth, they find treasure. And they do so at depths of 200 metres. Because there is an almost untapped source of renewable energy there. This treasure is dug up by means of probes. The heat is then stored in the adjacent soil or

extracted via a closed-loop system. In winter, a heat pump raises the relatively low temperature level of the soil to heat the building. And by reversing the process, the geothermal system is capable of cooling in summer. So simple. So sustainable.

Huge demand

There is strong demand for sustainable alternatives to fossil fuels. And it's growing all the time. Climate change alone is reason enough to phase out natural gas, oil and coal. And the conflict in Ukraine, inflation and rising energy prices have now accelerated the energy transition even more. Geothermal energy is one of PORR's many answers to these current challenges. After all, if you drill down 200 metres into the earth and place probes - as is the case with near-surface geothermal energy - then of course that generates emissions. But. And here's the good news, the geothermal systems have a long service life and generate almost no emissions while in operation. About 75% of the total energy provided is sourced from underground and about 25% is electrical energy. Using green electricity makes geothermal heating virtually net zero. In the case of passive cooling, the soil can provide as much as 100%. Making a geothermal system exceptionally sustainable.



(c) PORR

Great potential

At present, geothermal energy is responsible for only 2.5% of heating in Austria. However, a quarter of European population could be heating or cooling with geothermal energy by 2050. The sector is growing by about 40% a year. In 2022, PORR will be installing around 650 probes at more than 50 sites - for example in the Vienna TwentyTwo project or in the

LeopoldQuartier in Vienna. By the end of the year, PORR will already be the largest provider of geothermal systems in Austria. The expansion of this sustainable technology is part of the company's comprehensive Green and Lean strategy. After all, intelligent building not only connects people, it also shapes our future.

PORRtrait of Anita Angerer