RMI
ENERGY. TRANSFORMED.

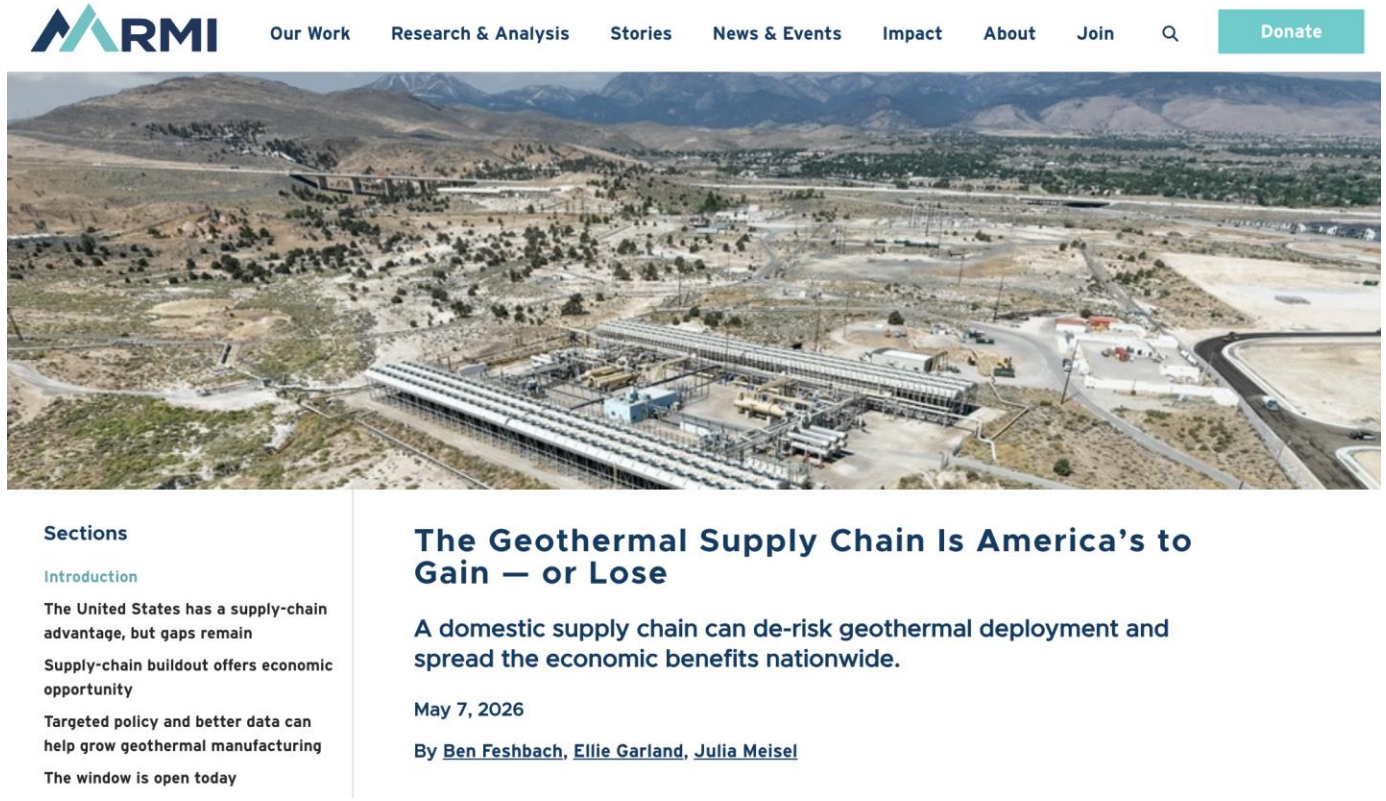
Next-Generation Geothermal Power: The Regional Economic Opportunity

May 21, 2026

Introductions

- **RMI is an independent, non-partisan, research and advisory nonprofit** focused on energy systems transformation.
- **RMI's economic development team engages economic and energy policy leaders across the United States** on the attraction and retention of investment in the commercialization, manufacturing, and deployment of new energy technology.

New RMI research:



Acknowledgements and Housekeeping

This session is made possible by the New Energy Industrial Strategy (NEIS) Center, a global network of researchers, policymakers, and private sector stakeholders advancing new energy industrial strategies.

- This session is being recorded.
- If you have questions at any point, please drop them into the Q&A box.

Agenda & Introductions

What we'll cover:

- **Background: Next-generation geothermal and its supply chain**
- **Presentation: Rhodium Group**
- **Presentation: Utah Governor's Office of Economic Opportunity**
- **Q&A**

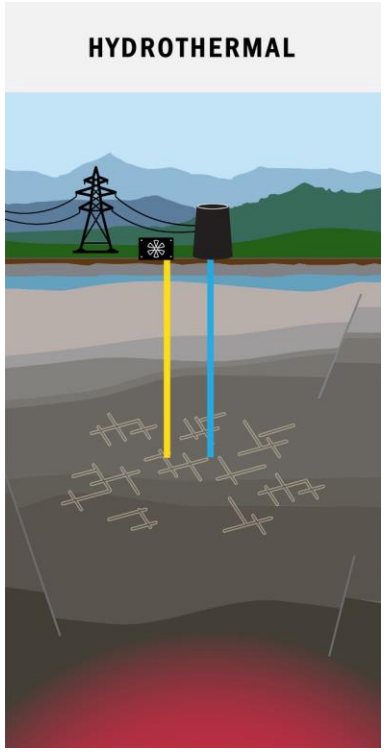
Who you'll hear from:

- **Ben Feshbach, RMI**
- **Ben King, Rhodium Group**
- **Galen Bower, Rhodium Group**
- **Anna van Brummen, Rhodium Group**
- **Jen Wakeland, Utah Governor's Office of Economic Opportunity**

Background: Geothermal power

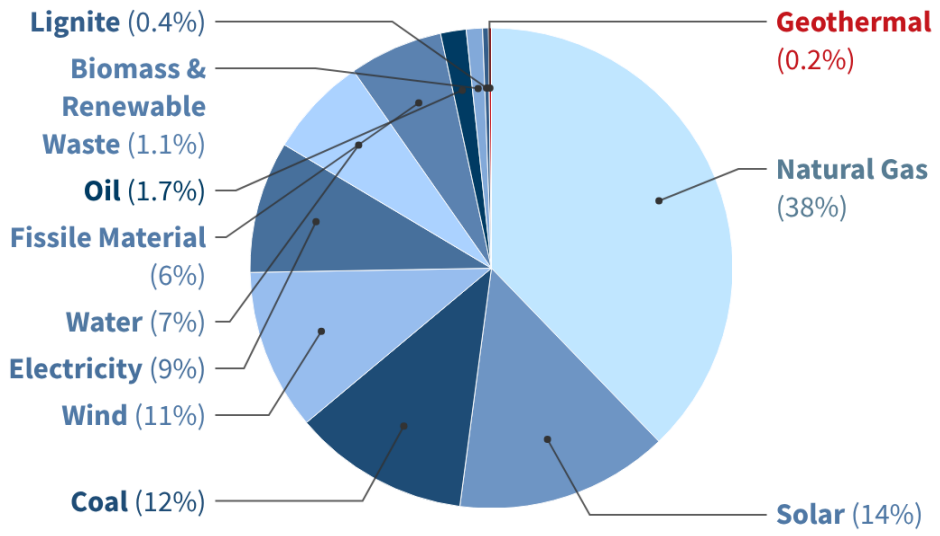
Note: Though geothermal also supports heating and cooling, our focus today is electricity systems.

Traditional hydrothermal power requires heat, water, and permeability.



As a national resource, it's niche—by some metrics less than 1% of installed electricity capacity.

Operational electricity generation capacity in the US by input technology share



Figures reflect nameplate operational capacity as of May 17, 2026.

Source: BloombergNEF

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But we're still finding more of it thanks to new prospecting technology.

In a geothermal milestone, Zanskar claims major discovery in Nevada

The firm says it has found an unknown, untapped geothermal resource that is viable using conventional drilling — a first in the U.S. in more than 30 years.

By **Alexander C. Kaufman**
4 December 2025

A geothermal drilling rig at Zanskar's new Big Blind site, located in rural Nevada (Zanskar)

Image source for left-hand illustration: U.S. Department of Energy

What is next-generation geothermal power?

Next-generation geothermal technologies extract energy from the subsurface in places where sufficient heat and fluid aren't naturally accessible.

- **Enhanced geothermal systems (EGS)** create permeability in hot rock;
- **Closed-loop geothermal systems (CLGS)** circulate working fluid through sealed subsurface networks;
- **Superhot rock (SHR)** projects apply these approaches at supercritical temperatures, unlocking even more energy.

CLGS systems are sometimes called advanced geothermal systems (AGS).

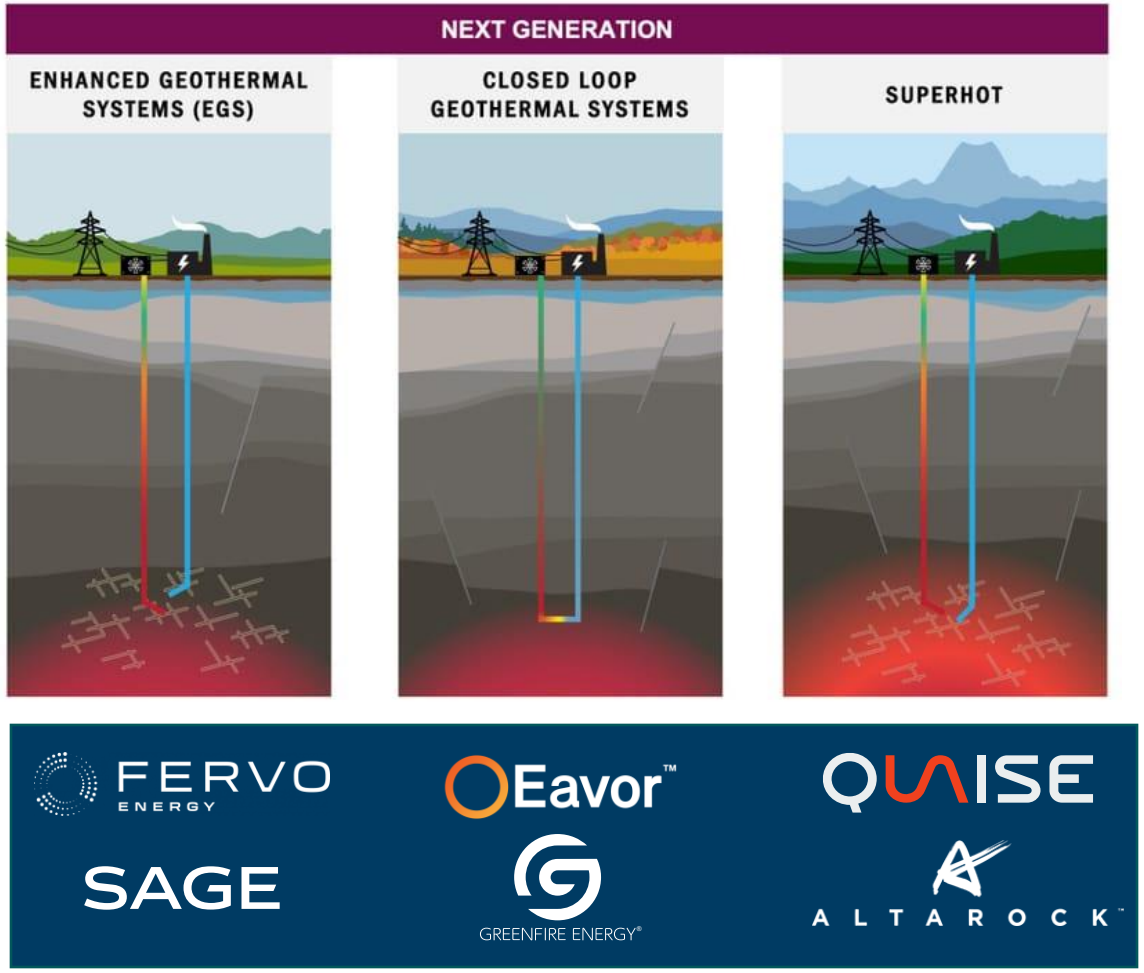
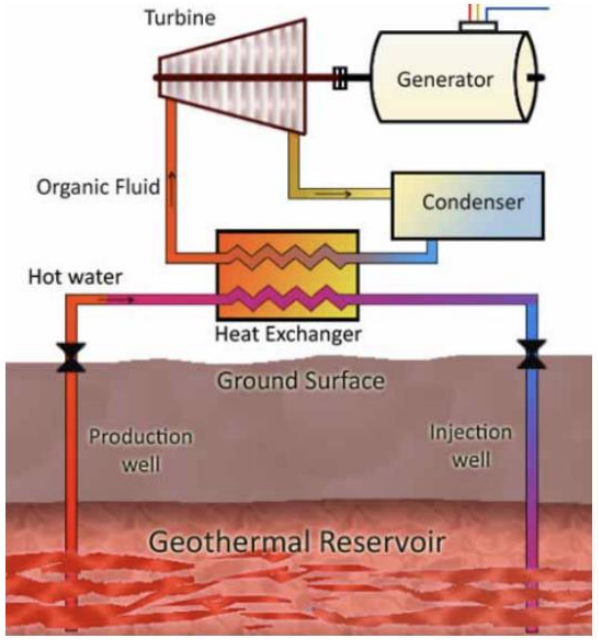


Image source: U.S. Department of Energy. Company classification is illustrative.

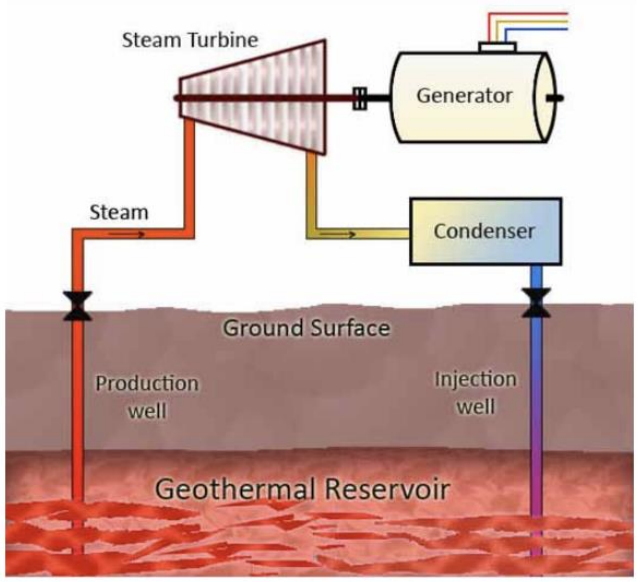
Equipment needs vary by technique and firm

There are different surface plant configurations.

EGS developers are using binary-cycle plants to leverage lower-temperature resources…



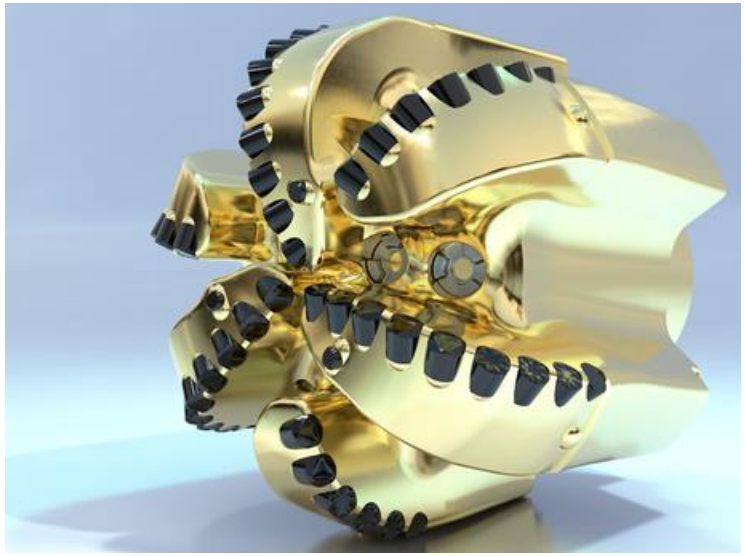
…while analysts suspect superhot rock developers may favor direct-contact steam turbines:



Equipment needs vary by technique and firm

There are *very* different approaches to drilling. Here are two (of many) examples:

Some firms are adapting mechanical drill bits, polycrystalline diamond compact (PDC) cutters from the oil and gas industry:



…while others are developing direct-energy-based drilling technology, like adapting gyrotrons developed for fusion research:

Image sources: Baker Hughes; Quaise Energy

The value of next-generation geothermal

There are benefits to the grid, and benefits to the United States.

Electricity system

- Scalable
- Flexible
- Firm

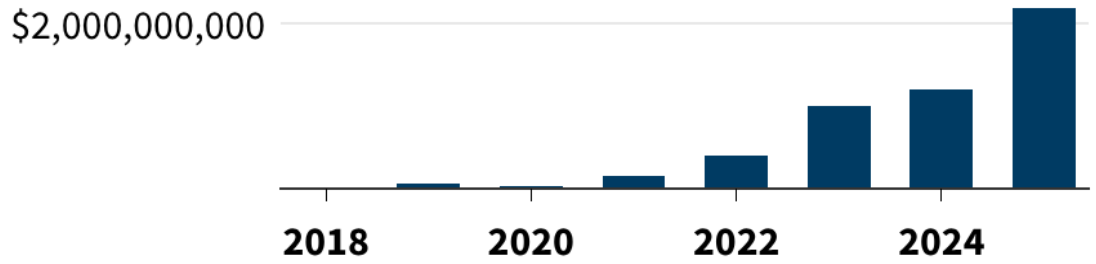
United States

- World's largest technical resource
- Talent and technology needed to unlock it

Progress in next-generation geothermal

Investment is soaring, and expectations keep improving.

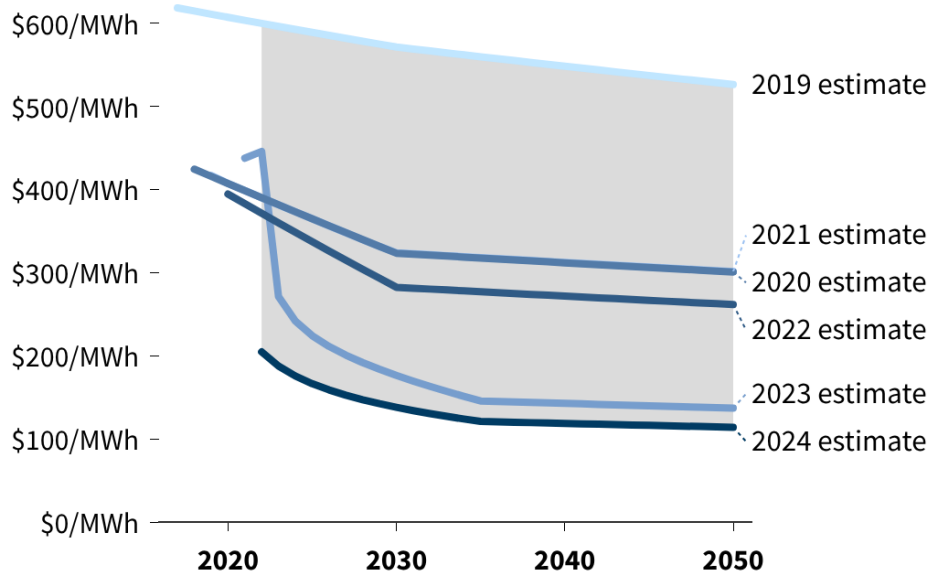
Investment in next-generation geothermal has grown a hundredfold in seven years



Figures capture equity investment, concessional loans, grants, project finance, and other forms of financing for the sector worldwide.

Source: International Energy Agency (IEA)

Next-generation geothermal cost-reduction expectations keep improving



Lines represent moderate-case learning curve expectations in levelized cost of energy (LCOE) of deep-field enhanced geothermal, as estimated annually from 2019 through 2024.

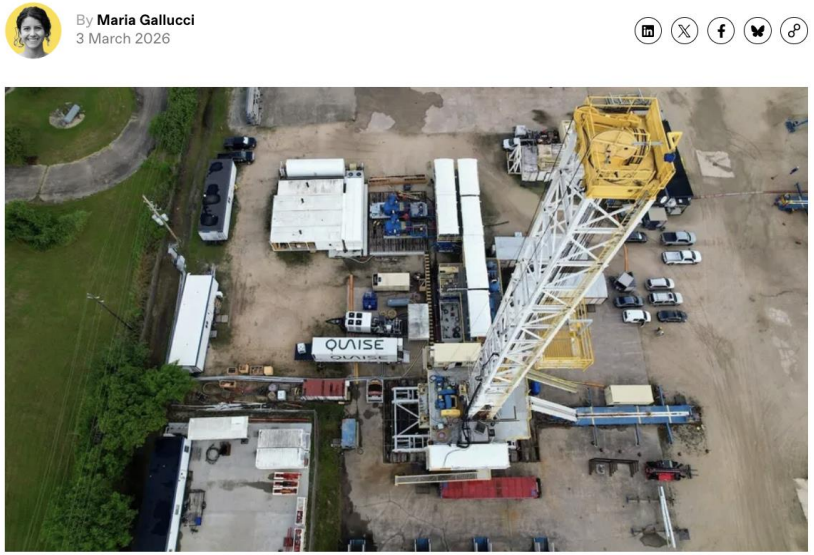
Source: BloombergNEF; National Laboratory of the Rockies

Progress in next-generation geothermal

Projects are advancing across western states, and an EGS firm, Fervo Energy, just went public.

Quaise looks to advance ‘superhot’ geothermal power plant in Oregon

The Houston firm aims to raise $200 million to develop a next-generation geothermal plant in Oregon as the technology gains momentum with investors.



An aerial view of Quaise Energy’s drilling rig at the Nabors Industries facility in Houston (Quaise Energy)

BUSINESS // ENERGY

Fervo’s Wall Street debut highlights Houston’s expanding role beyond oil and gas

By **Claire Hao**, *Staff Writer*
May 13, 2026

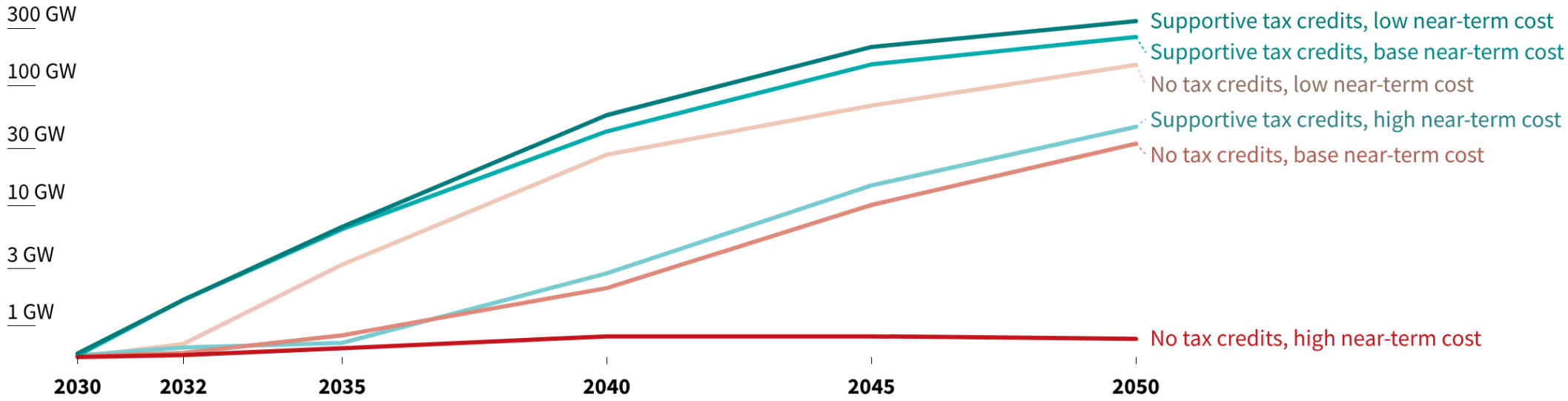
Fervo Energy, a Houston geothermal startup, is developing a Utah geothermal project known as Cape Station.
Courtesy of Fervo Energy

The *promise* of next-generation geothermal

There is a real path to national-scale adoption, but it is far from guaranteed.

Long-term prospects for next-generation geothermal are sensitive to near-term cost and policy dynamics

Next-generation geothermal is defined here as enhanced geothermal systems (EGS). Figures refer to installed EGS capacity in the United States.



Tax support refers to the federal 48E electricity investment credit. Near-term refers to the period between 2022 and the early-to-mid 2030s. The authors of the modeling highlighted above "impose a 50% limit on the annual rate of growth in new capacity additions for EGS and competing clean firm technologies in order to reflect limits on the rate at which the necessary supply chains and workforces for these technologies can be expanded."

Source: Pathways to national-scale adoption of enhanced geothermal power through experience-driven cost reductions, Wilson Ricks and Jesse Jenkins, 2025

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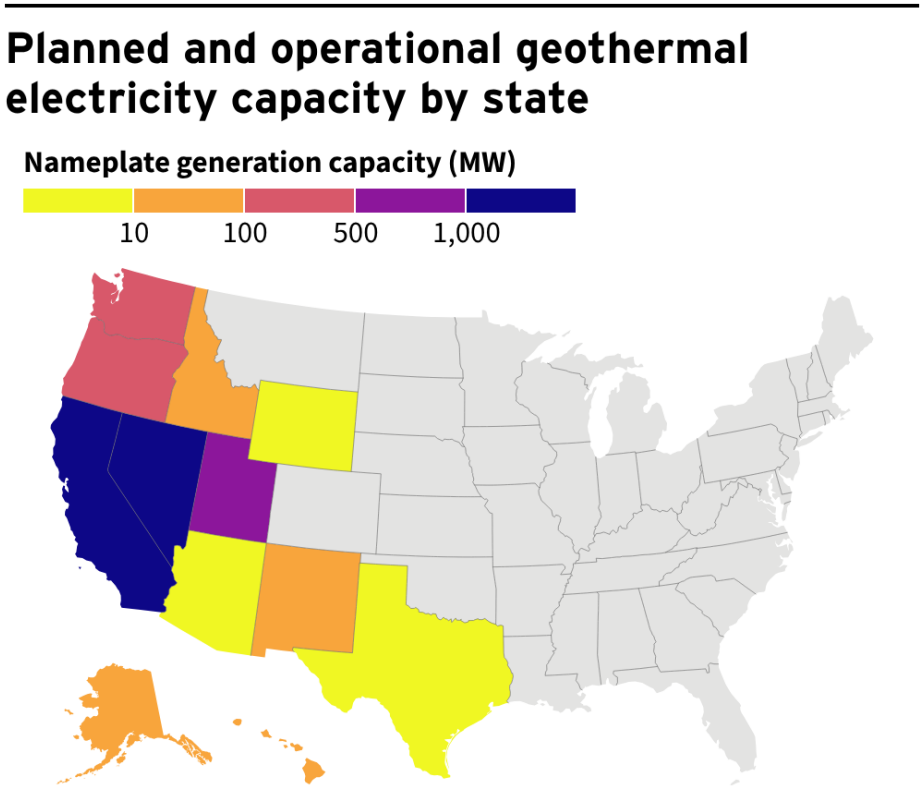
The geography of next-generation geothermal

To date, geothermal has been a mostly western resource.



Source data is current to May 17, 2026.

Source: BloombergNEF

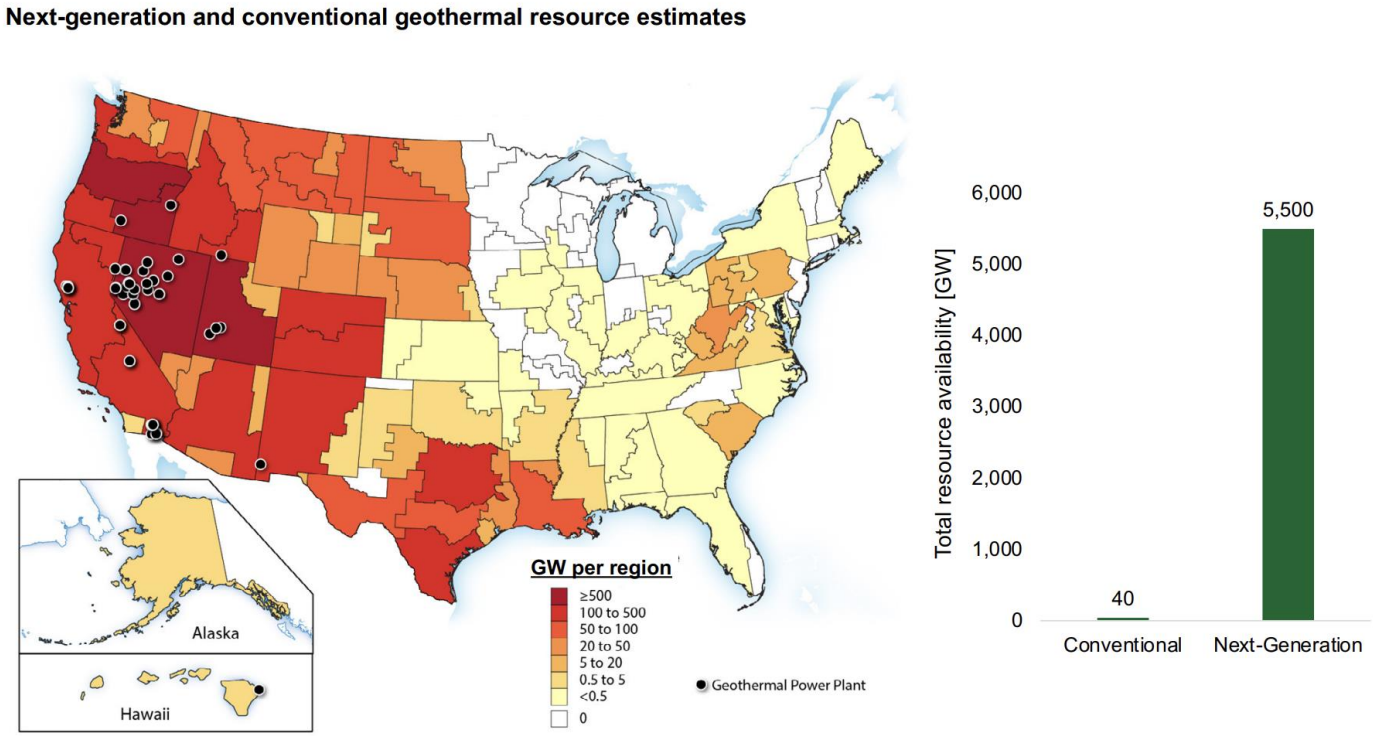


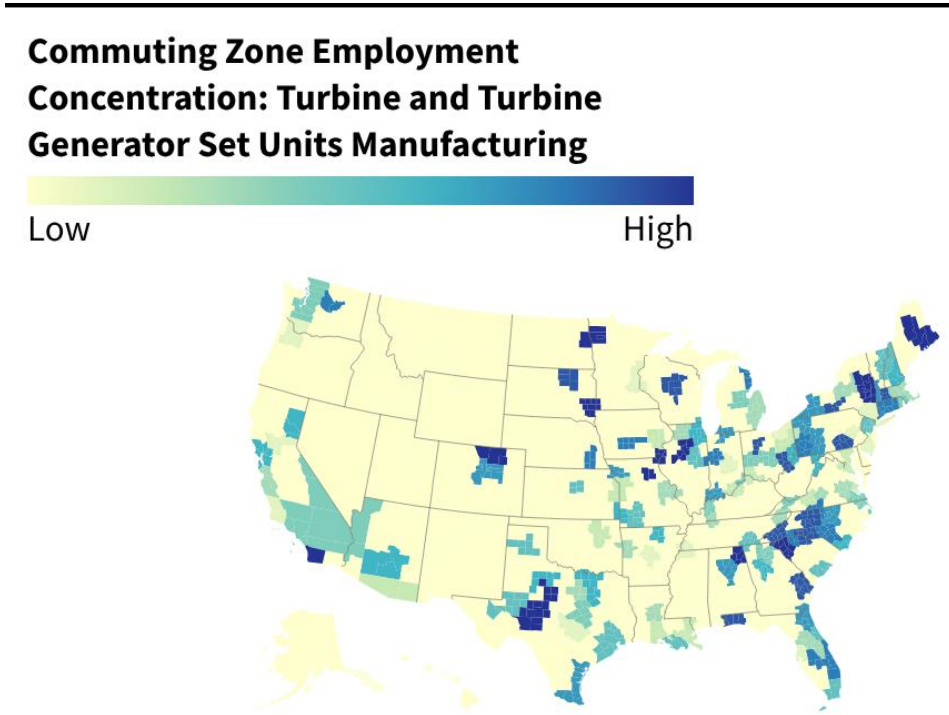
Figure 2: [Left panel] Total next-generation potential across the United States (red shading), overlain by locations of current conventional geothermal plants producing 3.7 GW of power (black dots). [Right panel] comparison between total available resource for conventional geothermal (left) and next-generation geothermal (right).

Source: *Pathways to Commercial Liftoff: Next-Generation Geothermal Power — 2024*

But the geography of opportunity is broader

That's because different parts of the country can support different parts of this supply chain.

If the industry takes off, we'll need a whole lot more turbines…



…along with the casing and tubing support for new geothermal wells.

Seizing this opportunity requires targeted policy and new research

- **Federal policymakers can advance this policy and research**
- **State-level policymakers can play a key role, too**