

TerraThermo and Eden GeoPower sign MOU to collaborate on 12MW Geothermal Project in Germany

TerraThermo Limited and Eden GeoPower Inc. are pleased to announce that they have signed a Memorandum of Understanding to collaborate on Projekt THERMO.

DUBLIN, IRELAND, December 3, 2024 /EINPresswire.com/ -- [TerraThermo Limited](#) ("TerraThermo") and [Eden GeoPower Inc.](#) ("Eden") are pleased to announce that they have signed a Memorandum of Understanding ("MOU") to collaborate on TerraThermo's 12MW geothermal power project in Lower Saxony, Germany ("Projekt THERMO").



Eden

Eden GeoPower Inc.



TerraThermo

TerraThermo is the developer of Projekt THERMO.

Eden is developing a first-of-its-kind Electrical Reservoir Stimulation technology for use in geothermal developments.

TerraThermo is interested in using Eden's technology in Projekt THERMO and to assist Eden in fast tracking the development and deployment of Eden's technology.

The Parties are expecting that Eden's technology would be implemented in the Projekt THERMO in 2026/2027, when the relevant wells are drilled.

The Parties have agreed to collaborate together, starting with Projekt THERMO but also more widely in Europe.

TerraThermo expects that the 12MW geothermal power plant would be the first of many, with the potential for multiple project in Germany and other European countries.

Overcoming limitations of traditional hydraulic fracturing in Europe with a new technology



We are delighted to be working with Eden GeoPower to bring their technology to Europe. The next generation of natural resource recovery technologies are critical in the energy transition.”

*John Ashbridge, CEO,
TerraThermo Limited*

Many European countries have either banned or have a moratorium on traditional hydraulic fracturing for natural resource extraction. This has effectively limited the ability to economically extract geothermal heat from the subsurface. Eden’s technology has the potential to unlock untapped value for project owners by either improving the productivity of their existing assets or developing new projects without the need for traditional hydraulic fracturing.

TerraThermo and Eden will assess the feasibility of deploying Eden’s “Electrical Reservoir Stimulation”

technology in Projekt THERMO. Upon a successful implementation of Eden’s technology, TerraThermo intends to roll out the technology in other projects across Europe.

Eden’s technology can:

- increase rock permeability in geothermal reservoirs to maximize heat extraction; and
- “create” permeability in suitable geological formations, allowing for many more geothermal projects than would be traditionally possible with conventional multi-borehole geothermal projects.

Eden’s “Electrical Reservoir Stimulation” Technology

Eden has developed a first-of-its-kind Electrical Reservoir Stimulation (ERS) technology to increase the recovery of natural resources and improve the economics of resource recovery with minimal environmental impact. Its patented Electrical Reservoir Stimulation (ERS) Technology uses electricity to enhance permeability, increasing the recovery of new and existing assets. Eden’s technology reduces water consumption, curbs carbon emissions, and mitigates the seismicity risks that come with traditional hydraulic fracturing, making the process fundamentally more sustainable.

Eden’s unique approach is equally well suited to enhancing subsurface permeability across industries, including geothermal.

By using high-voltage electricity and advanced reservoir monitoring techniques, Eden increases rock permeability while controlling the direction of the generated fracture network, targeting specific subsurface areas more precisely. This allows for a step change improvement in reservoir productivity and, as a result, the economic viability of energy transition initiatives that lever geological reservoirs. ERS is an evolution from traditional hydraulic-fracturing methods which are water-intensive and create uncontrollable fractures, or “short-circuits,” that can hinder fluid flow and obstruct re-stimulation, functionally ending a reservoir’s economic viability. Additional

benefits of ERS include a substantial reduction in the number of trucks necessary for fluid and proppant transportation, emissions from wastewater treatment, pumping horsepower requirements, and seismic events. The result is a reduction in CO2 emissions, water consumption, and associated environmental hazards compared to traditional hydraulic-fracturing operations.

Alignment with TerraThermo

TerraThermo's project development pipeline (including Projekt THERMO) are aligned with Eden's objectives of enhancing subsurface permeability in the geothermal industry. TerraThermo will seek to use Eden's technology in its projects, where possible.

John Ashbridge, CEO of TerraThermo, commented:

"We are delighted to be working with Eden GeoPower to bring their technology to Europe. The next generation of natural resource recovery technologies are critical in the energy transition. Europe has a long history of geothermal heat and power generation, but facilities have often been unable to achieve required production rates due to restrictions on traditional hydraulic fracturing, so we expect that Eden's technology will be extremely important for project developers and will be supported by legislators and the public."

Paris Smalls, CEO of Eden, commented:

"We are delighted to partner with TerraThermo to bring our technology to Europe. We believe that our technology is ideally suited to Projekt THERMO and the operating environment in Europe. With our alternative, water-minimal electric based rock stimulation technology, we can increase permeability and avoid the injection of large volumes of water into the reservoir. We believe that our technology can be a game changer for the European renewable energy market, particularly for deep geothermal. Our new engagement with TerraThermo highlights our goals to bring the value of our technology to the European market and assist many countries in achieving their renewable energy goals."

About Eden GeoPower Inc.

Eden is a leader in sustainable natural resource recovery. We break rocks with electricity to maximize subsurface permeability.

We believe that a more sustainable approach to natural resource recovery is critical to creating a carbon-neutral future. By using high-voltage electricity and proprietary modelling and reservoir characterization techniques, we can achieve precise fracture permeability enhancement, while preventing the high-water consumption and environmental risks associated with traditional hydraulic fracturing operations.

With backing from public and private institutions, our next-generation rock permeability enhancement technology is being demonstrated in multiple geologies across the world. We're working with industry leaders in geothermal energy, geologic hydrogen, geologic carbon storage, and mining to redefine how we recover Earth's natural resources.

To learn more about Eden and our “groundbreaking” technology, visit www.edengeopower.com

About TerraThermo Limited

TerraThermo Limited is a geothermal power generation company delivering Energy From Rocks™. TerraThermo is committed to contributing to the energy transition by delivering baseload geothermal power at industrial scale by deploying reservoir-independent geothermal technologies fused with leading energy project implementation and financing expertise.

TerraThermo is led by an experienced Board and senior management team and it will leverage its expertise and experience in capital-intensive oil and gas projects, build synergies with our strategic partners, and deploy the latest developments in reservoir-independent geothermal technologies.

TerraThermo is pleased to have the investment support of [alfa8](#), a next-generation family investment vehicle with entrepreneurial DNA.

Information on alfa8 can be found at <https://alfa8.co/> or on LinkedIn: www.linkedin.com/company/alfaeight/

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