The Rundown

By: CLEARPATH ACTION

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ClearPath Action Rundown
April 17th, 2026

Happy Friday!

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1. Kansas gets first carbon storage permit

The Environmental Protection Agency (EPA) **issued** the first Class VI well permit in Kansas for the PureField carbon capture project, unlocking new capacity for carbon dioxide (CO_2) storage in the region.

This project:

- Connects ethanol producers to underground storage, with capacity to store up to 150,000 metric tons of carbon dioxide annually;
- Advances deployment of proven geologic sequestration in the Arbuckle formation, more than 3,400 feet underground; and
- Supports the competitiveness of U.S. energy producers in global markets.

What's clear: Carbon storage infrastructure is essential to deploying carbon capture technologies at scale, and this permitting milestone underscores the importance of an efficient, predictable permitting process.

Plug in: Learn more about **Class VI wells**.

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2. Geothermal and the next era of American energy

Geothermal is no longer a future bet. It is entering its commercial phase. Private capital is now backing projects based on expected performance, with more than $1.5 billion raised across the sector in the past five years. ClearPath, J.P. Morgan and the Enhanced Geothermal Systems Deployment Coalition (EGS DC) recently **convened** developers, policymakers and energy buyers in Washington.

Three challenges came up repeatedly:

- Permitting timelines remain slow and inconsistent, particularly on federal lands;
- Grid interconnection is a constraint, with projects ready to move faster than the system can connect them; and
- Early-stage financing risk continues to limit deployment, with first-of-a-kind projects needing stronger policy support to unlock capital.

What's clear: Technology is advancing, demand is real and capital is flowing. Without faster permitting, streamlined interconnection and targeted support for early

projects, the U.S. risks missing a critical window to lead in next-generation geothermal.

Plug in: Read ClearPath's **blog** by **Matthew Mailloux** and **Jackson Blackwell**.

Dive deeper: ClearPath's **geothermal report** breaks down how federal permitting reform can unlock next-generation geothermal.

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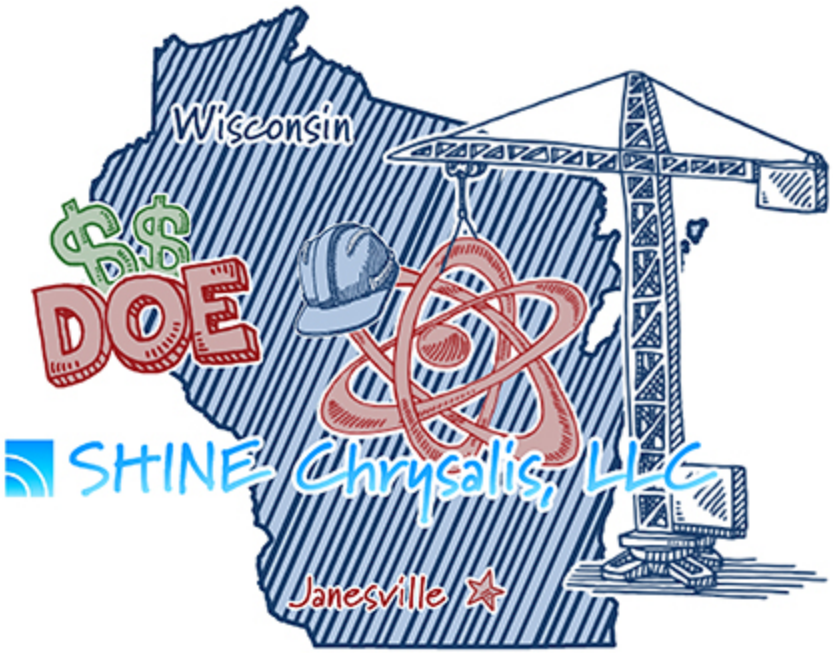
3. DOE backs domestic medical isotope production



DOE's Office of Energy Dominance Financing **issued** a conditional commitment for a $263 million loan to SHINE Chrysalis, LLC to build a high-volume medical isotope facility in Janesville, Wisconsin. The project will produce molybdenum-99 (Mo-99), a critical isotope used in over 40,000 U.S. diagnostic imaging procedures daily, using nuclear fission and fusion technology.

Key details:

- Chrysalis will be the only domestic commercial source of Mo-99, reducing reliance on foreign suppliers;
- The project supports hundreds of construction and operational jobs, strengthening the next-generation U.S. nuclear workforce; and
- SHINE's technology was developed with 16 years of National Nuclear Security Administration (NNSA) and national laboratory support, bringing a long-standing innovation to commercial scale.

What's clear: Reliable domestic Mo-99 production ensures U.S. leadership in nuclear medicine. It also reduces dependence on foreign sources, strengthens the nuclear workforce and reinforces national security.

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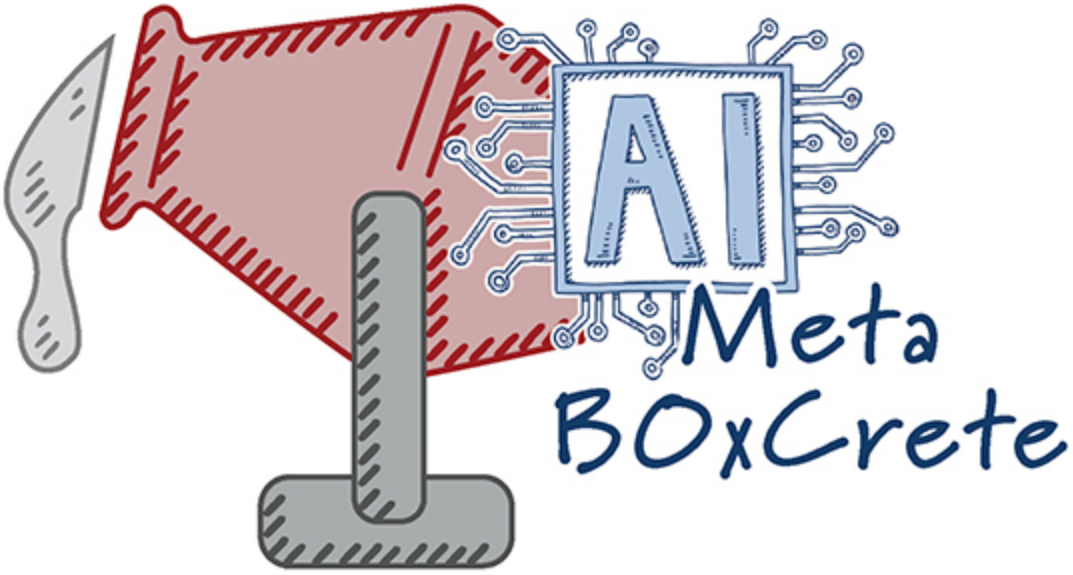
4. Meta pours AI into American concrete



AI is modernizing how America builds its core infrastructure. Meta **released** BOxCrete, an open-source AI model that helps American concrete producers design better mixes faster and reduce reliance on imported cement.

What to know:

- BOxCrete uses advanced statistical techniques to replace slow, trial-and-error lab methods with faster, data-driven mix design;
- At Meta's Rosemount, MN data center, an AI-optimized mix reached full structural strength 43% faster than the original formula while reducing cracking risk by nearly 10%; and
- Meta is releasing BOxCrete as an open source tool and dataset, accelerating adoption by researchers, software providers and concrete producers across the U.S. supply chain.

What's clear: The U.S. cement and concrete sector contributes more than $130 billion to the economy annually and supports roughly 600,000 jobs. Yet, imports still supply nearly one-quarter of domestic demand, a threefold increase in 15 years. AI tools like BOxCrete help American producers reduce import reliance by discovering mixes that utilize cheaper and higher-quality U.S.-made materials, strengthening domestic supply chains.

Plug in: Check out ClearPath's **blog** on why the Highway Bill is a critical opportunity to unleash American innovation in cement, concrete and infrastructure.

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5. ARPA-E to catalyze new chemicals and fuel manufacturing with AI

DOE is catalyzing the next generation of chemicals and fuels manufacturing by unleashing new AI capabilities. ARPA-E **announced** $34 million in awards available for innovators leveraging AI for chemicals and fuels production through the Catalytic Application Testing for Accelerated Learning Chemistries via High-throughput Experimentation and Modeling Efficiently (CATALCHEM-E) program.

These awards will:

- Decrease the time that labs need to discover and test new catalysts;
- Create new opportunities to use waste feedstocks like biomass and CO2 for chemical and fuel production; and
- Generate pathways for energy-efficient refining and chemical manufacturing in the U.S.

What's clear: CATALCHEM-E will demonstrate how AI could generate new competitive advantages for U.S. manufacturing, opening pathways for America to lead on next-generation chemical and fuel production technologies.

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6. 250 years of American energy innovation

As America celebrates its 250th anniversary, ClearPath is **highlighting** America's innovation story. From the earliest discoveries in electricity and steam power to modern nuclear, natural gas, advanced grid technologies and agriculture, American innovators have consistently pushed the boundaries of what's possible.

Great American Energy Innovators: Thomas Edison

- **1879** – Develops early electrical safety systems, helping protect circuits from overloads and failures.
- **1879** – Invented the light bulb, enabling safer living and working conditions and extending productive hours.
- **1882** – Launches Pearl Street Station, the first central power station and the foundation of the modern electric grid.

What's clear: Since Edison's days, America's grid has grown to become the world's largest machine with thousands of generation sources connected by transmission lines. Today, there is an opportunity to allow more generation projects to connect to the grid and let American energy move.

Plug in: For a full history of breakthrough technologies, click **here.**

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7. The Circuit

ClearPath's **Niko McMurray** was a panelist at The Economist's Nuclear Summit in London, discussing how nuclear energy can scale fast enough to reduce emissions.

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8. Coming down the pipeline

April 20, 6:30 PM to 8:30 PM, Washington, D.C. – **Niko McMurray** will speak on a panel, "A New Nuclear Renaissance," hosted by the **Harvard Club of Washington, DC**.

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9. ICYMI

- **XGS + CC Power sign 115 MW geothermal deal** – XGS Energy and California Community Power **signed** a Geothermal Exploration, Offtake, and

Development Engagement agreement to develop 115 MW of next-generation geothermal energy.

- **DOE backs domestic gallium production** – DOE's Office of Critical Minerals and Energy Innovation **announced** $5.4 million in awards for five projects to help establish a secure domestic supply chain for gallium, a key critical material used in semiconductors and defense applications. The U.S. has not produced gallium since 1987 and has no current domestic capacity.
- **DOE awards $14M for Pennsylvania enhanced geothermal project** – DOE's Office of Geothermal **selected** a $14 million project to convert an existing shale gas well for enhanced geothermal, piloting synergies between oil and gas infrastructure and geothermal in the eastern U.S.
- **Congress unlocks access for Northern Minnesota copper-nickel mine** – The Senate **passed** a resolution led by Rep. Pete Stauber (R-MN) under the Congressional Review Act to overturn a Biden administration **public land order** that limited mineral development in Minnesota.
- **Alaska's energy leadership means American energy independence** – This **op-ed** highlighting the benefits of investing in clean energy technologies caught our eye.
- **UK advances next-generation nuclea**r – The U.K. government **signed** a contract with Rolls-Royce SMR to begin development of small modular reactors, showing how allied countries are moving forward with next-generation nuclear power.

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10. Tune in: ClearPath x Political Climate

ClearPath has partnered with the Political Climate, "Washington's most influential energy policy podcast." Hosted by Julia Pyper, Brandon Hurlbut and former FERC Chairman Neil Chatterjee, the show brings together energy policy leaders for candid, in-depth discussions.

Stay ahead of the conversation shaping America's energy future with the latest episode of the Political Climate featuring Avery Ash, the CEO of SAFE **here**.

ClearPath believes America must lead the world in innovation over regulation… markets over mandates…providing affordable, reliable, clean energy.

That's all from us. Thanks for reading and have a great weekend!

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