**..... Natural Geothermal Systems**

To generate power from natural geothermal systems, you need:

Abundant heat
found in rocks
deep undergroundFluid to carry heat
from the rocksSmall pathways to
move fluid through
the hot rocks**..... Problem**

Despite the presence of heat, sometimes conditions are not ideal for power generation from natural geothermal systems.

In these cases you have:

Abundant heat
found in rocks
deep undergroundInsufficient fluid
to carry the heatLimited pathways
to conduct fluid

ENHANCED GEOTHERMAL SYSTEMS

Solution

A human-made enhanced geothermal system (EGS) can extract heat from tens of thousands of feet below the surface and put it to good use.

**What makes EGS?**

=

An abundant,
previously inaccessible,
heat source

+

Fluid injected from
the surface

+

Pathways expanded by
injected fluid**With an enhanced geothermal reservoir, you can generate power anywhere with hot rocks deep underground!**

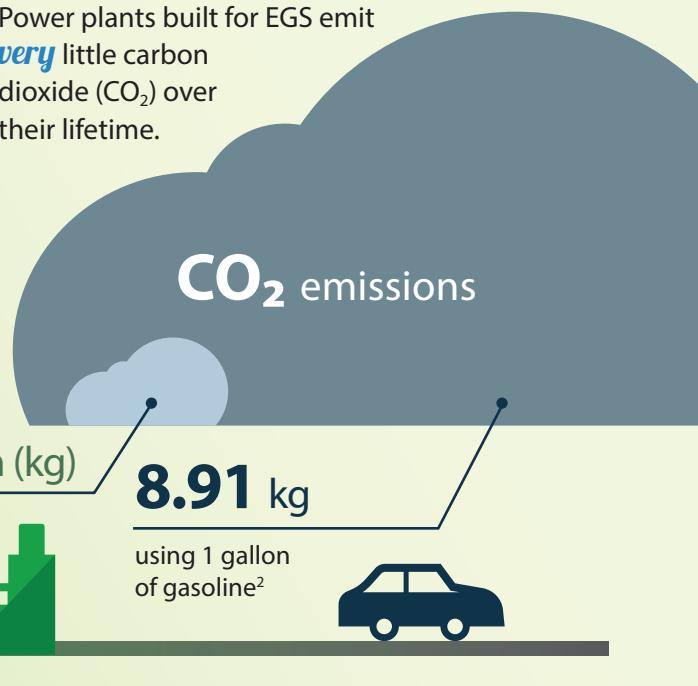
ENERGY THAT *works* AROUND THE CLOCK

EGS is a reliable, baseload energy source. It can provide power **24** hours a day, **365** days a year, independent of weather conditions and with the flexibility to meet consumer demand.



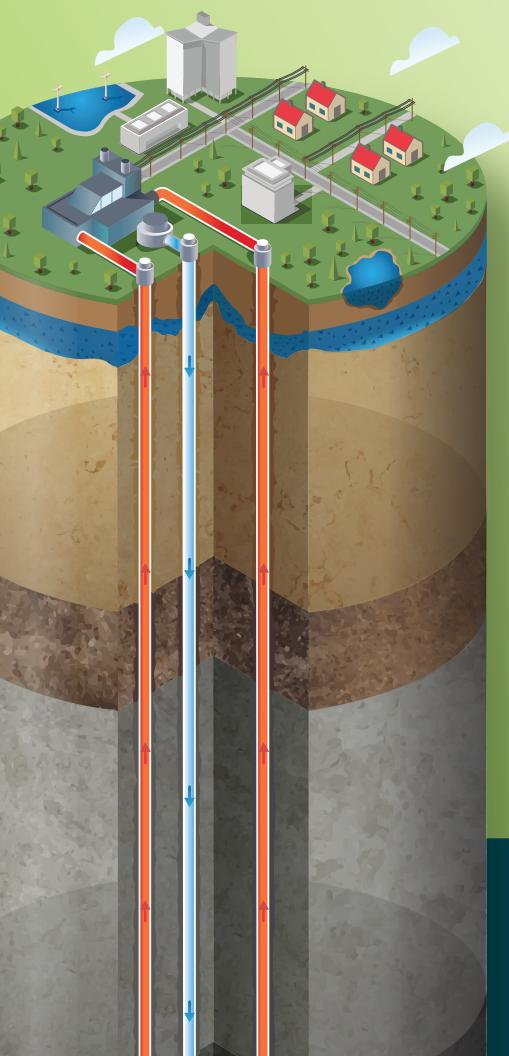
GREEN TECHNOLOGY FOR A greener WORLD

Power plants built for EGS emit **very** little carbon dioxide (CO₂) over their lifetime.



^{1&2} For more information about the references, visit: energy.gov/eere/geothermal/forge

* A plant uses moderately heated geothermal and secondary fluid that pass through a heat exchanger. The geothermal fluid causes the secondary fluid to flash into vapor, driving turbines to power generators.



CLEAN ENERGY FOR AMERICA'S HOMES



If this shape represents **all** the households in Texas,

EGS has the potential to *power* this:



EGS could provide more than **90 GWe** for the American people – the equivalent of more than **65 million homes!**