

Board of Trustees Update: May 2024

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

SER Administration:

- SER's legislative budget request (listed below with next steps) was funded in full
 - \$2 million increase in standard budget to increase personnel focused on rare earth elements, critical minerals, financial administration and outreach – 6 hires, including two tenure-track faculty in CEPS (one in Chemical and Biomedical Engineering and one TBD)
 - \$17 million for a solvent extraction demonstration to create Wyoming coal-derived asphalt binder in Campbell County – begin the detailed engineering, which requires a contract with BOT approval
 - \$2 million matching funds – working with the Foundation to secure non-state funds
 - \$2 million for continued nuclear energy capacity building across UW – present plan to ERC
- SER was recently informed about unexpected reversions of appropriations and is working to demonstrate the legal obligation of funds

SER Academics:

- SER and CEPS are actively working on our feasibility studies for our proposed nuclear certificates, although these will only be presented to the BOT if we are able to raise an endowment sufficient to support the execution of these certificates.
- SER is actively working on a Program Review, as requested by AA

SER Outreach:

- Completed the Rocky Mountain Professional Landman Conference – April 29, 2024
- Fall planning underway for distinguished speakers series, Energy Day coordination, and at least two conferences

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.

- CEGR (Center for Economic Geology Research) has hired an Oil and Gas Program Manager to oversee the Mowry Program and to help expand SER/University oil and gas research focus, and interagency collaboration with Wyoming state agencies, including Wyoming State Geological Survey (WSGS) and Wyoming Oil and Gas Commission (WOGCC), and strengthen collaboration with the Enhanced Oil Recovery Institute (EORI). The candidate will begin June 3rd.

- CEGR continues to expand collaborations with the Energy and Petroleum Department through the designation of shared laboratory space in the Energy Innovation Center’s Geotechnical Laboratory. Several new pieces of equipment to perform geomechanical experiments will be brought to the shared facility.
- CERPA (Center for Regulation and Policy Analysis) has provided support for SER to launch its podcast “Energy Frontier: The Wyoming Landscape”. The podcast is hosted by Executive Director Dr. Holly Krutka and new episodes can be heard every other Wednesday starting May 8th.
- CERPA continues to provide policy support to the Governor’s Office and the Wyoming Energy Authority on proposed rules while closely monitoring interim committees of the Wyoming Legislature.
- H2ERC (Hydrogen Energy Research Center) has commenced work on a field pilot project to clean-up produced water and convert it into hydrogen using natural gas. The field pilot is in collaboration with Los Alamos National Laboratories, Willims, and EPC. The project will run for two years and be field-tested in Carbon County.
- CCCC (Center for Carbon Capture and Conversion) and Western Research Institute (WRI) continue to advance solvent extraction research, scale-up and engineering design – this process is used to convert Wyoming coal into asphalt binder. The solvent extraction pilot plant construction is almost complete at the UW Lutz. This will allow the team to provide much needed testing quantities for potential industrial partners in both the roofing and paving industries.
- NERC (Nuclear Energy Research Center) was selected to host the 2024 Nuclear Innovation Bootcamp in Laramie this summer, hosting international nuclear professionals
- CEPWM (Center of Excellence for Produced Water Management) recently deployed an integrated magnetic carbon membrane-based desalination system at the City of Laramie’ wastewater treatment plant

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.

- Focused Technical Work:
 - 3 DOE Funded Projects
 - 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
 - Current Industry Collaborative Projects
 - Skull Creek Field (Muddy, Powder River Basin) - NGL EOR project
 - Polymer Pilot Project in the Big Horn Basin with Merit Energy
 - Microbial EOR Project with Amplify Energy at Wertz Field in the Greater Green River Basin
 - Regional Minnelusa 3D Seismic project with 6 industry partners.
- Staff and Hiring
 - Completed hiring 1 of 2 Sr. Geologist positions
 - Will look to hire a new Senior Petroleum Engineer

- Completed filling the Deputy Director position
- Legislative Engagement
 - Director Whitman and Commercial Pipeline Advisor, Brian Jeffries are presenting an update on the Wyoming Pipeline Corridor Initiative for the Joint Minerals Interim Committee meeting on May 10, 2024, in Laramie