HETR

Hybrid Energy Thermal Remediation

High Temperature. Low Carbon. No Compromises.

US PATENT NUMBER: US 12,523,373

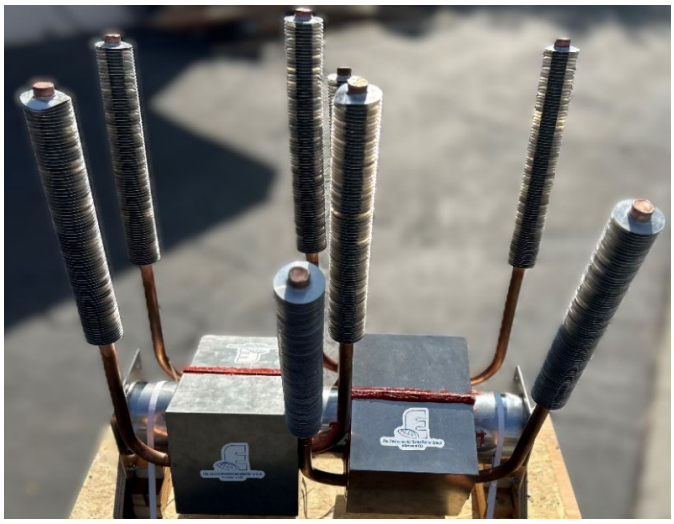
HETR™ is ERG's patented (U.S. Patent No. 12,523,373) next-generation Thermal Conduction Heating (TCH) technology that delivers industry-leading subsurface temperatures while reducing energy demand, infrastructure needs, and carbon intensity. It is field-proven, scalable, and deployment-ready for the most challenging DNAPL source zones.

Why HETR™ Matters

- Higher thermal output than conventional TCH
- Built-in renewable energy recovery during operation
- Flexible energy inputs (combustive and/or electric)
- Lower lifecycle energy demand and infrastructure burden
- Precision heat delivery where and when it matters

Performance at a Glance

- Target subsurface temperatures: 100°C to 400°C
- Heat flux: ~400–550 W per linear foot of well
- Typical well spacing:
  - 8 ft on center (high-temperature applications)
  - up to ~17 ft on center (moderate-temperature applications)



Energy Smarter by Design

Each HETR™ well generates energy while heating:

- 100–500 watts per well, 24/7 via thermoelectric energy harvesting
- Reduces reliance on grid power and heavy electrical infrastructure
  - Can be combined with auxillary solar - to go off grid!

Field-Ready. Proven. Patented.

HETR™ is delivering full-scale thermal remediation in the field today—backed by U.S. Patent No. 12,523,373 and combining industry-leading thermal performance with smarter energy use to drive faster, deeper, and more sustainable cleanup of complex source zone