

# Board of Trustees Update: November 2025

SER's Mission: To advance energy-driven economic development for Wyoming

### **SER Administration:**

- Holly Krutka will step down as SER Executive Director on Nov 21 and will be in a support role through Dec 10. A transition plan is being developed and will be presented to the ERC on Nov 21.
- SER held its budget hearing with Governor Gordon on 10/23/25.

#### **SER Academics:**

• SER and CEPS have completed their feasibility study for the Subsurface Energy Certificate and are ushering it through on campus approvals for the November BOT meeting.

## **SER Outreach:**

- The SER outreach team recently completed the following events:
  - 2025 Landscape Discussion on Energy Law and Policy in Rockies October 16, 2025 –
    over 150 people were in attendance
  - o Fall Distinguished Speaker Series includes speakers from USGS, INL, Navajo Transitional Energy Company, WSGS, HySpex.
  - The fall quarterly newsletter for the School of Energy Resources is forthcoming.

**SER Research:** The SER research program leads and supports a wide array of Wyoming-focused research programs to ultimately drive increased state revenue and graduate students with expertise important to Wyoming. The SER research program includes faculty staff and students across the university as well as internal to SER.

- The SER Center for Economic Geology Research (CEGR) has completed three geologic characterization wells in the Greater Green River Basin and met its 2025 in-state field objectives. These wells were drilled under the Department of Energy's (DOE) CarbonSAFE program, to support two separate projects being developed by Frontier Infrastructure Holdings and Williams Companies. The CarbonSAFE program is currently being evaluated under the new DOE leadership. It is currently unclear what this evaluation could mean to SER CarbonSAFE projects, but SER has already had one CarbonSAFE project (the HERO Basalt Carbon SAFE) paused due to the programmatic review and DOE shutdown.
- CEGR received a seed grant from RED via the NSF-funded Accelerating Research Transition Grant titled "Exploration of Potential Uses for Tailings, Byproducts, and Co-products in the Burgeoning Domestic Rare Earth Element Industry" which is a collaborative with industry partner Wyoming Rare (formerly American Rare Earths) to understand value-added uses for geologic resources at their Halleck Creek mine.

- The Mowry Project was recently highlighted in a dedicated session at the Rocky Mountain Section of American Association of Petroleum Geologists. The session was chaired by Tim Fischer, SER Oil and Gas Program Manager and featured eight presentations for UW faculty, researchers, and students.
- The Multidisciplinary Advanced Stimulation Laboratory (MASL) in the SI Building had the grand opening on October 10<sup>th</sup>.
- The Center for Carbon Capture and Conversion (CCCC) continues to work on demonstrating new uses for Wyoming coal, including the design and construction of a demonstration-scale coal refinery to develop coal-based products. Below is an update on the development of the coal refinery:
  - o Construction continues for the pyrolysis portion of the coal refinery field demonstration plant located at the Wyoming Innovation Center, in Gillette. The construction will complete all infrastructure for the pyrolysis portion of the coal refinery demonstration plant. The pyrolizer has a revised schedule for fabrication and will start in January of 2026 and aim for completion in May 2026. Below is a picture of the progress:



- o The solvent extraction team has made significant progress this fall with successful longer runs being done in the pilot plant. The filtration system is being modified to a more economical design. The engineering data from the pilot plant will be used for the detailed engineering design of the solvent extraction field demonstration plant. Detailed engineering for the solvent extraction portion of the field demonstration plant will commence in November.
- CCCC's Carbon Engineering research program progress has the following updates:
  - o Extraction and separation of critical minerals and rare earth elements (REE) using various "waste" streams from the coal refinery upstream processes.
  - O Using the graphitic material made from the pyrolysis process, the research team is looking to make graphite from Kemmerer coal. Previous research showed that the carbon content from GGRB coal was higher than coal from the PRB.
- The Energy Engagement, Leadership, and Careers Program (ELC) is beginning work on the third Social License for Wyoming's Energy Future study. With funding provided by both the Wyoming Energy Authority and SER, this replication study will follow the same methodology used in the first two studies but will include revised survey and interview questions to reflect up to date and relevant energy topics. Results across all three studies will be compared to provide valuable insights about how Wyoming residents' perspectives about energy have changed over time and in the context of changing energy landscapes and technologies.
- The Hydrogen Energy Research Center (H2ERC) is making good progress on the construction of the water treatment/hydrogen production unit at Echo Springs. The team is receiving bids for a

- desalination unit. Once the bids are processed, the team will start the final assembly of the modular unit.
- H2ERC's Hydrogen: Make, Move, Use or Store Phase II funding program continues to deliver:
  Gisella Mena is continuing her PhD work on hydrogen produced from Wyoming coal and waste shale gasification with promising preliminary results.

# **Enhanced Oil Recovery Institute (EORI):**

#### **EORI Overview**

- Since its creation in 2004, projects on which EORI has worked have returned over ten dollars for every dollar provided by the state. For a total investment between 2004 and June 2024 of \$53 million, EORI has generated tax revenue of \$558 million to the state and Wyoming citizens.
- The mission of EORI is to work collaboratively with the Wyoming oil and gas industry and provide technical expertise to minimize stranded oil reserves, extend field life, and add revenue to the State of Wyoming through additional taxes from incremental production.
- EORI, funded directly by the Wyoming State Legislature through the Enhanced Oil Recovery Commission (EORC Agency 070), is the only State institute exclusively focused on improving and enhancing oil recovery in Wyoming fields.

# **Team Development**

 An increase of \$558,802 for 2 additional staff members was included in the EORC FY27/28 Biennium Budget.

## **Project Highlights**

- EORI is currently collaborating with industry partners on 23 projects. Highlights include:
  - o Two CO<sub>2</sub>-EOR projects involving 6 fields
  - o One NGL-EOR project at Skull Creek Field
  - Two nitrogen-EOR projects
  - o One enriched Air-EOR project at Alpha Field

## **Professional and Community Engagement**

- EORI's Industry/Public forum, EOR Insights, continue quarterly
- The Enhanced Oil Recovery Commission (EORC) 3<sup>rd</sup> Quarter meeting was held on September 10, 2025, in Gillette. The EORC meeting was preceded by an EORI/Industry Meeting and a Legislative Luncheon for state legislators from NE Wyoming.