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# Eavor Introduction and Case Study for Generating Innovation with Japan (GIJ) Net Zero 2023

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JETRO Canada

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# Eavor Overview

Founded in 2017, Eavor is based on a simple bet:

1. *Geothermal needs to be scalable*
2. *Only closed-loop is truly scalable*

Eavor went "all in" on this bet 6 years ago:

- It's hard; requires multiple innovations
- $135M+ private equity capital raised
- Eavor-Lite™ Running since 2019
- Eavor-Deep™ Completed 2022
- Eavor-Europe™ (Geretsried) Earthworks began Oct 2022
- Partners: bp, Chubu, VVP, Temasek, Chevron, BHP, BDC, Deep Energy Capital, Precision Drilling, H&P Drilling

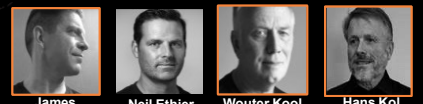
## *World Class Team*

Founders & Leadership


Board of Directors


Advisors


Area Representatives & Business Development




Germany


Subject Matter Experts


The solution is now ready for commercialization

| 2017 - 2019 | 2020 - 2022 | Next 18 Months | H2 2024 – 2025 | 2026 → |
|---|---|---|---|---|
| Concept, Founding Team & Initial IP<br>Market Development & Project Portfolio Build<br>Equity Tranches 1 & 2 - Eavor-Lite™ | IP & Technology Development<br>Portfolio Maturation, Series A Capital<br>Eavor-Deep™, Launch Eavor-Euro™ | Completion of 1st Commercial Project<br>Ongoing IP & Technology Development<br>Initiate EPC/Development Co. Buildout | Deployment of Commercial Projects<br>Market & Partnership Expansion<br>Portfolio "Transfer" & Tech Sales | |



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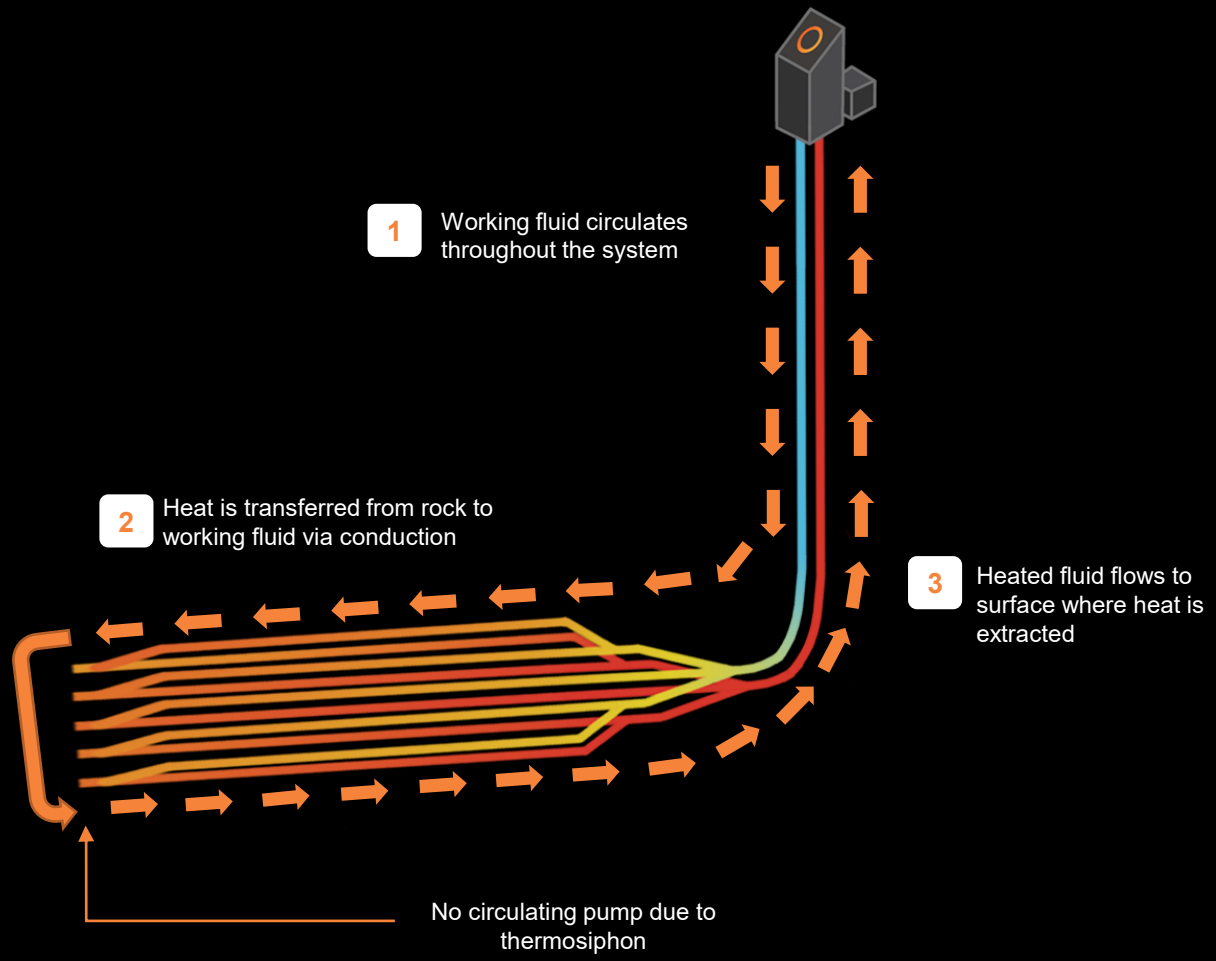
# Introduction to Eavor-Loop™

## Eavor-Loop™ is the world's first multilateral closed-loop geothermal system

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## What is Eavor-Loop™

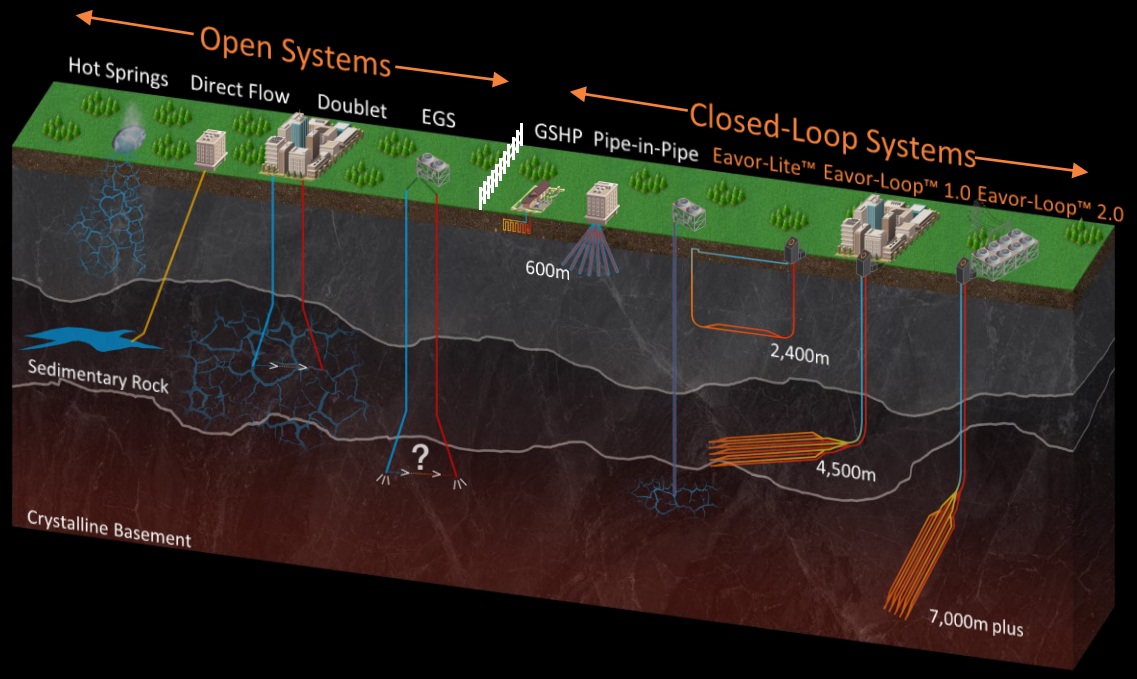
- Eavor-Loop™ is an extremely deep, industrial-scale geo-exchange system
- Provides highly predictable and reliable power
- System can be tailored to the required output

## Behind the Technology

- Multilateral wells are drilled several kilometres deep
- Each loop consists of up to twelve parallel laterals (passes)
- Our closed loop creates a thermosiphon that eliminates parasitic pumping load; parasitic loads of up to 50% typically block low temperature geothermal projects, limiting the scalability of these projects

# Offers Unique Advantages Few Clean Energy Solutions Can

## Eavor-Loop™ is the only truly scalable form of geothermal energy technology




### Massive Benefits

- Can be sited virtually anywhere on the planet – no requirement for permeable aquifer or fracking
- Can be customized for the size of heat or electricity output required
- Can be sited at the demand point or implemented via repowering of existing interconnected generation facility (e.g., coal)
- Capable of lossless load-following and eliminates the need for a circulating pump

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| | Traditional Geothermal | Enhanced Geothermal | Eavor-Loop™ |
|---|---|---|---|
| Produces firm power | ✓ | ✓ | ✓ |
| Produces direct-heat, power, & cooling | ✓ | ✓ | ✓ |
| Low surface footprint | ✓ | ✓ | ✓ |
| Clean energy source | ✓ | ✓ | ✓ |
| Low materials intensity | ✓ | ✓ | ✓ |
| No permeable aquifer required | ✗ | ✓ | ✓ |
| No circulating pump | ✗ | ✗ | ✓ |
| No fracking | ✓ | ✗ | ✓ |
| No induced seismicity | ✓ | ✗ | ✓ |
| Negligible continuous water use | ✗ | ✗ | ✓ |
| Highly predictable | ✗ | ✗ | ✓ |
| Capable of lossless load-following | ✗ | ✗ | ✓ |

# Offers Unique Advantages Few Clean Energy Solutions Can (Cont'd)

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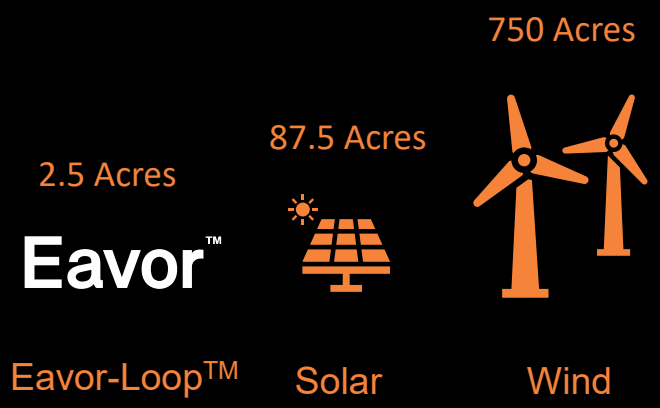
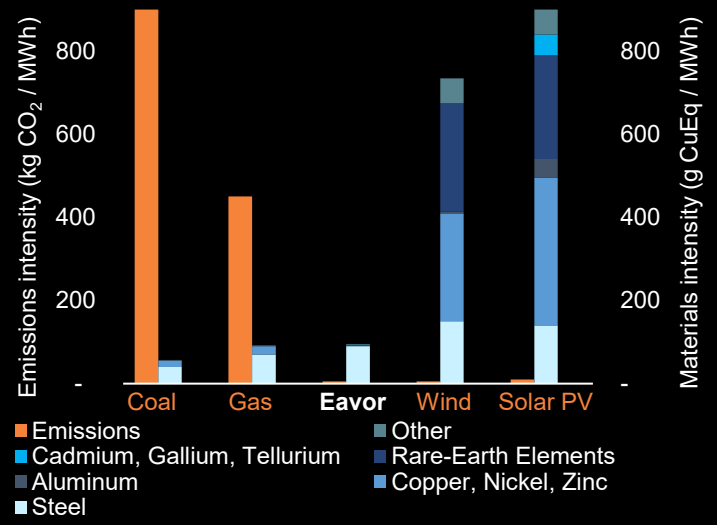
Eavor-Loop™ holds significant competitive advantages in energy density, environmental impact and predictability

## Energy Density(1)



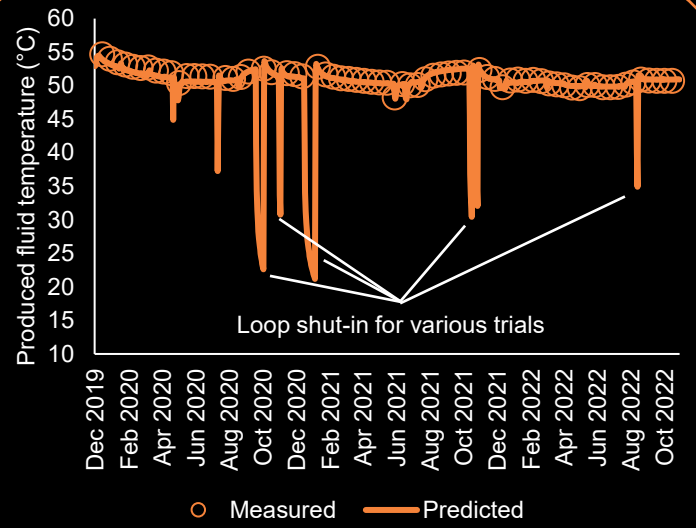

Eavor-Loop™ is expected to generate 35x more power than solar and 300x more than wind using the same land footprint

## Environmental Impact




Only Eavor-Loop™ delivers low emissions and materials intensity for power generation, enabling true energy independence

## Predictability

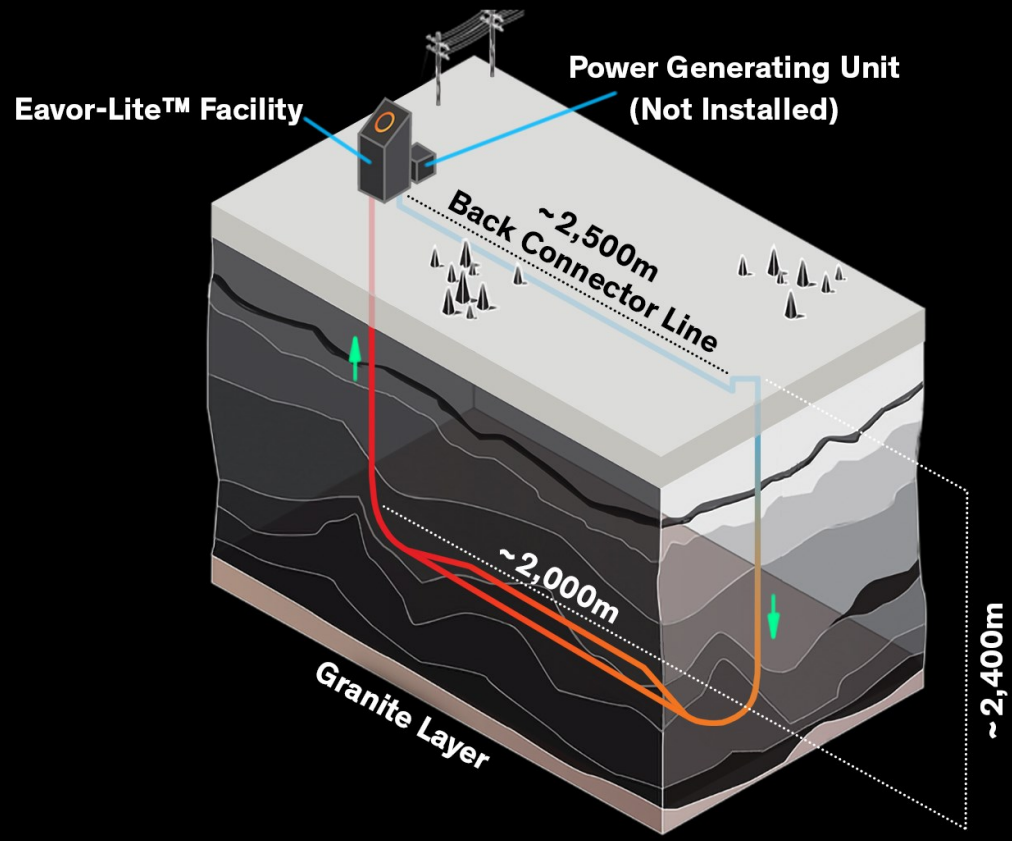



Eavor's conduction-dominated process is highly predictable, with less than 0.5% error between calibrated model prediction and field measurements, as proven at Eavor-Lite™

(1) Illustrative of 3MW of capacity

# Case Study: Eavor-Lite™ – Overview


| Technical Objectives | |
|---|---|
| 1. Drill and intersect | ✓ |
| 2. Seal and pressure test Rock-Pipe™ completion system | ✓ |
| 3. Validate thermodynamics | ✓ |



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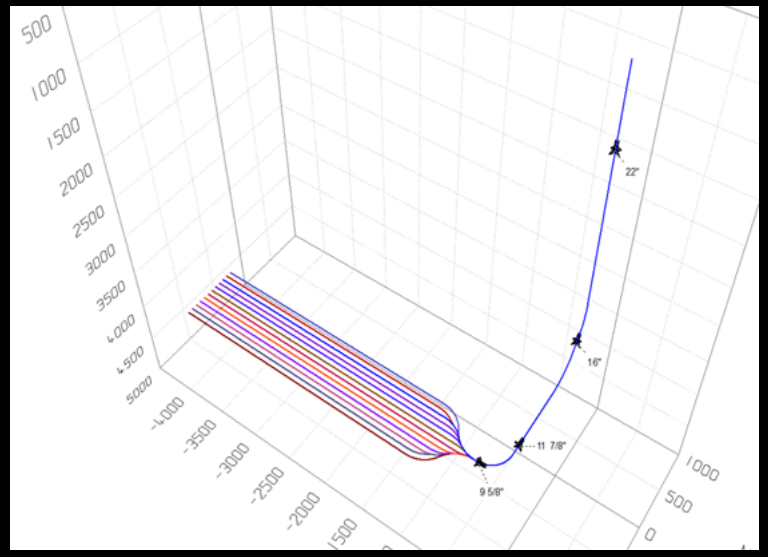
# Case Study: Geretsried

## Geretsried, Germany

- In partnership with Enex Power Germany GmbH
- Combined Heat and Power; 65 $MW_{th}$ / 8 $MW_e$
- Four initial Eavor-Loop™ 1.0 implementations built from adjacent surface locations, 60m x 120m each, potential for future growth

- Phase 1 GHG reductions: 40,000 t $CO_2$ / year & will supply the entire local region with heat and electricity





Pad layout during drilling operations


Completed site layout for normal operations



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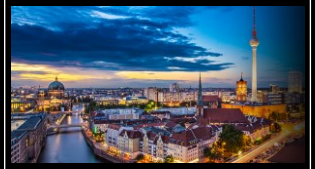
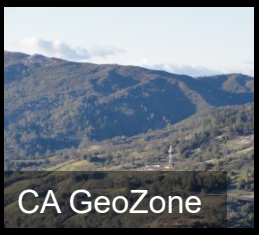
# Eavor-Loop™ Applications

| | Minimum Viable Application* | Preferred (Proactive) Application |
|---|---|---|
|  | 2MW electricity project | GW scale electricity projects with 20-year PPA or FIT |
|  | District heating in cities & towns with 100,000+ people | District heating in cities with 500,000+ people, where the district heating network already exists and is fed by a fossil fuel plant that is due for closure within 5 years |
|  | Combined heating and power (CHP) with 1 Eavor-Loop™ minimum. | 15 Eavor-Loop™ minimum upside |
| | Combined cooling heating & power (CCHP) with 1 Eavor-Loop™ minimum | |
|  | Agricultural & industrial heating with minimum demand of 15MWth | 15 Eavor-Loop™ minimum upside including CHP with excess power going to the grid |

*Ideally a minimum of 3 Eavor-Loops to secure economies of scale on the first well pad







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# Next Steps

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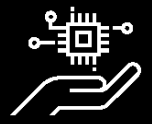
Seeking Partners for Development or Investment into Our Infrastructure Portfolio or Main Company

1 

## Investing Directly into Eavor

Eavor currently has a B Capital raise underway, and we will continue to raise money to grow. We will make room for strategic partners as beneficial

2 

## Investing into our Project Portfolio

Over 200 projects worldwide in various stages, including those under construction, in planning/ feasibility, with or without commercial agreements in negotiation and/or signed

3 

## Partnering with Eavor to Develop Your Own Projects

Our vision requires rolling out massive projects with multiple partners, supporting them with technology licensing, training, and transfer. Companies that have specific needs for green, clean, baseload heat/power/ cooling, failed conventional geothermal projects, or specified areas for development are good matches