

— PLATFORM · HIGH TEMPERATURE



High Temperature. Low Carbon. No Compromises.

PATENT

U.S. Patent 12,523,373

HETR™ (Hybrid Energy Thermal Remediation) is ERG's patented thermal conduction heating platform for high temperature source zones. It heats with multiform energy from combustive and/or electrical sources, reducing energy demand, infrastructure needs and carbon intensity.

100 to 400 °C

Subsurface treatment target

400 to 550 W/ft

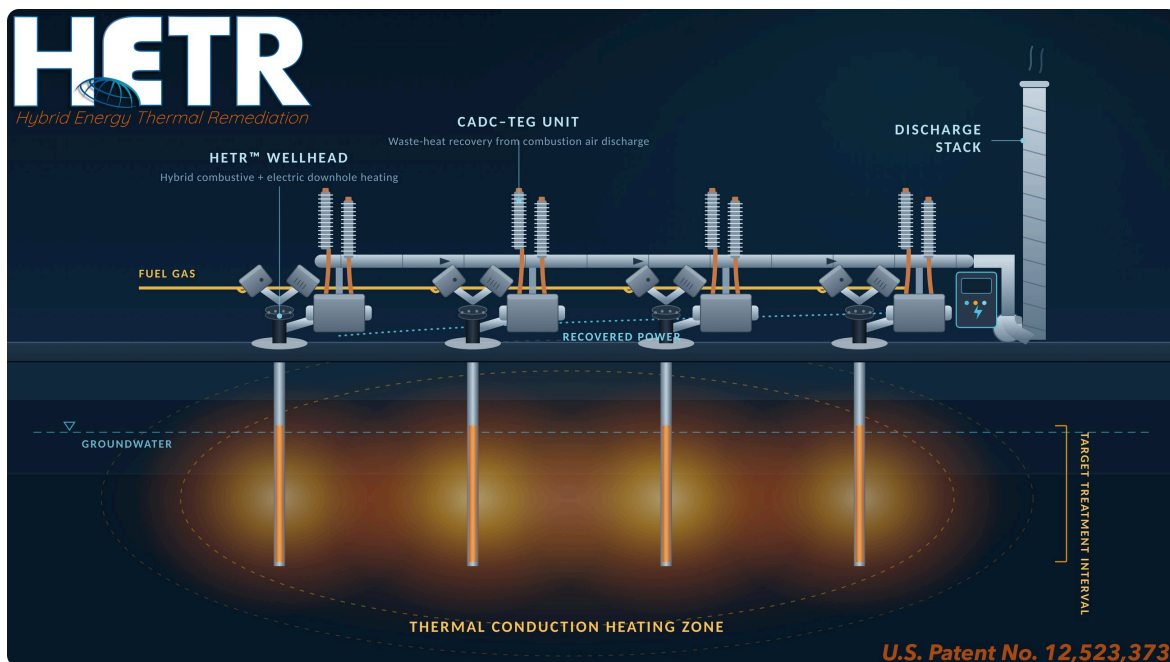
Sustained heat flux to the formation

8 to 17 ft

Heater well spacing

100 to 500 W

Thermoelectric generation per well, 24/7



Conceptual HETR™ wellfield, with CADC-TEG units recovering waste heat from the combustion air discharge as electrical power.

— HOW HETR™ DIFFERS

Multiform energy

Grid connected, partial grid or fully off grid operation. The energy source adapts to the site, not the other way around.

Thermoelectric recovery

Each well generates 100 to 500 W around the clock while it heats, reducing grid draw and pairing with solar for off grid operation.

4D heat control

Heat input differentiated along and across wells, boosted at discrete depths, or displaced to a deep zone without heating everything above it.



HETR™ IN THE FIELD

Field proven. Patented. Scaling now.



HETR™ heater assembly during fabrication.

3

full-scale implementations completed or in progress

500+

HETR™ wells planned across 2026 projects

U.S. 12,523,373

Patent issued January 2026

BEST APPLIED WHEN

- Low permeability lithology (clays) limits alternative approaches
- Aggressive source removal is required, or low cleanup goals require thermal certainty
- DNAPL or high mass zones are present
- Infrastructure constraints demand energy flexibility

MODEL SPECIFICATIONS

MODEL	ENERGY OUTPUT	HEAT FLUX	TEG	POWER
FDG-HETR-150X	8.8 to 44 kW	4.5 to 23 kW	100 to 500 W	None to 115V/1Ø
FDG-HETR-250X	24 to 74 kW	11 to 36 kW	200 to 600 W	None to 115V/1Ø



HETR™ wellhead with burner and control enclosures at Carson Plaza, Carson, California.

COMPLETED PROJECT

Carson Plaza, closed for unrestricted land use

In the final phase of a combined remedy beneath an operating dry cleaner, a focused eight-well HETR™ wellfield operated with soil vapor extraction to treat the residual source zone. Concentrations fell about 99% across soil, groundwater and soil vapor, and DTSC issued No Further Action for unrestricted land use in August 2026.