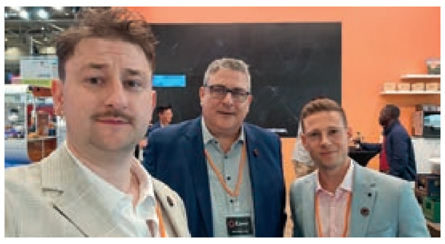
Geothermal is moving to mainstream

By scaling our technology, we will help accelerate the shift to a resilient energy future everywhere.

• Page : 03



Geothermie im Fokus der Politik

Der Bund hat erstmals einen gesetzlichen Rahmen geschaffen, um Planungs- und Genehmigungsprozesse zu vereinfachen.

• Page : 10

Eavor Times

… Start of Power Production in Geretsried … Start of Power Production in Geretsried … Start of Power Production in Geretsried …

The operations team standing beside the turbine in full operation. Photo: Florian Langanke

We Did It

First Power from the World's First Commercial Eavor-Loop™

We have achieved a breakthrough long imagined but never before realised: the world's first commercial Eavor-Loop™ is now delivering power to the public grid. At our site in Geretsried, just south of Munich, electrons are flowing from a geothermal facility that operates independent of naturally occurring hot-water reservoirs. It marks a historic moment for the geothermal sector and firmly positions Eavor as the global leader in scalable, dispatchable clean energy.

Proof of Concept

This milestone proves that the Eavor-Loop™ concept – a closed-loop system combining proven oil-and-gas technologies and functioning almost independently of local geology – works safely, reliably and predictably. By enabling deep geothermal wherever heat and power demand exist, the technology brings a new level of energy democracy: regions previously excluded due to a lack of hydrothermal resources can now access clean, baseload heat and power.

The journey has been remarkably swift. Founded in 2017, Eavor built its first demonstrator, Eavor-Lite™, the following year. That project proved essential capabilities such as drilling multilaterals and safely intersecting deep wells, laying the foundation for our first commercial-scale development.

Germany quickly emerged as the ideal location. A strong regulatory framework, rich subsurface data, an established feed-in tariff and high demand for secure clean energy created the certainty needed for a world-first. The Geretsried job site, where earlier hydrothermal attempts had found neither water nor permeability, offered exactly the tight and dry subsurface that provides the perfect environment to showcase the strengths of closed-loop geothermal.

Inauguration in 2023

Permitting began in 2021, supported by investment from leading global energy companies. In 2023, additional financing followed, including support from the EU Innovation Fund. In August 2023, in the presence of then German Chancellor Olaf Scholz, Federal Minister of Education and Science Bettina Stark-Watzinger, Bavarian Minister-President Markus Söder, Alberta's Minister Rebecca Schulz, and Isabelle Poupart Chargee D'Affairs at the Berlin Embassy, representing the Canadian Federal Government the project was officially inaugurated.

The campaign focussed on key technological milestones: creating multiple laterals from a single well, achieving precise wellbore intersections using Eavor-Link™ AMR, deploying insulated drill pipe in extreme conditions, and sealing laterals with Rock-Pipe™.

Because proving technology took priority over speed, Loop 1 does not serve as a benchmark for future drilling timelines. Yet even during the final laterals the learning curve became clear: drilling times halved, bit run lengths tripled and rates of penetration improved by more than 90 per cent through iterative optimization.

However, first power is only the beginning. Building on what we've learned in Geretsried, Eavor is advancing additional projects in Germany, including Hannover and Neu-Ulm, while expanding its global portfolio.

Innovation remains at the heart of our mission: enabling energy autonomy everywhere.

Leonhard Kerkeling

> "I couldn't be more proud of the people behind this remarkable milestone. Eavor is not just imagining the future of geothermal energy – we're creating it. It's a testament to the Eavor team, who refused to accept limits and believed in what's possible."

Mark Fitzgerald | President and CEO, Eavor Technologies Inc.

SIGNAL TO THE WORLD

"Geretsried is more than a milestone; it's a signal to the world. By delivering power to the grid, we've proven that Eavor's closed-loop technology can transform how clean energy is produced globally. This achievement validates years of planning, innovation, and execution. For me, it's incredibly rewarding to see this vision become reality. Geretsried is proof of concept and a launchpad for global deployment, showing what our technology can deliver. The spotlight is on Eavor, and we're ready to lead the future of clean energy worldwide."

Jeanine Vany
Executive Vice President, Eavor

Inauguration Event in Aug. 2023, f.l.t.r.: Michael Liebreich (Moderator), Hubert Aiwanger (Minister of Economy of Bavaria), Robert Winsloe (Executive Vice President Origination, Eavor), Philippe Dumas (Secretary General EGEC), Isabelle Poupart (Canadian Embassy), Yuta Kano (CHUBU). Photo: Roland Horn

The first point on the learning curve

Interview by Alex Land

Robert, Eavor has made history in Geretsried, Germany. The first of its kind project started providing heat and producing power in December. What did you think at that specific moment?

Robert Winsloe: I had many thoughts at the same time. We have been through so many ups and downs over the last eight years that some people doubted that we would ever get to this point. Others said that it couldn't be done, that it wasn't possible. So, I think one of the emotions we all feel is relief.

Making geothermal energy possible anywhere

And then I thought back to the inauguration event in 2023 when Michael Liebreich asked me what the significance of the first Eavor-Loop™ at Geretsried would be? I replied that "this will put the first point on the learning curve". The learning curve is at the core of our business. Now we have the first point, what comes next? The first loop has been expensive. It's not commercially viable. But with everything we've learned, the second point then becomes a steppingstone towards our ultimate goal of making geothermal energy development possible anywhere.

No important large-scale project succeeds without overcoming a wealth of challenges. Geretsried certainly hasn't been any different in that sense. So, this is also an opportunity to stop and reflect and to recognize all of the people that have contributed to this rollercoaster of a journey. Most of the people are still with the company. Some of them have moved on to other opportunities. But it's not just the people within the company. Our partners, our investors, the European Innovation Fund, the development banks and the local communities in Geretsried and Wolfratshausen have all been critically important, along with the German government who have created a commercial environment which makes it attractive for companies like Eavor to commercialize our technology in Germany.

To come further down the learning curve

With this success we now have a responsibility to take this technology, to improve it, to come further down the learning curve, to deliver on our mission, to change the world, to make it possible to develop geothermal energy anywhere on the planet. We'll do that first in Germany and then in Canada, in the United States, in Poland, in Japan, and in other places around the world.

What exactly is behind the Eavor-Loop™ technology? What makes it unique?

Winsloe: The Eavor-Loop™ is very easy to describe. It's a giant underground radiator built, in Geretsried, at a depth of 4,500 meters. It's like a ground source heat pump for a city of at least 100,000 people. It is very simple to describe, but challenging to construct. What makes it unique is that because we are just looking for heat, with no aquifer required, this technology is massively scalable. There are very few places around the world where this won't work.

What were the key factors that made the pioneering project possible in the end?

Winsloe: Let's go back to Eavor-Lite™ in 2019. From day one, we always had this idea that we are first and foremost a technology company. The technology is scalable and we wanted a business model to match. We'd shown how it works on paper, and we were curious to find out who wanted to license our technology. Of course, people said: "No, no, you have to demonstrate that it works first". So, we said, okay, and we found this location in Canada, just north of Calgary. And between January and December of 2019, we secured the location, designed the well, began the construction, drilled and completed the wells and put the world's first Eavor-Loop™ into production, all within the space of 12 months. That in itself was an incredible achievement. We were able to demonstrate

"It is very simple to describe, but challenging to construct. What makes it unique is that because we are just looking for heat, with no aquifer required, this technology is massively scalable."

Robert Winsloe | Eavor

➔ Interview continues on page 10

Our Milestones

2017
Eavor Technologies Inc. is founded.

2019
Eavor-Lite™ is completed and successfully proves multilateral drilling, borehole sealing, and the thermosiphon effect.

2020
Legal framework established for the first commercial Eavor-Loop™ in Geretsried.

2021
Main operational planning for Geretsried begins; major global investors including Vickers, bp, Chubu Electric, BDC, Temasek, Chevron, BHP, Helmerich & Payne, and Precision Drilling commit capital.

2022
Eavor-Deep™ test in New Mexico proves precise drilling at 18,000 ft (about 5,500 meters) and 250 °C. Geretsried approves the Eavor-Loop™ plant; construction starts with the October groundbreaking.

2023
The Geretsried Eavor-Loop™ receives a €91.6 M EU Innovation Fund grant. OMV invests €34 M to support global deployment.

2024
First loop's vertical drilling is completed; horizontal drilling begins.

2025
Start of power production.

Mark Fitzgerald, Photo: Matheson and Hewitt Photographers in Calgary

Geothermal is moving to mainstream

"We are proud to announce the successful delivery of the world's first electrons generated from closed-loop multilateral wells. With Geretsried now on-stream, we're more confident than ever that our closed-loop geothermal system, designed for adaptability and suited to the world's diverse regions, will secure its place as the leading solution for commercial geothermal applications."

Mark Fitzgerald | President and CEO of Eavor

What does Eavor stand for today?

Mark Fitzgerald: We stand for what can be created when a global need meets a determined and creative team.

Where do you want to take Eavor in the next five years?

Fitzgerald: In the next five years, we aim to solidify Eavor as the global leader in geothermal technology with the leading solution for commercial application. Deploying projects around the world will prove that geothermal can be a cornerstone of clean energy infrastructure. By scaling our technology, we will help accelerate the shift to a resilient energy future everywhere.
Through that, we will be recognized as a company that has had an impact on global advancement in energy security, decarbonization and environmental sustainability.

What role will deep geothermal energy play in the global energy mix of the future?

Fitzgerald: The Eavor-Loop™ is uniquely suited to provide carbon-free energy virtually anywhere, anytime. Deep geothermal will become a critical pillar of the global energy mix, providing clean, firm power that complements intermittent renewables like wind and solar. As nations seek reliable solutions for energy security, geothermal is moving from niche to mainstream. As hyperscalers look to support data centres, Eavor-Loop™ can step in with a small footprint and be built anywhere it's needed.

Where do you see the advantages of closed-loop systems over all other types of geothermal energy?

Fitzgerald: Our closed-loop design is scalable, predictable, and deployable almost anywhere, making geothermal truly global. This flexibility, combined with zero emissions and minimal environmental impact, sets closed-loop apart as the future of geothermal energy.

We asked Dr. Carsten Reinhold, a veteran of the oil and gas industry, why he joined Eavor – a clean tech company – three years ago.

I was working for nearly 25 years for the oil and gas industry around the globe before I joined Eavor three years ago. My first contact with geothermal was when I started to work on brown field oil exploration in the Upper Rhine Graben in SW Germany, one of the birth places of modern oil and gas exploration and of geothermal.

"I was fascinated by the technology and the people's enthusiasm to simply change a little bit the world of energy supply. I had to be part of it!"

Dr. Carsten Reinhold | Eavor

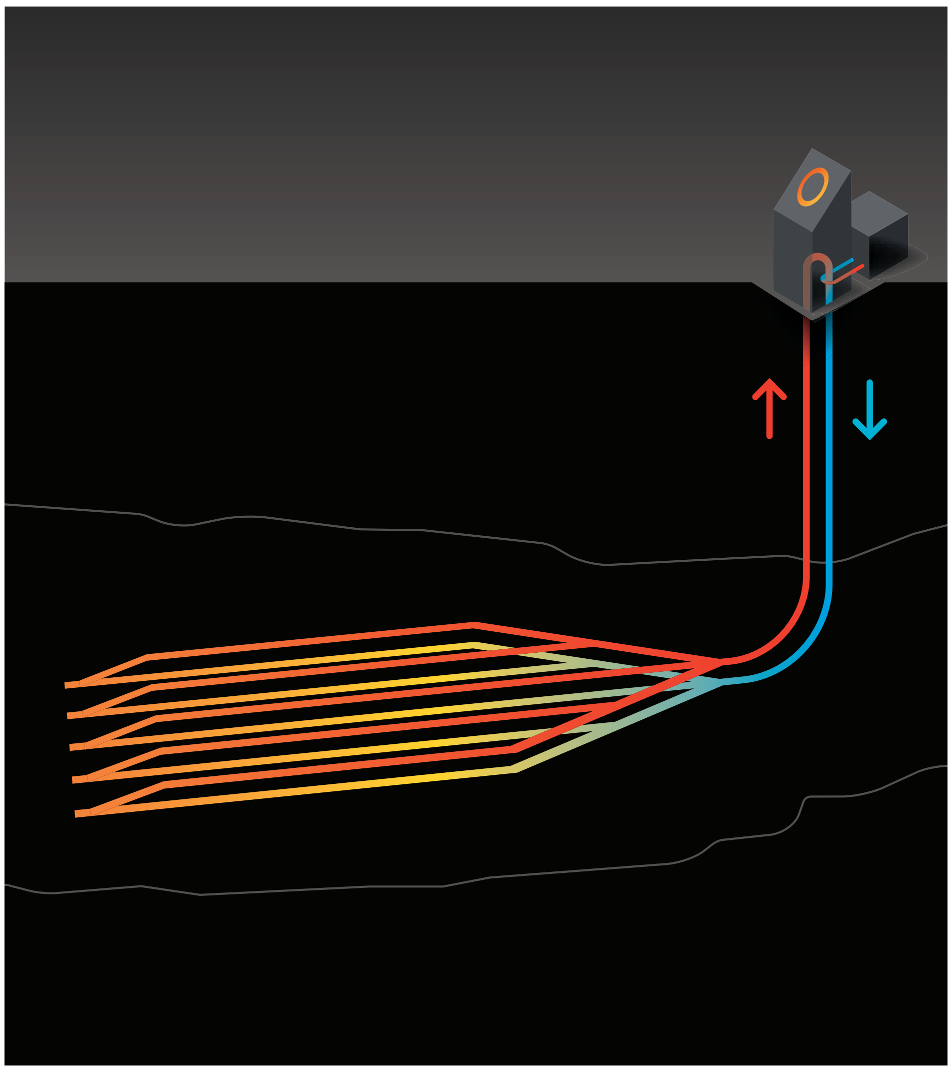
When I was approached by geothermal companies who were interested in our subsurface data I realized that we both are working with the same data to unlock the full potential of the subsurface. My next step towards geothermal was when I evaluated the reasonable re-use of suspended oil wells by transforming them into a coaxial heat probe for geothermal heat production, which is basically a shallow to mid deep closed-loop system.

This was when I discovered Eavor which was as well active in the Upper Rhine Graben and their closed-loop deep geothermal system. I was fascinated by the technology and the people's enthusiasm to simply change a little bit the world's energy supply. I had to be part of it!

I don't know how long the energy transition will last from traditional oil and gas to renewable energy production, but for me it is clear, the future will be green and Eavor as a front-running, innovative geothermal company is providing the solution for scalable, base-load heat and power generation everywhere and I am proud to be part of it!

Dr. Carsten Reinhold, Head of Geoscience & Feasibility at Eavor GmbH, Photo: Marcus Gernsbeck

We are also working on new technology



The graphic shows the simplified technical system of an Eavor-Loop™. Source: Eavor

What is so special about an Eavor-Loop™?

Matt Toews: Eavor-Loop™ can enable "geothermal anywhere" because it doesn't need a reservoir, hat ts essentially no on-going water use, no fracking or induced seismicity, can be placed near cities or critical infrastructure.

You are responsible for technical development. Where are we currently?

Toews: All of the technical elements of an Eavor-Loop™ are working with the first loop: Rock-Pipe™, Insulated Drill Pipe, Ranging while drilling (Eavor-Link™), side-tracking, thermosiphon, heat production, and conversion to power.

We faced a lot of challenges with the first loop, but the good news is that we've solved them. We will apply those solutions and lessons learned to future projects. The outlook for Loop 2 and beyond for other projects in Europe and globally is very positive and we are poised to scale alongside our partners.

Achieving first power at Geretsried is a huge milestone, and the culmination of a lot of work over many years. But it is still just a first step in our broader plan to achieve geothermal heat or power anywhere – we have a long way to go and are excited about the future.

What are you focusing on in the further development of the technology?

Toews: Our focus is on 2 areas: 1) continuing to drive down the cost curve with Loop 2 at Geretsried by being more efficient in each area of our operations and 2) placing Eavor-Loops deeper and hotter.

Loop 2 at Geretsried will be placed slightly deeper than Loop 1 and we plan to drill longer laterals as well – this is another concrete step in our overall plan to go deeper/hotter and drive down the cost of energy.

We are also working on new technology that can enable Eavor-Loops at extreme depth, below 10 km TVD and as deep as 15 km TVD. This will enable clean, secure, baseload, and low-cost power nearly anywhere in the world.

"I was confident it would work, so when I saw we reached first power at Geretsried I felt calm and just extremely proud of the team and all the effort it took to get here. Many vocal critics said it was impossible, that we'd never make it happen. We faced significant challenges along the way; it was a rollercoaster with plenty of ups and downs. But in the end, we overcame the obstacles and proved it could be done."

Matt Toews | CTO of Eavor Technologies Inc., Photo: Tracy Larsson

Project Timeline Geretsried

October 2022
Groundbreaking ceremony at the construction site.

January 2023
Construction of the rig cellar at drilling site A.

Excavation for drilling site 2 has begun.

February 2023
Visit by Bavaria's Minister of the Environment Thorsten Glauber.

March 2023
European Commission announces funding for the Eavor-Loop™ in Geretsried.

May 2023
Foundation with four rig cellars on drilling site B completed.

June 2023
Completion of the drilling site.

July 2023
Local parish priest blesses the drill bit at Gut Breitenbach.

August 2023
Chancellor Scholz, Premier Söder, and federal representatives briefed on the project.

November 2023
Open house at the Visitor Center informs residents and the interested public about the Eavor-Loop™ on site.

Marco Becker and Chris Cheng, Managing Directors of Eavor GmbH, Photo: Alex Land

The Tip Of The Spear

Eavor GmbH is the German subsidiary of Canada-based Eavor Technologies Inc., with its headquarters located in Düsseldorf, North Rhine-Westphalia. From here, the company oversees the operational project development of geothermal heat and power generation projects across Germany and Europe. In addition, the German office serves as the hub for Eavor's business development activities in the Middle East. Founded in 2019, the subsidiary has grown into a team of around 50 specialists. The company is led by its managing directors, Marco Becker and Chris Cheng.

Developing a climate-neutral and economically viable energy supply for the country and the region is a huge challenge. Renewable energy from the Eavor-Loop™ offers Geretsried a reliable, clean and secure energy supply for the future. In Geretsried, Eavor is building the worldwide first commercial Eavor-Loop™ for heat and power. The first loop is drilled, and the ORC-platform started producing power in December 2025.

"40by40 is Eavor's aspirational vision to have 40 Gigawatts of heat and power capacity installed in Germany by 2040."

Chris Cheng | Eavor

Hanover represents Eavor's first heat only project and first collaboration with a heat utility. It will also be our first Eavor-Loop™ built in an urban setting.

Neu-Ulm represents Eavor's most advanced 2.0 project and is also the first project where the company is not developing the project and acting purely as a consultant. It proves our consulting business model, and in 2025, we executed a seismic campaign on behalf of the client.

The company's vision for the German market is called 40by40. Chris Cheng: "40by40 is Eavor's aspirational vision to have 40 Gigawatts of heat and power capacity installed in Germany by 2040. Approximately half of this is heat and half is electricity."

What comes next? Marco Becker: "It is extremely important as potential investors in the company are very interested in the 'what's next?'. It also needs to be developed and grown so that Eavor can demonstrate its ability to come down the learning curve, both by advancing its technology and through operational excellence."

Germany is currently the most important market, but other regions are also becoming increasingly interesting. Eavor GmbH staff help maintain Eavor's presence in the Netherlands, and supports the company's work in Poland, Romania, Hungary and Italy.

Alex Land

March 2024
ILN (Isar Loisach Naturwärme) and Eavor Erdwärme Geretsried signed the heat supply contract at Geretsried town hall after approval by the municipal utilities board and the town council.

April 2024
Heavy-duty transport over 35 meters long delivers a special tank to the Geretsried drilling site.

May 2024
European Investment Bank (EIB) approves loan of up to €45 million for the Eavor-Loop™ project.

September 2024
Eavor Partner Summit: Technology presented to 130 international guests.

November 2024
Around 80 EGEC Congress participants visit the Geretsried site.

March 2025
Sponsorship of Rainer-Maria-Rilke Gymnasium: Students build an Eavor-Loop™ model.

September 2025
Local Volunteer Fire Department inspected the fire-water extraction point in the so-called Five Tank Area at the drilling site.

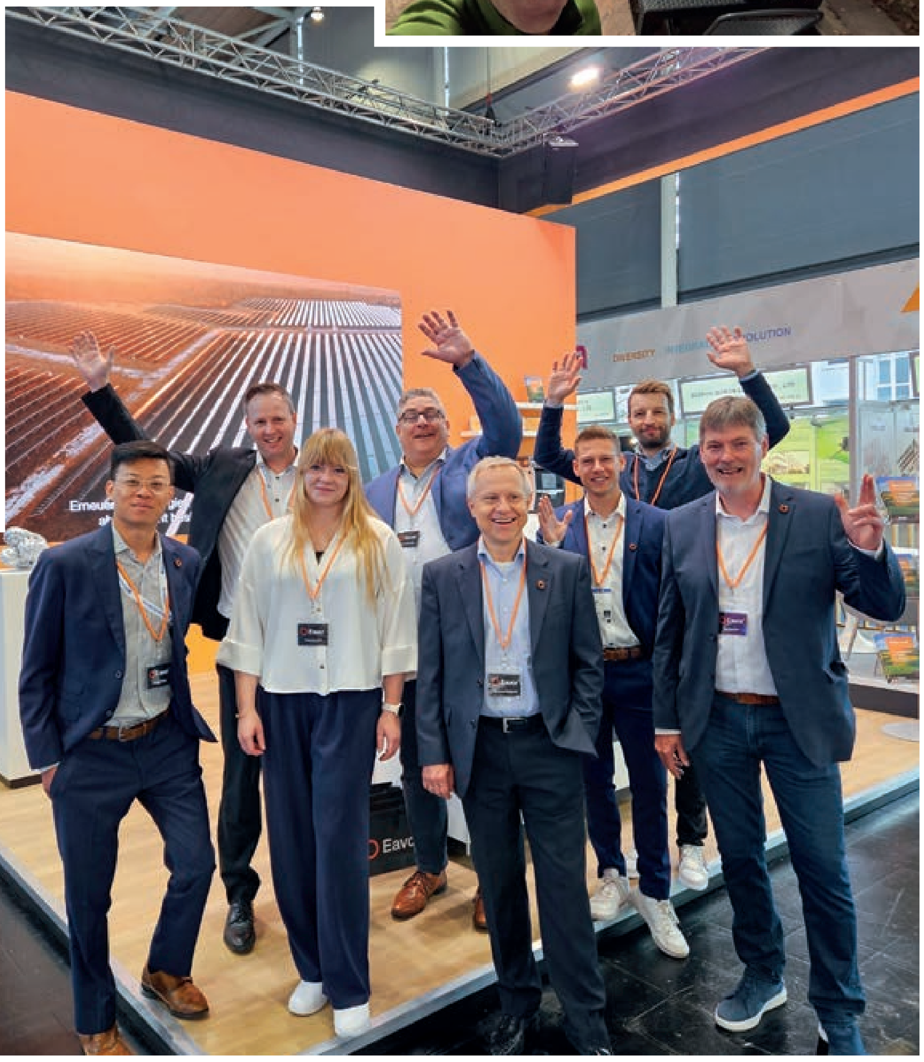
December 2025
The world's first commercial Eavor-Loop™ begins producing electricity.

"Geretsried's success shows the project is a strong model for wider European and global rollout, providing stable, local, carbon-free energy with very low land and water use."

Fabricio Cesário | Managing Director of Eavor Erdwärme Geretsried GmbH & Co. KG

Eavor is writing the next chapter of

the energy transition in Geretsried



Implementing lessons learned from the first loop: personnel involved designing the second loop in Geretsried. Photo: Dave Tayler

Reflections from the drilling campaign

Pioneering Work in Geretsried: What Comes After the First Eavor-Loop™

With the completion of Loop 1, Eavor has reached a decisive milestone in Geretsried – and gained a wealth of insights that will feed directly into the construction of the next loops. While the first focused on achieving technical milestones rather than speed, the following loops are expected to be drilled significantly faster and more efficiently. As a result, the team anticipates substantial time and cost savings.

However, for Drilling Superintendent Trent Fraser, the campaign was far more than a technical endeavour. “In over 30 years of my career, this is one of the absolute highlights,” he says. The project constantly tested patience, creativity, and resilience. Logistical hurdles, unexpected downhole issues and the ambition to create something entirely new pushed the team to think differently – and brought them closer together.

> “A concept that was only being a dream in the past! To push past the normal drilling ideology, trouble shoot and overcome problems that are far from the ordinary.”

Trent Faser | DSI

Technically, the project delivered impressive gains. Drilling time per lateral was cut by 50 per cent, and bit run lengths tripled. The rate of penetration improved by more than 90 per cent over the course of the campaign.

Challenges nevertheless arose. For instance, liner cementation proved to be insufficient and with both wells in hydraulic communication, efficiency was greatly reduced as many operations needed to be conducted sequentially rather than simultaneously. Wellbore instability which complicated lateral drilling operations was subsequently mitigated through use of an engineered water-based mud system. “What truly set this campaign apart were the unprecedented technology ‘firsts’ - the deepest well intersection in history, the first well intersection using Eavor-Link™ AMR, the first use of Rock-Pipe™ to seal a lateral wellbore,” Steve Nowe, Vice president Drilling at Eavor reflects.

> “What makes me most proud is how the team came together to overcome numerous challenges to deliver exceptional results with safety as its core value.”

Steve Nowe | VP Drilling

> “What set this drilling campaign apart was the team’s perseverance – whatever the challenge, they worked tirelessly with a failure-is-not-an-option mindset.”

Drake Ottacher | WSDE

Overall new and enhanced technologies were key to the project’s success. These include multilateral sidetracking, which create the vast subsurface contact area required for heat transfer in an Eavor-Loop™. Insulated drill pipe, enabling bottomhole circulating temperatures to be reduced sufficiently for downhole directional drilling tools to be used reliably; our Active Magnetic Ranging system Eavor-Link™ that reduced the time needed for wellbore intersections by more than 80 per cent by eliminating the need for wireline ranging operations; and Rock-Pipe™ sealant, that eliminated the need for costly casing in the heat-transfer section while ensuring a reliable seal against the surrounding rock.
Armed with these insights, Eavor now moves on to the next loops – faster, more efficient, and technically more refined.

Leonhard Kerkeling

Drilling personnel at Pad A, Geretsried. Photo: Ekkehard Winkler

Eavor is a Canadian geothermal technology company based in Calgary, Alberta, Canada. Its most important market at present is Germany and Europe. Eavor GmbH, based in Düsseldorf, is responsible for project development in this market. At Eavor, we all work toward the same goal: offering Eavor-Loops to provide baseload, dispatchable, highly scalable clean geothermal energy as part of the energy supply in as many areas around the world as possible. Photo above: Team Calgary Photo below: Team Düsseldorf

Geothermie rückt in den Fokus der Politik

von Paul Wiehager

Neue Initiativen stärken die Branche

In den vergangenen Monaten hat die Geothermie enorm an politischer Bedeutung gewonnen. Mit dem Geothermiebeschleunigungsgesetz (GeoBG) hat der Bund erstmals einen klaren Rahmen geschaffen, um Planungs- und Genehmigungsprozesse zu vereinfachen und Projekte schneller in die Umsetzung zu bringen. Darüber hinaus haben Bundesländer wie Bayern und NRW bereits eigene Masterpläne entwickelt, um das Potenzial der Geothermie strategisch auszubauen und langfristige Ausbauziele zu definieren.

Auch auf europäischer Ebene bewegt sich viel: Die EU arbeitet derzeit am sogenannten „Geothermal Action Plan", der der Technologie auch im europäischen Kontext den Weg aus der Nische ebnen soll. Für Eavor eröffnen diese Entwicklungen wichtige Chancen: bessere Rahmenbedingungen, mehr Sichtbarkeit und ein stark wachsendes politisches Interesse an sicherer, grundlastfähiger, lokaler Energie.

Die zweite Säule

Der andere Teil der Abteilung „Kommunikation und Energiepolitik" ist nicht weniger wichtig – im Gegenteil! Durch Projektkommunikation, strategische Onlinekommunikation und Pressearbeit gestalten wir kontinuierlich die öffentliche Wahrnehmung von Eavor. Dabei positionieren wir das Unternehmen als innovatives Greentech-Unternehmen und Gamechanger der Wärmewende. Die mediale Sichtbarkeit ist mindestens genauso entscheidend wie der gezielte Austausch mit Politik und Verwaltung. Sie bildet den zentralen Hebel für lokale Akzeptanz, stärkt die Unternehmensreputation und sorgt für Aufmerksamkeit und Vertrauen am Markt.

Energiepolitische Arbeit

Wie wir Politik aktiv mitgestalten

Es führt möglicherweise bei dem ein oder anderen zu Verwunderung, dass Lobbyarbeit die meiste Zeit nicht in Abgeordnetenbüros oder Plenarsälen stattfindet. Das Fundament unserer energiepolitischen Arbeit spielt sich in Form von Grundlagenarbeit und Strategieentwicklung am Schreibtisch ab. Täglich verfolgen wir das politische Geschehen von der lokalen über die Landes- und Bundes- bis hin zur europäischen Ebene. Durch kontinuierliches Monitoring und die Analyse politischer Entwicklungen können wir Debatten frühzeitig aufgreifen, Stellungnahmen erarbeiten und gezielt auf neue Impulse reagieren.

Hier gewinnen wir Informationen, entwickeln gemeinsame Strategien und können letztlich indirekt Einfluss auf politische Prozesse nehmen. Die Verbandsmitgliedschaften ermöglichen es uns, Allianzen zu formen und so der Geothermie eine lautere Stimme im politischen Diskurs zu verschaffen. Der kleinere, aber ebenso entscheidende Teil unserer Arbeit findet im direkten Austausch mit politischen Entscheidern und Fachabteilungen der Ministerien statt. Hier sind wir sehr aktiv, um bei Gesetzgebungsprozessen, der Ausgestaltung von Förderprogrammen und bei der Entwicklung energiepolitischer Strategien unsere Perspektive einzubringen. Dieser direkte Dialog ist unverzichtbar, um unsere Technologie verständlich zu erklären und so politische Unterstützung zu erlangen.

„Erfolgreiche Energiepolitik ist entscheidend für den Business Case von Energieunternehmen."

Alex Land | Eavor

Eavor setzt auf Austausch

Egal ob auf Fachkongressen, Messen oder politischen Dialogformaten: Wir machen unser Unternehmen und unsere Technologie greifbar. Wir gehen keiner Diskussion aus dem Weg und fördern jede Art des konstruktiven Austauschs. So sichern wir Sichtbarkeit, Akzeptanz und positionieren uns als verlässlicher Partner der Energie- und Geothermiebranche.

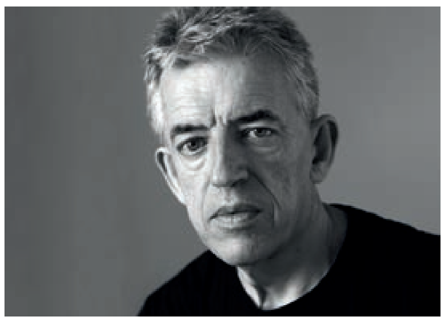
Das Politikteam v.l.n.r.: Leonhard Kerkeling, Alex Land, Paul Wiehager, Foto: Selfie

→ Interview continued from page 2

our ability to connect two eight-and-a-half-inch diameter holes at a depth of 2,500 meters, and that the Rock-Pipe™ technology works. So, we said: "Great, we've proven it, it works. Now who wants to license the technology?" And people said: "No, no, no. Now you have to build it at commercial scale." Then began another journey, a search for a new larger, full-scale project.

Why did we choose Geretsried? A major factor was a company called Enex. They had drilled two dry geothermal wells. They were looking for an extension of the aquifer that exists under Munich. And unfortunately for them, but fortunately for us, they found the heat but not enough permeability. And that became a wonderful opportunity for us.

What is the significance of the Geretsried project for other projects in Europe and around the world?



Robert Winsloe. Photo: thegallerysw3.com

Winsloe: One of the reasons why the EU Innovation Fund awarded us the grant was because they didn't see this as just a one-off project. They saw it as a technology that was ready for demonstration at commercial scale. And they felt that this grant would provide a platform for taking this technology and scaling it massively across Europe, with a big focus on decarbonization of the district heating market. So, even though we're celebrating first power today, we're also celebrating our ability to decarbonize district heating. The path to geothermal power anywhere on the planet is paved with district heating projects. These district heating projects help to decarbonize a massive sector in Europe, but they also take us closer to the point where geothermal power development becomes possible. The significance of this one small step is massive, both in the context of the decarbonization of district heating in Europe and as a steppingstone towards power generation on a global basis.

"The significance of this one small step is massive, both in the context of the decarbonization of district heating in Europe and as a steppingstone towards power generation on a global basis."

Robert Winsloe | Eavor

Coming back to our objective to be a technology licensing company, this milestone gives other companies confidence that the technology is real, that the learning curve is real. People and companies are beginning to say: "Yes, we now believe. We believe that this technology is real. We believe in the learning curve. We are prepared to invest our own money in developing Eavor-Loop™ projects." We've started to see this with other companies in different places around the world including in Germany.

The other significant factor is that this first power milestone gives investors confidence that the path to changing the world is a lot clearer.

Robert, Thank you very much for this brief journey through time.

Visualisierung des Projektstandortes, Rendering: Luckypage

Projekt Hannover

Nachhaltige Fernwärme für die Landeshauptstadt

Gemeinsam mit der enercity AG, dem regionalen Energieanbieter, plant Eavor die Umsetzung eines Eavor-Loop™-Systems in der 1.0-Konfiguration mit zwei Loops und einer Gesamtleistung von rund 30 MWth. Damit können künftig bis zu 20.000 Haushalte mit klimafreundlicher Wärme versorgt werden – das entspricht etwa 15 bis 20 % des gesamten Fernwärmebedarfs Hannovers. Parallel investiert enercity in den Ausbau des Fernwärmenetzes, um die Nutzung der geothermischen Wärme optimal zu integrieren. Der Standort befindet sich im Stadtteil Lahe an der Kirchhorster Straße, Ecke Alte Peiner Heerstraße.

Wichtige Meilensteine wurden bereits erreicht: Ein langfristiger Wärmeliefervertrag mit einer Laufzeit von 30 Jahren ist abgeschlossen, die 2D-Seismikkampagne verlief erfolgreich und bestätigte eine stabile geologische Struktur ohne Überraschungen. Auch das Basic Engineering sowie das UVP-Vorprüfverfahren wurden abgeschlossen – eine Umweltverträglichkeitsprüfung ist nicht erforderlich. Zudem wurde die Projektfläche durch einen Erbbaurechtsvertrag mit der Landeshauptstadt Hannover gesichert.

Derzeit läuft die Due Diligence des Projekts sowie die Detaillierung der technischen Planung.

Leonhard Kerkeling

GEOLOGIE

- Zielformation: Unterer Muschelkalk (Trias) in ca. 3200 m Tiefe
- Gestein: dichter Kalkstein mit geringer Porosität und Permeabilität
- Erwartete Temperatur: ca. 150 °C
- Gesamtmächtigkeit: etwa 100 m – Geosteering erforderlich, um den Reservoirhorizont präzise zu treffen
- 2D-Seismik (2025) bestätigt Tiefe und Ausdehnung des Zielhorizonts

„In Hannover zeigen wir erstmals, wie wir nachhaltige Wärme direkt in die Stadt bringen – ein Modell für viele weitere Projekte."

Niklas Pfeffer | Project Development Engineer

„Bisher war der Untere Muschelkalk nur ein Komparse, in Hannover ist er der Hauptdarsteller."

Matthias Ziller | Senior Geologist

Projekt Neu-Ulm

Klimaneutrale Wärme für die Region

Die Stadtwerke Ulm/Neu-Ulm (SWU) prüfen zusammen mit Eavor während einer Aufsuchungs- und Erkundungsphase, ob die Eavor-Technologie in der 2.0 Konfiguration als Baustein für die Wärmewende in der Region dienen kann. Damit würde erstmals ein Eavor-Loop™ im kristallinen Grundgebirge realisiert werden und damit ein bedeutender Meilenstein für das Unternehmen und die Weiterentwicklung der Geothermie in Deutschland gelingen. Das Projekt soll künftig rund 13.500 Haushalte im Fernwärmenetz Neu-Ulm/Senden zuverlässig mit klimafreundlicher Wärme versorgen.

Die im ersten Quartal 2025 erfolgreich abgeschlossene 2D-Seismikkampagne umfasste vier Linien mit einer Gesamtlänge von 53,2 Kilometern. Die Datenverarbeitung und Interpretation wurden bis Ende August abgeschlossen, ebenso das Oberflächenengineering. Derzeit arbeitet das Team an der 3D-Modellierung und den technischen Spezifikationen der Bohrungen, während parallel die passende Bohrtechnik entwickelt wird. Ein weiterer Schritt auf dem Weg zu einem der innovativsten Geothermieprojekte Europas.

Paul Wiehager

GEOLOGIE

- Zielformation: granitisches Grundgebirge unter ca. 1000 m Sedimentgestein
- Gestein: dichter Granit oder Gneis, geringe Durchlässigkeit, hohe Festigkeit
- Loop-Tiefe: ca. 4000–7000 m, vertikal mit max. 20° Neigung
- Erwartete Temperatur: 214–258 °C in maximaler Tiefe
- 2D-Seismik bestätigt Tiefenlage und stabile geologische Struktur

Potenzielle Projektlokation, Foto: SWU Stadtwerke Ulm/Neu-Ulm GmbH

„Wir entwickeln gemeinsam mit SWU ein Leuchtturmprojekt mit Signalwirkung für viele Stadtwerke."

Oliver Heymann | Project Development Engineer

„Drei Jahre Daten-Erhebungen und Modellierungen – das Ergebnis: Der Untergrund ist bestens geeignet."

Heike Falk | Senior Development Geoscientist

Congratulations and comments on the start of power production at the Eavor drilling site in Geretsried

"Eavor's achievement at Geretsried represents a landmark moment for Canadian clean technology innovation and leadership. Canada Growth Fund (CGF) is proud to support a Canadian champion as it advances toward broader commercial deployment, reflecting our mandate to support Canadian technologies through first commercialization and strengthen Canadian competitiveness, including participation in the emerging energy sector."

Yannick Beaudoin | President and Chief Executive Officer, Canada Growth Fund Investment Management Inc. (CGFIM)

"In Geretsried, we see more than a technological first. This is a European success story in action. The first commercial Eavor-Loop™ plant shows that geothermal energy can be scaled up to deliver affordable, clean and reliable heat and power to households and businesses – day and night, in every season. It cuts emissions and strengthens energy security. Eavor's milestone proves what Europe can achieve when innovators, the European Investment Bank and partners join forces.

With support from our InvestEU-guaranteed loan of nearly €45 million, the EU Innovation Fund grant and leading European and global banks, this pioneering project turns cutting-edge geothermal technology into reality. It accelerates the clean energy innovation Europe needs to stay competitive and reach climate neutrality."

Nicola Beer | European Investment Bank Vice President

"We are delighted that partial commercial operation has finally commenced at Geretsried. While this may appear to be a modest step for geothermal development, it represents a significant milestone for the energy industry and our planet as well. This achievement demonstrates the potential of next-generation closed-loop geothermal technology to transform the global energy landscape. CHUBU is committed to supporting the continued growth of this project and the further advancement of the Eavor-Loop™ technology.
Together with our project partners – Eavor and OMV – we look forward to deepening collaboration and driving innovation as we move forward on this transformative journey toward a decarbonized future."

Hiroki Sato | Division CEO of Global Business of CHUBU

"OMV congratulates Eavor on the world's first commercial Eavor-Loop™ facility, proving closed-loop technology and opening new opportunities for sustainable energy supply. As Eavor's project partner, OMV contributed substantial operational know-how, with our subsurface, drilling, and project execution experts working closely with Eavor over the past year to enhance the performance envelope and ensure the successful delivery of Loop 1. The insights gained from this next generation of geothermal solutions strengthen OMV's extensive expertise in geothermal energy.

For us, this is a vital part of the energy mix – harnessing Earth's heat to deliver clean energy, cut emissions, and support cities in achieving their climate targets. With our Strategy 2030 OMV is committed to re-inventing the future of energy."

Berislav Gaso | OMV Executive Vice President Energy

„Eine wunderbare Nachricht, herzlichen Glückwunsch an alle Beteiligten zu diesem großartigen Meilenstein! Wir kommen Schritt für Schritt weiter auf unserem gemeinsamen Weg Richtung Klimaneutralität. Für uns als Stadt bringt das Projekt eine ganz konkrete Perspektive für eine nachhaltige Versorgung mit grüner Wärme. Wir sind sehr gespannt auf die weitere Entwicklung und die nächsten Schritte."

Michael Müller | Erster Bürgermeister von Geretsried

„Ich gratuliere Eavor herzlich zur erfolgreichen Inbetriebnahme des neuen Stromkraftwerks. Damit kommen wir einem eigenen Fernwärmenetz für Geretsried wieder einen großen Schritt näher. Unsere eigenen Planungen sind bereits weit fortgeschritten. Der Baubeginn ist – abhängig von der Inbetriebnahme des zweiten Eavor-Loops – für 2027/2028 vorgesehen. Aktuell arbeiten wir an der Klärung aller zentralen Voraussetzungen. Das Ziel ist dabei klar: eine wirtschaftliche, zuverlässige, klimafreundliche Wärmeversorgung für unsere Stadt."

Jan Dühring | Geschäftsführer Isar Loisach Naturwärme

Finanziert von der Europäischen Union
Emissionshandelssystem
Innovationsfonds

RECYCLED Paper made from recycled material FSC® C006990 www.fsc.org

Print product with financial climate contribution
ClimatePartner.com/19527-2408-1003

IMPRINT

Published by
Eavor GmbH
Peter-Müller-Straße 14
40468 Düsseldorf
Germany

Responsible under German press law:
Alex Land
Editors: Leonhard Kerkeling, Alex Land, Tracy Larsson, Ute Sauer, Paul Wiehager
Contact: info@eavor.de

eavor.com

IMPRESSUM

Herausgegeben von der
Eavor GmbH
Peter-Müller-Straße 14
40468 Düsseldorf
Deutschland

V.i.S.d.P.: Alex Land
Redaktion: Leonhard Kerkeling, Alex Land, Tracy Larsson, Ute Sauer, Paul Wiehager
Kontakt: info@eavor.de

eavor.de