

# 11 THINGS YOU SHOULD KNOW ABOUT HGEO



## A New Chapter: Hydrocarbons and Geothermal Energy Office

The U.S. Department of Energy (DOE) has realigned and rebranded the former Office of Fossil Energy as the **Hydrocarbons and Geothermal Energy Office (HGEO)** to advance President Trump's bold agenda for restoring American energy dominance.



## Our New Name is Our New Vision

HGEO's mission is to unleash the full potential of America's hydrocarbon and geothermal resources to provide **affordable, reliable, and secure** energy for the nation.



**Hydrocarbons**  
The energy-rich compounds that make up oil, natural gas, and coal.



**Geothermal Energy**  
Electricity and heat produced from beneath the earth's surface.



## Expanded Structure and Strategic Focus

As a part of this realignment:

- The **Office of Geothermal** now resides within HGEO.
- The Office of Carbon Management is now the **Office of Coal**.
- The Office of Resource Sustainability is now the **Office of Oil and Natural Gas**.
- The **Office of Strategic Resources** is being established to oversee liquefied natural gas (LNG) regulatory matters and the Strategic Petroleum Reserve (SPR).
- All critical minerals and materials work, aside from the laboratory work performed at the National Energy Technology Laboratory, will be consolidated under DOE's new **Office of Critical Minerals and Energy Innovation** (which is separate from HGEO).



## A Vision for American Energy

This realignment is more than a name change. It marks a pivotal moment, guided by HGEO's renewed vision to **power American prosperity, lower costs, and strengthen national energy security** through innovation in hydrocarbon and geothermal resources.



## Research and Innovation Drive Progress

HGEO accelerates early-stage research, development, and demonstration (RD&D) to advance domestic energy production and reduce reliance on foreign sources. Key priorities include:

- Ensuring coal remains a reliable, secure, and competitive energy source through continuous innovation
- Strengthening the resilience, reliability, and performance of U.S. oil and natural gas systems
- Positioning geothermal as a competitive domestic source for reliable baseload electricity generation
- Maintaining critical infrastructure, including the SPR, to secure the nation's energy supply
- Providing oversight of LNG regulatory matters to ensure U.S. leadership in the global market



## Revitalizing American Coal

The Office of Coal leads RD&D to stabilize, optimize, and grow the American coal industry by:

- Modernizing and extending the life of existing coal assets
- Optimizing efficiencies across the coal value chain
- Supporting the growth of coal-based power, exports, and manufacturing



## Enhancing Oil and Natural Gas Systems

The Office of Oil and Natural Gas leads RD&D to strengthen the resilience, reliability, and performance of the nation's oil and natural gas systems by:

- Extending the economic life of primary recovery operations
- Doubling the recovery factor in unconventional reservoirs
- Advancing exploration and emerging plays throughout the development life cycle
- Increasing efficiencies and reliability of midstream and power generation infrastructure



## Prioritizing Geothermal Energy

The Office of Geothermal leads RD&D to accelerate the discovery and development of gigawatt-scale geothermal energy by:

- Supporting resource characterization and advancing the best opportunities for development
- Driving innovations that enable development optimization of advanced materials, tools, and methods
- Investing in the revitalization of existing geothermal production
- Pursuing methods of utilizing geothermal for storage and load-following capabilities



## Delivering on Trump Administration Priorities

HGEO's objectives are aligned with Secretary Chris Wright's nine strategic initiatives as outlined in the Secretarial Order, "[Unleashing the Golden Era of American Energy Dominance](#)." This includes:

- Advancing energy addition, not subtraction
- Unleashing American energy innovation
- Returning to regular order on LNG Exports
- Promoting affordability and consumer choice in home appliances
- Refilling the SPR
- Modernizing America's nuclear stockpile
- Unleashing commercial nuclear power
- Strengthening grid reliability and security
- Streamlining permitting and identify undue burdens



## Partnering for a Stronger, More Secure Energy Future

By leveraging America's hydrocarbon and geothermal resources, HGEO works to enhance reliable baseload power, strengthen grid reliability, and improve long-term energy security for communities nationwide. These activities are pursued in partnership with the [National Energy Technology Laboratory \(NETL\)](#), DOE's only government-owned, government-operated National Laboratory focused on advancing the nation's energy future.



## Your Engagement is Essential

HGEO's work spans energy sectors that support millions of U.S. jobs and trillions in economic activity. Progress depends on continued collaboration. We invite partners to stay engaged, share ideas, and contribute expertise as we advance U.S. energy abundance and prosperity.

### U.S. Job and Economic Activity Highlights

- **Coal:** ~147,200 jobs | ~\$261 billion in economic activity
- **Oil and Natural Gas:** ~1,054,400 jobs | ~\$2.1 trillion in economic activity
- **Geothermal:** ~8,870 jobs | ~\$558 million in venture funding investment

\* Figures reflect rounded estimates based on the most recently available DOE and industry reporting from 2024-2025.



U.S. DEPARTMENT of ENERGY

Hydrocarbons and Geothermal Energy Office