The Conservative Case for Advanced Geothermal:

Drilling Down for a Cleaner, Resilient, Energy Dominant Future

READ THE FULL WHITE PAPER.

Geothermal energy is a cornerstone of America's path to energy dominance—delivering baseload power, strengthening energy independence and reducing costs for consumers and industry. Built on the same innovations and expertise that made the U.S. a global leader in oil and gas—including sub-surface mapping, horizontal drilling and multi-stage hydraulic fracturing—advanced geothermal technologies are expected to generate up to 90.5 gigawatts of electricity in the U.S. by 2050. America has the opportunity to unleash vast amounts of new energy resources, but international competition is heating up. America is poised for leadership in geothermal and federal policies can help.

Why Geothermal?

- 24/7 Baseload Power
- Energy Security & Resilience
- Domestic Supply Chains
- U.S. Technologies & Workforce
- Small Surface Footprint
- Minimal Emissions & Water Use
- Ready to Scale Today

UNLEASHING GEOTHERMAL ENERGY: FEDERAL POLICY SOLUTIONS

Cut Red Tape to Unleash Energy: Enact Comprehensive Permitting Reform

Geothermal projects must navigate complex and archaic permitting processes, which can significantly delay development timelines. Congress must enact comprehensive permitting reform that accelerates the pace of deploying geothermal projects to unlock America's vast subterranean heat resources. This can help achieve the goals of increasing the U.S. energy supply and energy dominance.

Scaling Geothermal Investments: Continue Leveraging Federal Tax Credits

The high capital costs associated with geothermal drilling and infrastructure development remain a major barrier. Without a stable tax system, including incentives, financing these innovative projects is difficult. Targeted financial support can help de-risk geothermal projects and encourage broader adoption by businesses, utilities and individuals. Congress has a long history of providing such assistance with bipartisan support. Two critical credits are 45Y and 48E, which support the deployment of innovative new energy systems, including geothermal.

Accelerate Technological Innovation: Prioritize Research and Development and Commercialization

High costs and technical challenges—particularly with drilling and reservoir development—continue to limit geothermal energy's growth. Like any new technology, developing, deploying and eventually commercializing and scaling new technologies poses significant challenges to nascent market participants. Federal support for research and development (R&D) at the Department of Energy (DOE), its national laboratories and other agencies must remain consistent to avoid slowing breakthroughs needed to reduce costs and scale deployment.

THE POWER OF ADVANCED GEOTHERMAL: STRATEGIC OPPORTUNITIES

Geothermal energy can benefit a wide variety of industries, applications and scenarios.

- **Bolstering Defense & National Security:** Geothermal can provide reliable, resilient power to America's military installations at home and abroad.
- **Providing Stable Power for Data Center Growth:** Geothermal energy offers consistent, 24/7 power and efficient cooling without releasing any emissions.
- **Revolutionizing Heating & Cooling:** Geothermal systems reduce energy usage and operating costs while improving comfort and resilience in schools, hospitals, etc.
- **Emerging Use Cases:** Geothermal technologies may also one day provide heating for agricultural uses, extract critical minerals such as lithium and provide energy storage.

U.S. LEADERSHIP IS THREATENED BY CHINA

The U.S. currently leads the world in geothermal energy production and technological innovation. As global competitors like China aggressively expand their geothermal capabilities, America must take action to maintain its leadership. If the U.S. fails to act, we risk losing our competitive edge. America cannot afford to fall behind.

With smart policies, we can lead the global geothermal revolution—powering our economy, securing our grid and driving innovation.

CRES Forum Policy Recommendations:

- **Federal permitting reform overhaul which:**
  - Expands categorical exclusions under the National Environmental Policy Act (NEPA) for geothermal,
  - Reforms the judicial review process under NEPA to accelerate timelines,
  - Streamlines federal permitting and regulatory processes, and
  - Enables applicants to reimburse the Department of the Interior (DOI) for administrative costs, expediting lease and permit processing.
- **Maintain technology-neutral tax incentives like the 45Y and 48E credits to spur private investment.**
- **Prioritize robust R&D funding to reduce drilling costs and advance next-generation geothermal technologies.**

"Built on the same oil and gas drilling expertise that made the U.S. a global energy leader, next-generation geothermal can provide reliable, affordable and American-made energy without reliance on foreign adversaries. With the right policies—streamlined permitting, expanded domestic drilling and investment in advanced technologies—geothermal can unleash the full potential of our energy sector while creating high-paying jobs and revitalizing local economies."

Read the full white paper and learn more at CRESForum.org