

# Board of Trustees Update: May 2025

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

## **SER Administration:**

- The first of four required annual Energy Resources Council 2025 meetings was held on April 11.
   During the meeting ERC authorized additional funds from exception funding to support the inflation recovery and other work for the coal pyrolysis demonstration in Campbell County.
- SER is facing several financial challenges, including:
  - Paused negotiations for successful proposals worth \$45 million in federal funding
  - Lack of a state supplemental budget in which SER had \$2.09 million included
  - Significant negative impact to philanthropic donor support of SER related to donor concerns with the recent CEPS dean removal
- While SER is facing financial challenges, we are confident that with current resources we can deliver on our mission in FY26. However, we will be less nimble in terms of faculty support than we have been in recent years.

#### **SER Academics:**

- HLC has fully approved the undergraduate and graduate SER/CEPS Nuclear Energy Science certificates.
- SER and CEPS submitted a NOI for a new proposed certificate in Subsurface Energy Undergraduate Certificate built on existing and planned courses

### **SER Outreach:**

- SER held its annual conference focused on land administration professionals with a record 190+ registrants
- SER Outreach is planning outreach events for the summer and fall, including both in-community events and on-campus events.
- Outreach is continuing work on the institution-wide website migration to update the SER site
  and is grateful that institutional marketing is flexible to help the new website meet SER's unique
  needs

**SER Research:** The SER research program leads and supports a wide array of Wyoming-focused research programs to drive increased state revenue and graduate students with expertise important to Wyoming.

• The SER Center for Economic Geology Research (CEGR) is completing the first deep well to characterize an area north of Granger, Wyoming for geological CO2 storage to support local trona and natural gas industries with industry partner Frontier Carbon Solutions. This is the deepest well ever drilled by the University and has reached a depth of >17,100'. This work is supported by a federal grant with state and industry matching funds.

- Center for Carbon Capture and Conversion (CCCC) continues to work on demonstrating new uses for Wyoming coal. Including:
  - Construction of the pyrolysis field demonstration plant at the Wyoming Innovation Center will continue once the spring weather hits Gillette and the ground has had a chance to thaw. The current startup date is December 2025, weather permitting. Detailed engineering for the pyrolysis portion is complete and the proposal for the final construction phase has been submitted. Detailed engineering for the solvent extraction portion of the field demonstration plant will commence in June 2025.
  - The solvent extraction team is continuing their shake-down efforts with the pilot plant in the Lutz building. The engineering data from the pilot plant will be used for the detailed engineering design of the solvent extraction field demonstration plant.
  - The coal char membrane team, led by Professor Jon Brant, is working to include gas separation in their research. The thought is to separate CO2 and H2 from any pyrolysis gas generated from the pyrolysis process.
- The Center for Energy Regulation and Policy Analysis (CERPA) continues to publish the monthly CREW Report that summarizes the monthly economic impacts of Wyoming's energy commodity markets.
- CERPA also published an "Issue Snapshot" on Wyoming's Leasing and Permitting Rules and Regulations for Natural (Geologic) Hydrogen Exploration and Production.
- CERPA monitored and developed a summary of the 2025 Legislative General Session.
- The Energy Engagement, Leadership and Careers (Energy ELC) is developing several engagement and workforce development programs including:
  - A Workforce Partner Map of Wyoming programs and organizations that are relevant to energy workforce development
  - The Critical Minerals Leadership Academy program that will convene a cohort of graduate students and early career professionals invested. We are planning a 2025 pilot version that will consist of approximately 8 days of lectures, workshops, and field excursions in Wyoming and will highlight conventional and unconventional critical mineral research and development.
  - o Partnering with the UW Science Initiative to develop K-12 teaching modules on uranium.

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

**EORI Mission:** Technical collaborative work directly with the oil and gas industry in the state. The Institute focuses on minimizing potentially stranded oil reserves and adding revenue to the state of Wyoming through additional taxes from increased production.

- Mr. Amitabh Garg was selected for the position of Senior Petroleum Engineer at EORI. He is a petroleum engineer with an extensive background in IOR and EOR processes, modeling and areas critical to EORI. He has an impressive work background with BP and other companies and will be a terrific addition to our team. His start date at EORI is July 1, 2025.
- EORI has recently released 3 new publications:

- The Enhanced Oil Recovery Institute Increasing Oil Recovery Through 20 Years of Collaborative Work with Wyoming Operators
  - Author: Dr. Eric Robertson, Roberson Solutions
  - This in-depth study and review of all EORI collaborative projects with industry between 2004 and June of 2024, provides a comprehensive evaluation and determination of the incremental production associated with industry/EORI collaborative projects and the tax value back to the State of Wyoming.
- A Review of the Wyoming Pipeline Corridor Initiative: Facilitating CO2-EOR in Wyoming
  - Author: Brian Jeffries, Commercial Pipeline Advisor, The Enhanced Oil Recovery Institute
  - This publication provides a detailed review and recounting of the history and development of the Wyoming Pipeline Corridor Initiative (WPCI)
- 20 Years of Collaborative Work with the Wyoming Oil and Gas Industry
  - Author: The Enhanced Oil Recovery Institute
  - This booklet outlines the history of EORC and EORI since 2004. EORI's value to the state included in this booklet is based on the more technical, in-depth report developed by Eric Robertson.
- All these presentations and reports are available on the EORI Web site: https://www.eoriwyoming.org/projects-resources/publications?layout=columns
- EORI is currently working 17+ Industry Collaborative projects including:
  - Field Development using 3 different EOR technologies
    - Enriched Air-EOR
    - NGL- EOR
    - CO<sub>2</sub>-EOR projects on 5 fields
  - o 2 Polymer-related projects in the Big Horn Basin
  - Developing brines for effective water-flooding in the Muddy formation
  - Regional studies involving over 10 Industry Partners
    - Geology
    - Reservoir
    - 3D Seismic
- **EOR** Insights
  - EOR Insights is a Platform for Interactive Industry Meetings or Quarterly events continue
    - The 1st Quarter 2025 EOR Insights was held on January 8, featuring Robert Downey who presented "CycleStim" technology with potential to improve recovery and production.
    - The 2nd Quarter meeting will be held on June 18 and will focus on the updated and improved EORI - WYRIT interactive reservoir tool