Fossil to Future

Geothermal Energy from Existing Fluid Production

Gradient Geothermal

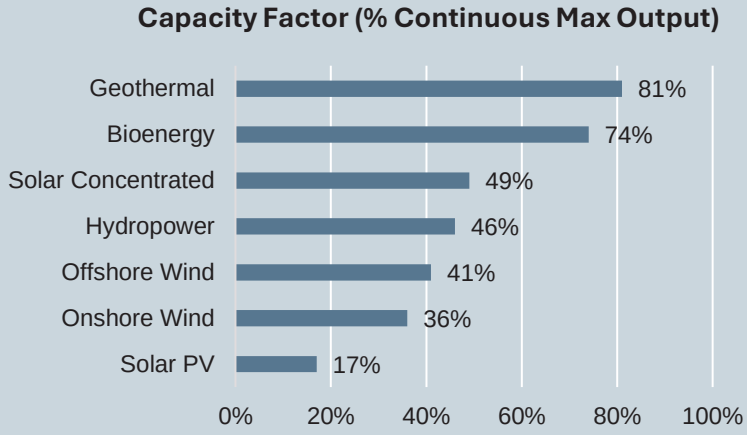
Executive Summary:

- Geothermal Energy is Essential to Global Renewable Energy Mix
- Recent Global Trends have brought Geothermal Energy to the forefront of the Global Renewable Energy Conversation
- Gradient's mobile, modular geothermal system can provide power, cooling, emissions reduction to a variety of well sites and facilities
- Looking to close $1.2M of $3M Seed Round

Why Geothermal

Geothermal Energy Advantages:

- **Baseload**
- Small Footprint
- Flexibility: Electricity, Heat, Cooling
- Security



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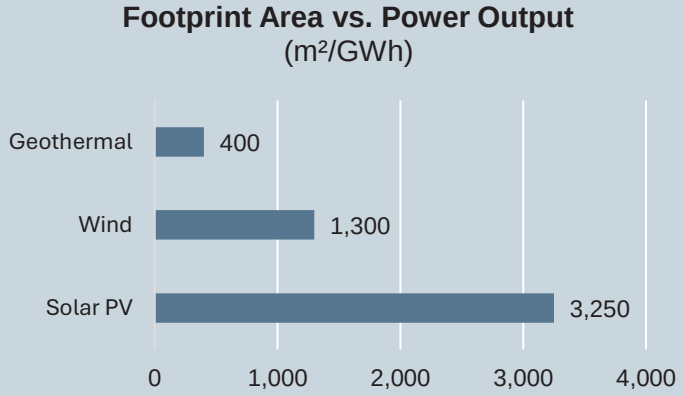

Source: Comparison of Land Footprint for Various Electrcity Generation Technologies, USDOE, 2019

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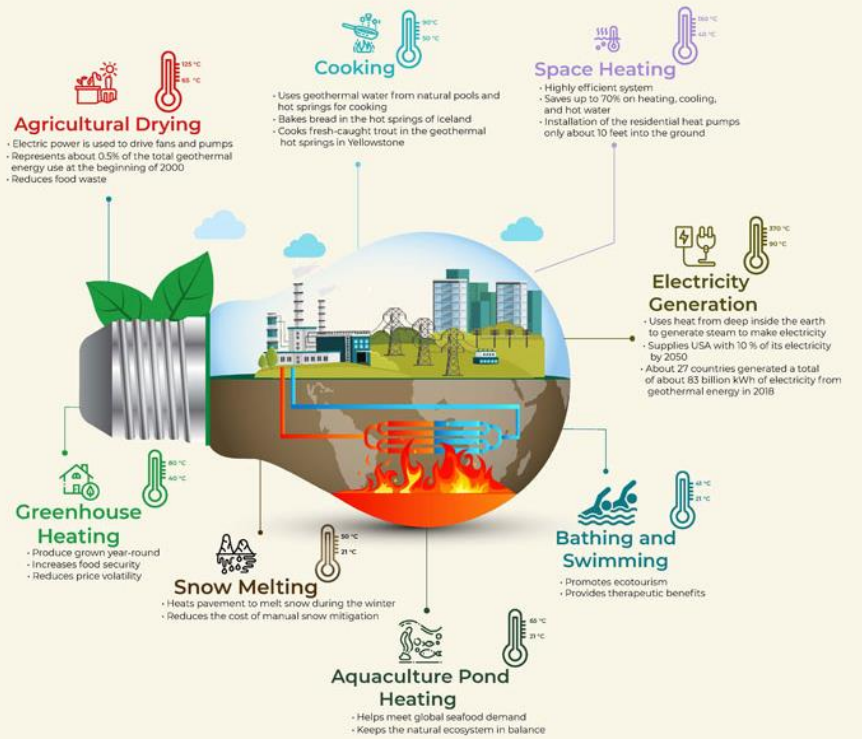

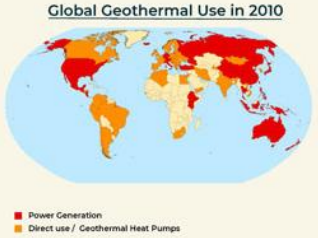

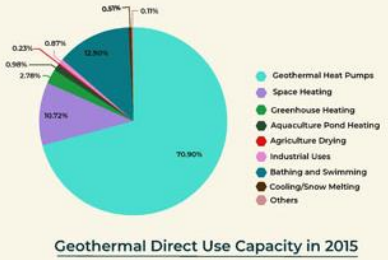

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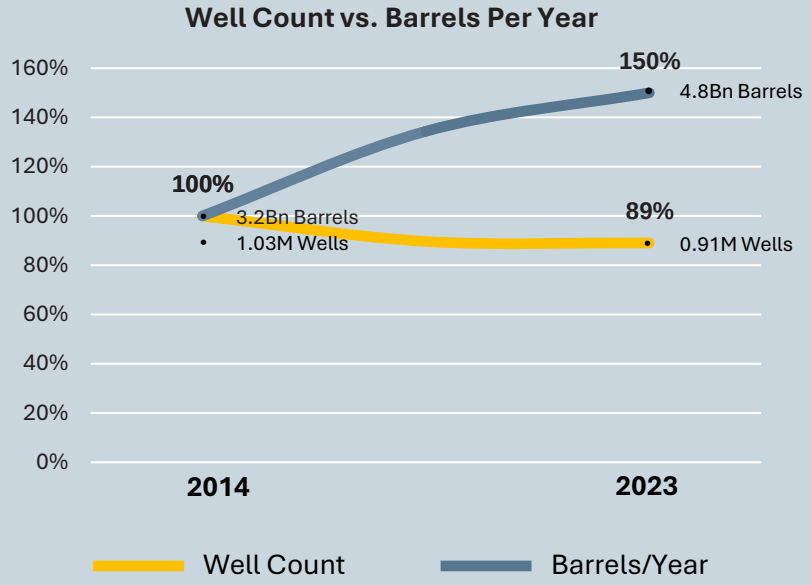
Source: USAF Joint Base San Antonio Texas

Why Now

2025 Global Trends Affecting Geothermal Energy:

- **Drilling Technology Advancements**
- European Energy Security
- Data Center Power/Cooling Needs



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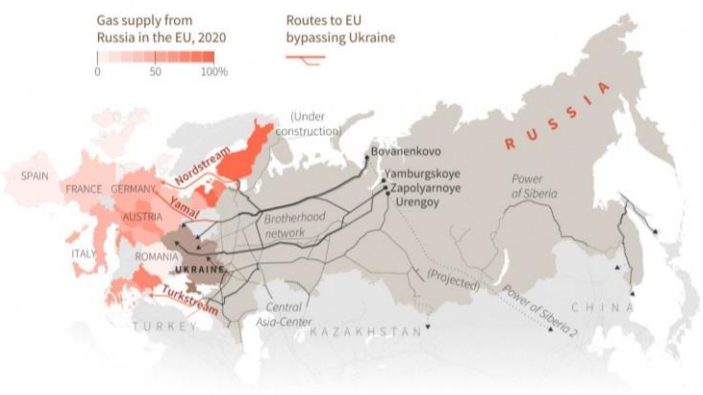

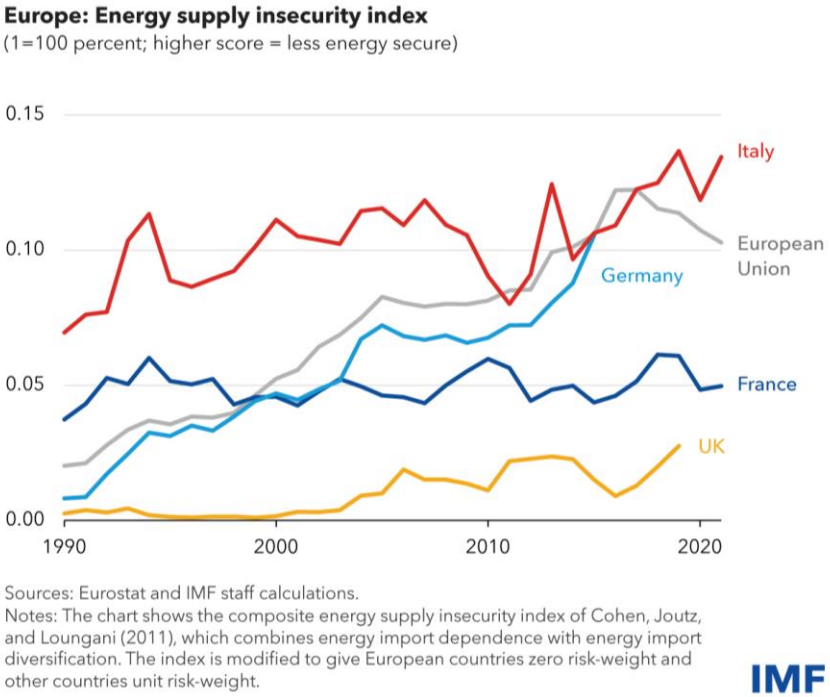

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EPRI U.S. Data Center Load Projections

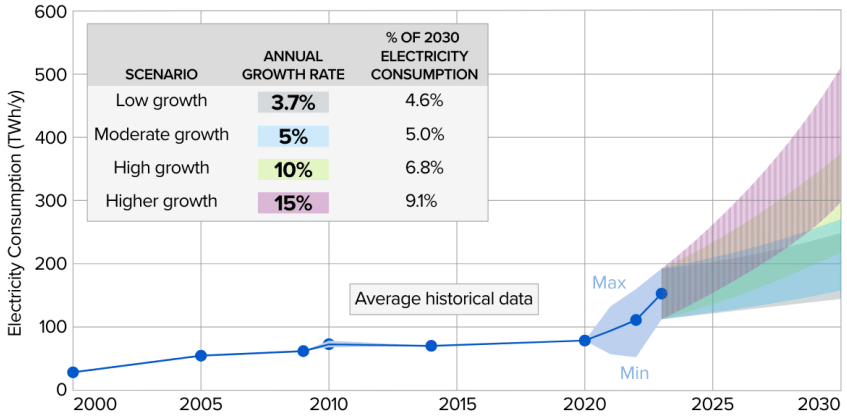


Figure ES-1. *Projections of potential electricity consumption by U.S. data centers: 2023–2030 . % of 2030 electricity consumption projections assume that all other (non-data center) load increases at 1% annually.*

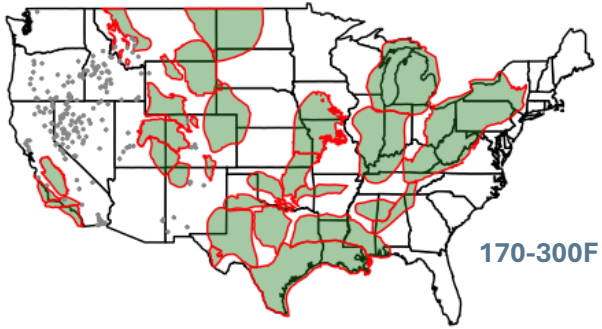
Gradient Geothermal Solution

Focus on Existing Produced Fluids:

- **Lower Temperature** (Widen Geographic Reach)
- Lower Cost (No Exploration/Drilling)
- Flexible power supply (Electricity, Cool, Heat)

Current High- and Medium-Temperature Geothermal Project Locations
Geothermal Sites (USGS)

Available Low-Temperature Geothermal Project Locations
Available Geothermal Resources



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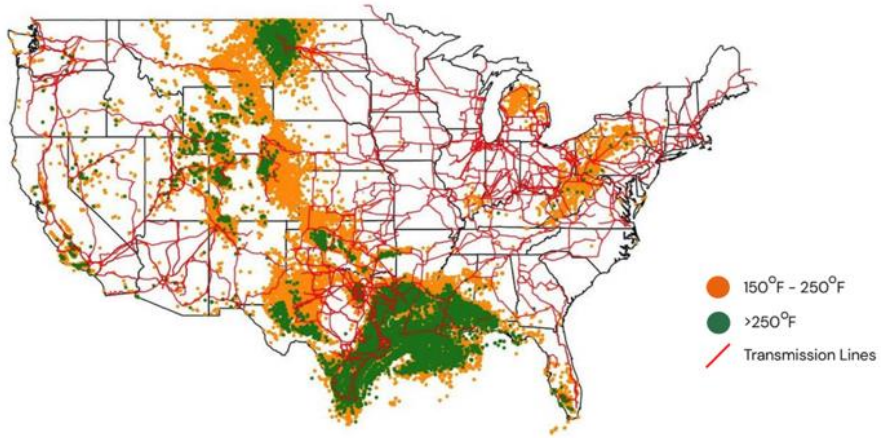
Map of US Well Sites by Temperature



Energy from Oil and Gas Wells:

- 500,000+ Applicable Wells
- 13 GW of power potential
- 18.2 Million Tons CO_2 Emissions Avoided

Gradient Geothermal Solution

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Electricity
Pine Valley, NV

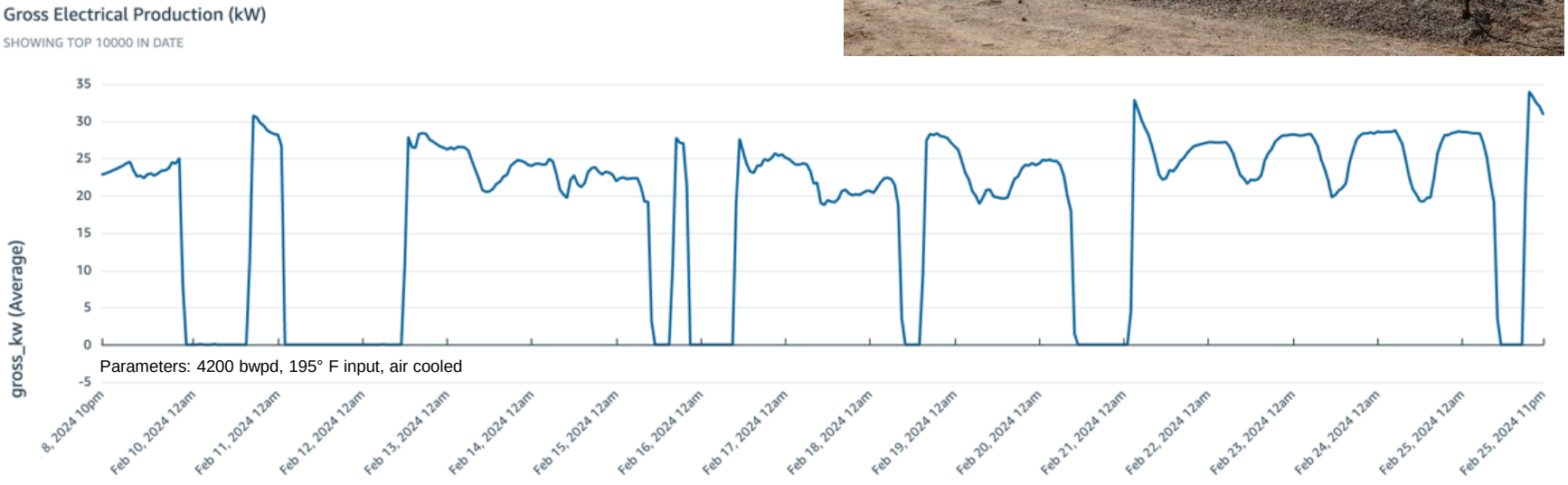
Fluid Cooling
Williston Basin, ND

Thermal Energy Network
Pierce, CO

Gradient Geothermal Example

- **DOE Wells of Opportunity-funded project**
- **Pathway to 1 MW at existing oilfield**
- **Four season operations**
- **Grid-tied**

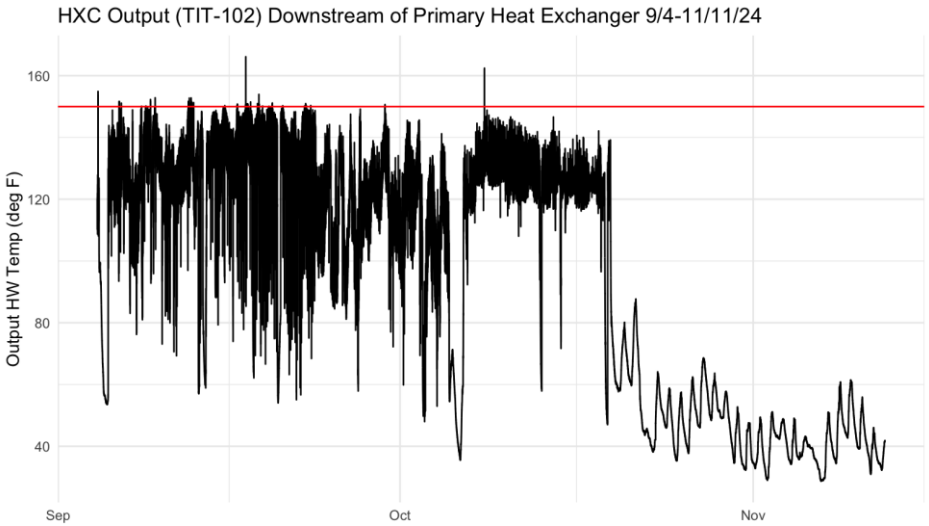
Case Study: Power Generation from Long-Term Stable Produced Fluids



Gradient Geothermal Example

- **Cooling produced fluids on liquids flowback from a new pad turn-on**
- **Met 150° F cooling spec 99.3% of time**
- **Modular layout for following completions crew to where cooling is needed across asset**

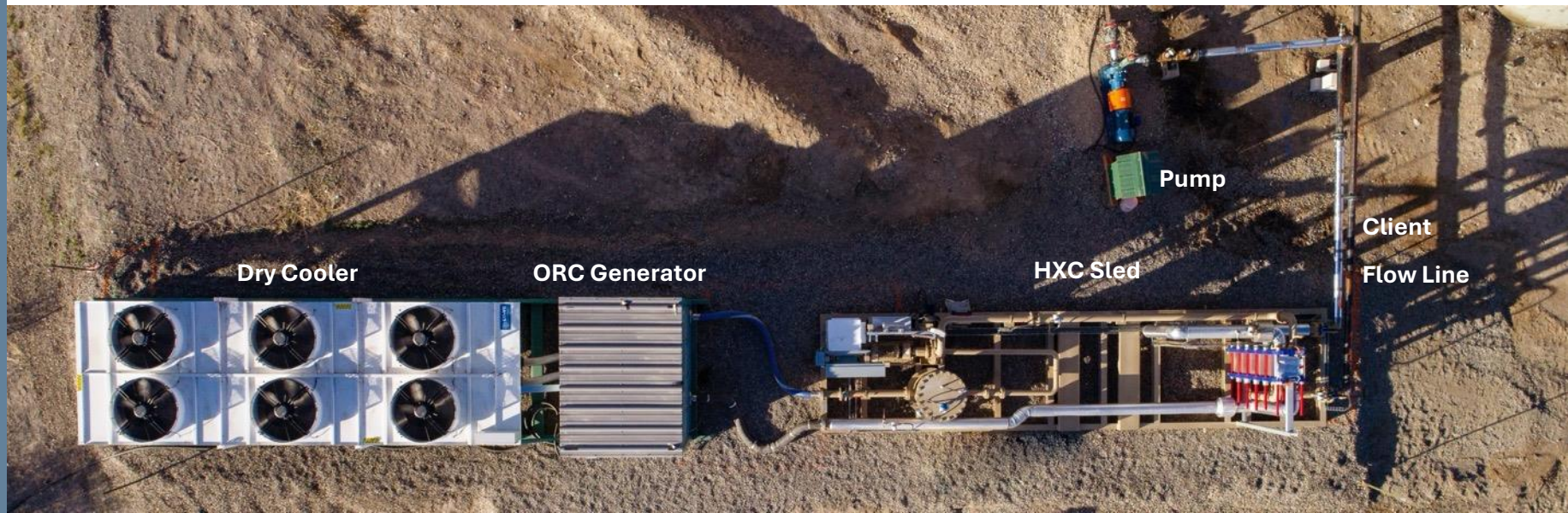
Case Study: Cooling Produced Fluids on Liquid Flowback



Gradient Geothermal Technology

Low Temperature Power Generation:

- **ORC/HXC Sled**
- Web/IP



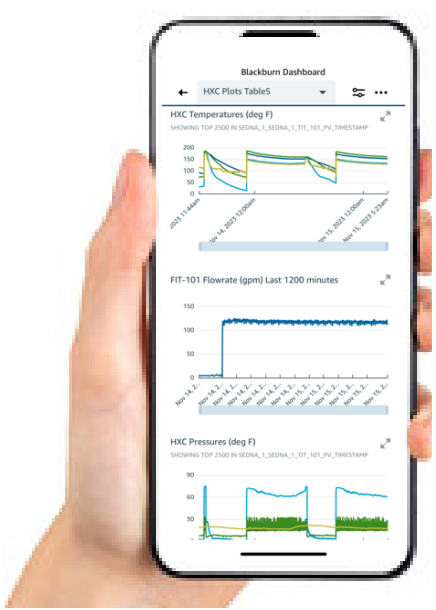

ElectraTherm
ACTIVE COOLER

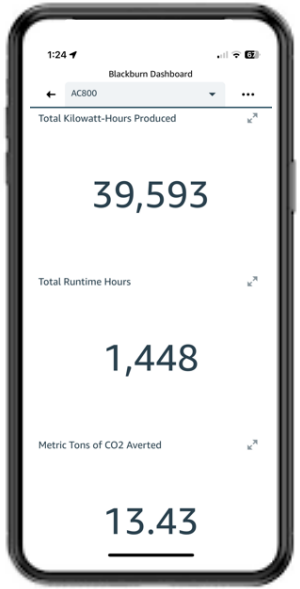
Gradient Geothermal Technology

Low Temperature Power Generation:

- ORC/HXC Sled
- **Web/IP**

- **Event-drive Operational Alert System:** Real-time text and email alerts. Website and mobile executive and operational dashboards with real-time data from cloud-based database
- **Wellfinder Web App** (v1.0) Develop an integrated software tool to help easily locate and evaluate oil and gas wells and facilities for geothermal potential.
- **HXC Sled** (3 patents filed April 2022) Heat exchanger sled that allows ORC equipment to work in the oilfield. V2 modifications and enhancements in design phase now
- **Downhole Heat Exchanger** (Patent filed July 2024) Proprietary technique to preserve geothermal heat to surface. Advanced modeling of heat loss in surface facilities and mitigations schemes

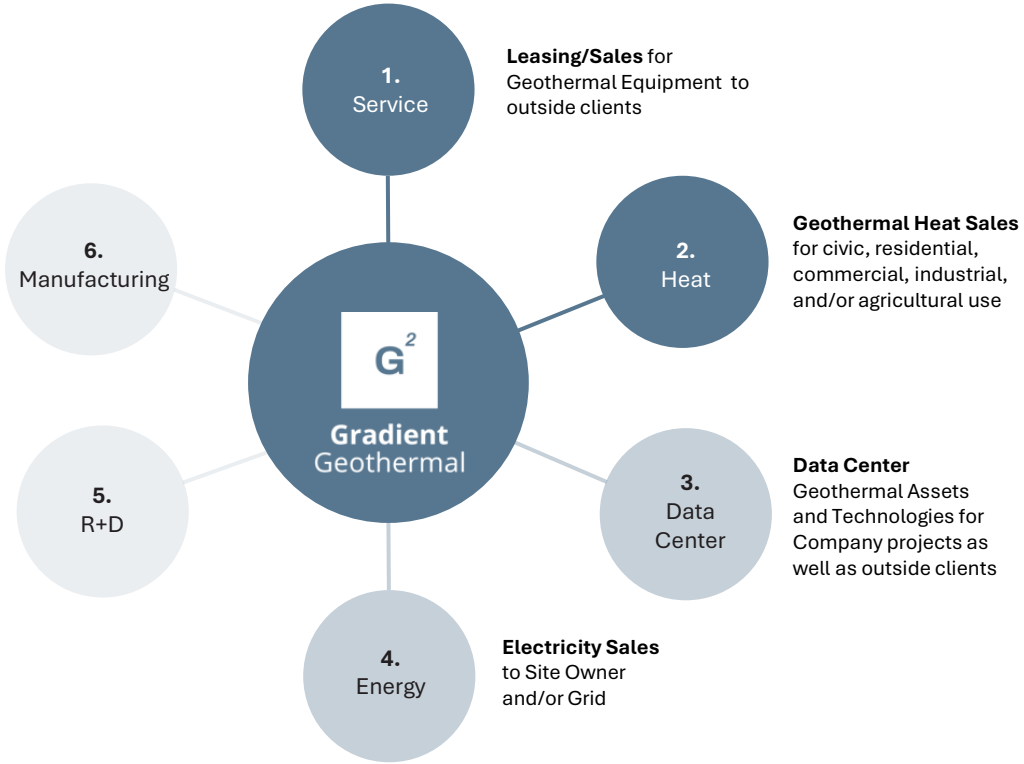




Gradient Geothermal Business Model

Revenue Streams:

- Service
- Heat Sales
- Data Center
- Energy Sales
- R+D
- Manufacturing



Gradient Geothermal Business Model

Lease/Sales Markets:

- Oil and Gas Production
- EGS/AGS Vendors
- Geothermal District Heating
- Data Center Cooling

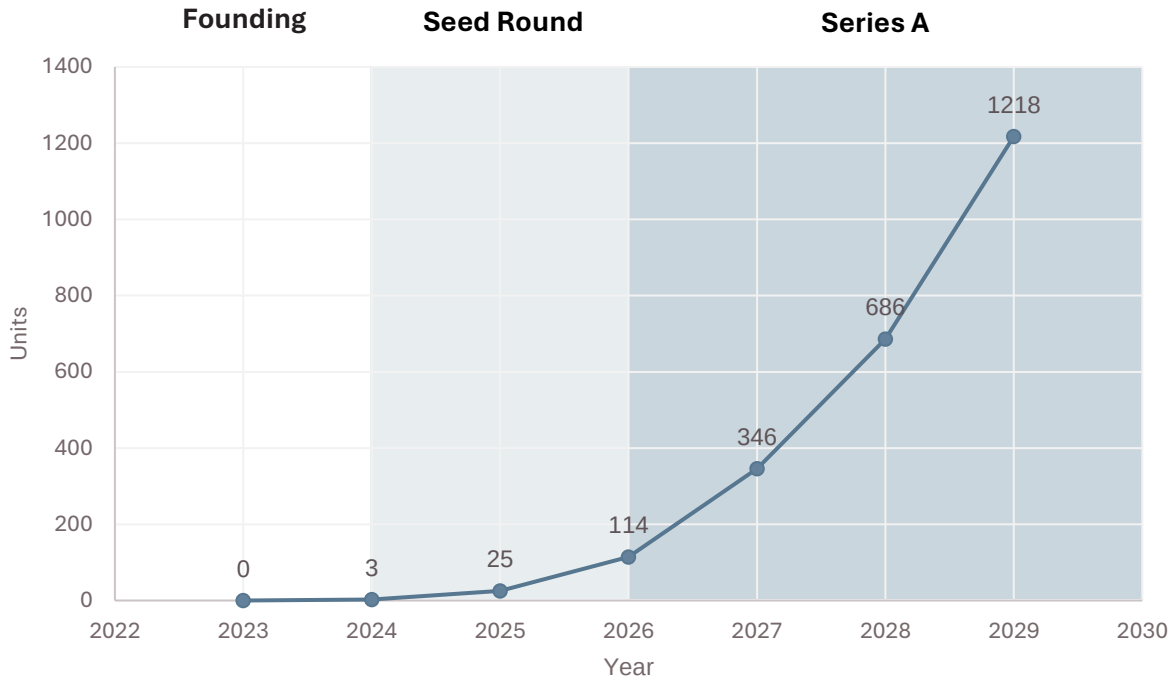
Advanced Geothermal System
Sage Geosystems, Fort Bliss, El Paso

Electricity Production for Geothermal District Heating
Paris, France

Data Center Power/ Cooling
Google/Fervo, USA

Gradient Geothermal Business Model

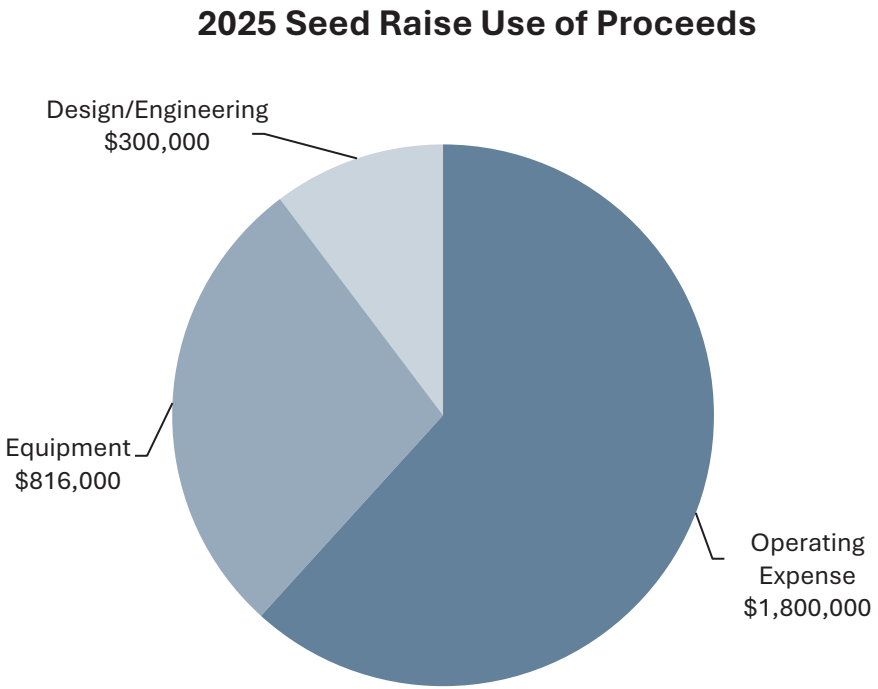
Unit Forecast:



Gradient Geothermal Investment

Seed Round:

- $3.0M Total
- $1.8M Raised
- $1.2M Outstanding
- Series A in Q4 2025



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