

Board of Trustees Update: Sept. 2024

SER's Mission: Energy-driven economic development for Wyoming

SER Administration:

- The Energy Resources Council met on August 22-23 and the next meeting will be the annual joint meeting with the Board of Trustees on November 22-23, 2024.

SER Academics:

- SER and CEPS jointly submitted the Nuclear Energy Science undergraduate and graduate certificate feasibility studies, which will go through various approval processes prior to BOT review.
- SER submitted the self-study for the required program review.

SER Outreach:

- Wyoming's Energy Future Symposium will take place on September 12 at the UW Conference Center with Governor Gordon as the keynote speaker. The free event co-sponsored by the Wold Foundation and SER will feature a student poster competition.
- SER and UW partners will host five individuals for the Fall Distinguished Speaker Series, with the first presentation occurring on September 13. These are free and open to UW faculty, staff, students and members of the community.
- In conjunction with the Energy Day football game, additional events are being scheduled for a broader 'Celebrate Energy Days', which will take place October 11-12 and is jointly organized by SER and CEPS. Friday activities will include a Distinguished Speaker presentation, tours at SER and the EERB, and joint reception in the EERB atrium. Saturday activities include booths in the IPF and the football game against San Diego State.

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 Department of Energy released full funding for two large-scale CO₂ storage demonstration projects under the CarbonSAFE program. One project, (Sweet Water Carbon Storage Hub) is in Uinta, Lincoln and Sweetwater counties and will provide carbon management options for regional mining and mineral industries. The other project (HERO Basalt) is in Oregon, in a region that uses Wyoming natural gas for power generation. This will result in a noticeable increase in UW's

research expenditure. SER is leading these projects with a combined total of approximately \$65 million.

- The School of Energy Resources has launched the Energy Engagement, Leadership, and Careers (Energy ELC) program to lead in community engagement and workforce development for energy research. The Energy ELC will engage with energy communities and foster a broad array of energy-related education initiatives, including for K-12, community college, undergraduate, graduate, early career, skilled, and professional levels.
- H2ERC (Hydrogen Energy Research Center) commenced work on a field pilot project to treat produced water and convert it into hydrogen using natural gas. The Steam Methane Reformer (SMR) unit has been procured through the Cheyenne-based company EPC.
- CCCC (Center for Carbon Capture and Conversion) has engaged Wood Sheridan to complete the detailed engineering and construction of the pyrolysis field demonstration unit. Concrete pads are to be poured in the fall with installation of equipment commencing the spring of 2025. The solvent extraction pilot plant construction is complete at the UW Lutz building. The team is waiting for the controls to be completed. The plan is to start up in late September or early October.
- CERPA (Center for Energy Regulation and Policy Analysis) recently published two new white papers: (1) *The History of Sage Grouse Management in Wyoming*; and (2) *Wyoming's Nuclear Supply Chain Opportunities and Challenges: Uranium Recovery*. The CERPA team continues to monitor the Joint Minerals Committee energy-related draft legislation and support SER's podcast, "Energy Frontier: The Wyoming Landscape".

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 severance taxes from increased production.

- The EORI Team
 - Rebuilding the EORI culture focused on our Mission, Team Unity and Collaboration
 - Paul Davis joined the EORI team as a Senior Geologist on August 1, 2024
 - We are in the process of hiring a Senior Petroleum Engineer
 - In addition, the EORC (Enhanced Oil Recovery Commission) is requesting a Budget Exception (Supplemental Budget) to fill 2 vacant positions that are critical for EORI.
- Focused Technical Project Work:
 - 3 DOE-funded projects are in their final budget periods and will be completed in 2025:
 - Unlocking the Tight Oil Reservoirs of the Powder River Basin
 - WY Trails Carbon Hub – CO₂ Pipeline Feed Study
 - Developing CO₂ – EOR and Associated Storage within the Residual Oil Zone Fairways of the Powder River Basin
 - Industry Collaborative Projects
 - Regional Minnelusa 3D Seismic project incorporating 8 fields and 6 industry partners.

- Two new CO₂ – EOR projects in Powder River Basin fields (Shannon and Frontier reservoirs) in Natrona and Converse counties.
 - Wyoming CO₂ Initiative – Pipeline Services at EORI
 - Completing a new, more comprehensive report on the Wyoming Pipeline Corridor Initiative.
 - Growing interest in using NGL's for improving oil production and EOR in Wyoming fields with 2 collaborative projects advancing at EORI.
 - Important advancements with the 3-Field Minnelusa CO₂ – EOR project with TR Operating southeast of Gillette. This will be the first new CO₂ – EOR project in Wyoming in 12 years with an anticipated start-up date of June 2026.
- Engagement
 - Ongoing improvements and enhancements to the EORI website which is a key outreach tool for the Institute widely used by industry and stakeholders.
 - Continued success with EOR Insights (Industry/Public meeting platform)
 - Last event on August 14th with WYOGCC Supervisor Tom Kropatsch
 - Next event scheduled for November 13th with Merit Energy and Polymer Technologies highlighting polymer work in the Big Horn Basin.
 - Nick Jones of EORI presented on the Salt Creek Field Residual Oil Zone project (Contango Oil and Gas) at the DOE project review meeting in Pittsburgh on August 6th.
 - Steve Whitaker of EORI will be presenting 2 papers on October 7, 2024, at the AAPG Rocky Mountain Section annual meeting in Park City, UT.