

Understanding Superhot Rock Energy in Context

Heat Extraction Methods

Conventional (or Traditional) geothermal systems

- **Heat extraction method:** production of naturally occurring hydrothermal fluid.
- **Alternative term:** Hydrothermal systems
- **Example:** Most existing geothermal power plants today

Enhanced (or Engineered) geothermal systems (EGS)

NEXT GENERATION

- **Heat extraction method:** Circulating water through fractures (either existing, created, or enhanced through stimulation) in hot rock.
- **Alternative term:** Engineered geothermal systems (EGS)
- **Example:** Fervo, Utah FORGE, Mazama¹

Closed loop geothermal systems (CLGS)

NEXT GENERATION

- **Heat extraction method:** Circulating water through continuous boreholes/underground heat exchanger in hot rock.
- **Alternative term:** Advanced geothermal systems (AGS)
- **Example:** Eavor, GreenFire, XGS²

Figure 1: Enhanced Geothermal Systems (EGS)

Note: Not to scale. Underground flow conduits for water may either involve below-ground piping or fracture networks (pictured).

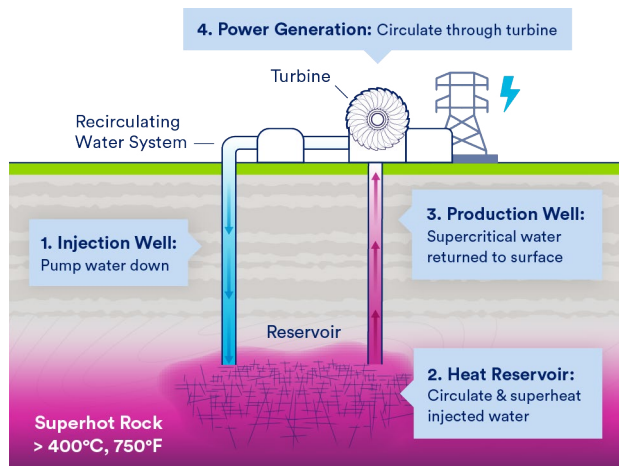
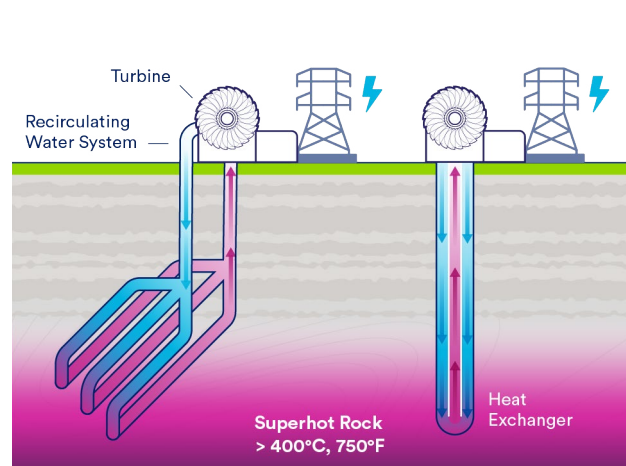


Figure 2: Closed Loop Geothermal Systems (CLGS)

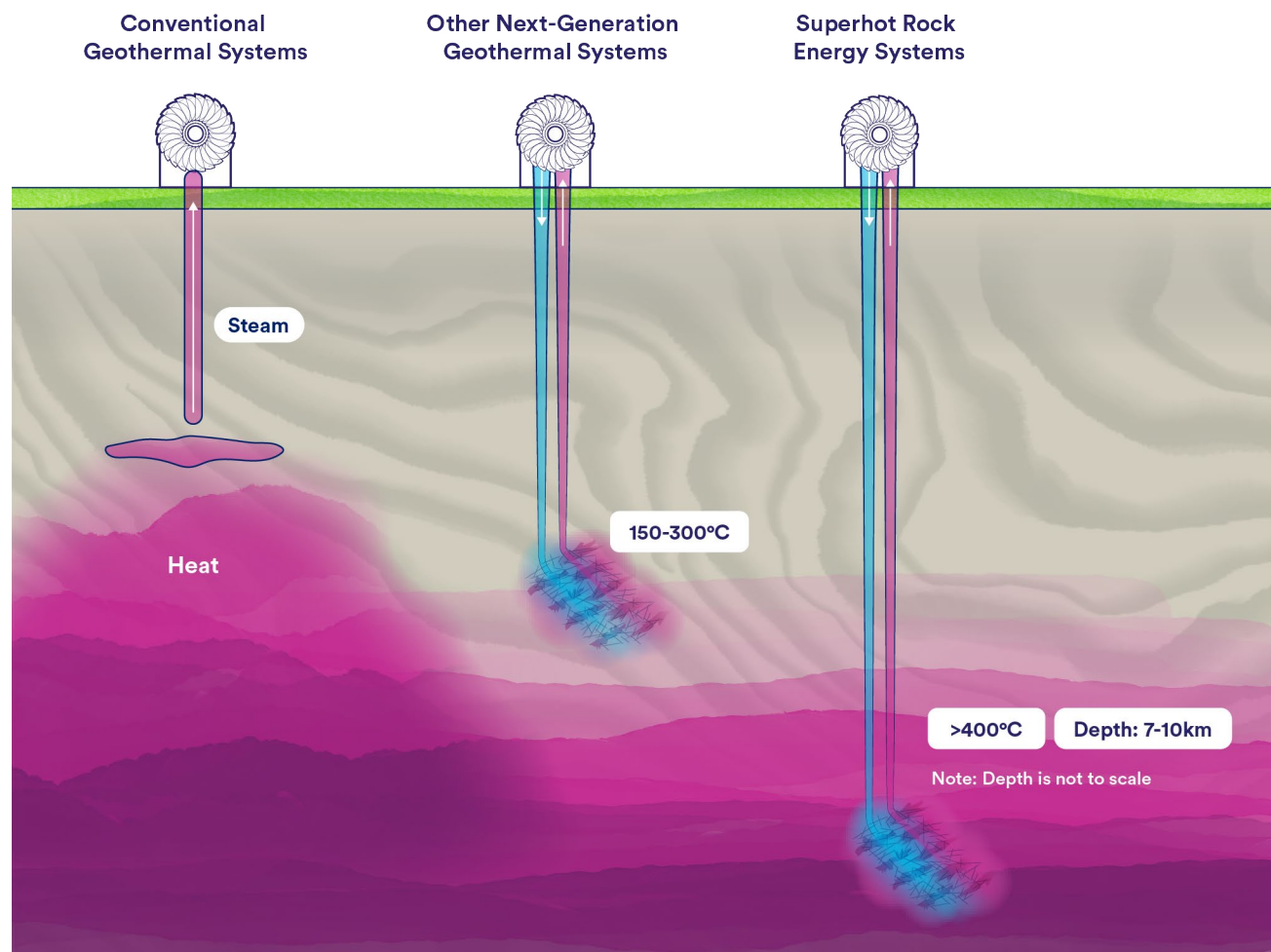
Note: Not to scale. Underground flow conduits for water may either involve below-ground piping or fracture networks (pictured).



Where does SHR fit in the picture?

Superhot Rock (SHR) is the *resource*, not the *method*. Superhot rock energy comes from a subsurface geologic rock resource existing in-situ at or above the supercritical temperature of water (374°C in de-ionized water or higher in brine). **SHR may use EGS or CLGS methods.** Existing EGS and CLGS developers are either actively chasing SHR or plan to as the technology matures.

Figure 3: Building toward superhot



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