

## *Board of Trustees Update: November 2023*

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

### **SER Academics:**

- SER and CEPS submitted two Notices of Intent (NOIs) Nuclear Energy Certificates at the undergraduate and graduate levels (to be reviewed by the BOT at the Nov meeting)
- The University of Wyoming announced a major gift from NextEra Energy Resources, LLC to support the growing Professional Land Management (PLM) program in the School of Energy Resources (SER).

### **SER Outreach:**

- Hosting Best Selling Author of “Fossil Future” Alex Epstein on November 30 in the EERB Atrium (collaborative effort between SER and CEPS)

### **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.

- SER is partnering with UW's Department of Civil, Architectural Engineering, and Construction Management and Western Wyoming Community College to examine the technical, economic, environmental and social challenges related to hydrogen production using heat and electricity from derived nuclear power.
- CCUS research in Wyoming continues. SER Research staff attended and provided educational support to the Wyoming Department of Environmental Quality for the first public hearing in Rock Springs for Class VI wells. Class VI wells are used for the injection of CO<sub>2</sub>.
- CERPA (Center for Regulation and Policy Analysis) in collaboration with other SER centers published the following white papers: (1) “Hydrogen Production with CCS Opportunities”; and (2) “Interstate and Federal Pore Space Challenges for CCUS Deployment”.
- CERPA continues to provide policy support to the Governor's Office and the Wyoming Energy Authority on proposed rules related to BLM oil and gas leasing, the Council on Environmental Quality's efforts to reform the National Environmental Policy Act, the Rock Springs BLM RMP/EIS (comment deadline extended to January 17, 2024) and other issues critical to Wyoming energy development.
- Wyoming Integrated Test Center near Gillette, WY: Japan Carbon Frontier Organization (JCOAL) and its partner, Kawasaki Heavy Industries (KHI), held a ceremony at the Integrated Test Center to mark the construction completion of their solid sorbent capture technology.
- H2ERC facilitated the submission of two proposals to ARPA-E on geologic Hydrogen production: (1) Engineering Subsurface Hydrogen Reservoirs with Laponite® Suspensions – led by Dr. Saman

Aryana of the Department of Chemical and Biomedical Engineering at UW; (2) Sustainable H<sub>2</sub> Production from Abiotic Catalyst-enhanced Stimulation of Iron-rich Rocks – led by the University of Texas at Austin where the H<sub>2</sub>ERC is a subcontractor.

- CCCC (Center for Carbon Capture and Conversion) along with Western Research Institute (WRI) continue to move forward with the solvent extraction research, scale-up and engineering design. The larger Solvent Extraction pilot plant is being constructed at the Lutz building on UW campus. This will allow the team to provide much needed testing quantities for potential industrial partners in both the roofing and paving industries.
- The fast pyrolysis field demonstration plant in Gillette is moving forward. CCCC is working with Wood to procure several large pieces of equipment with long lead times.

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

EORI Mission: The mission of EORI is technical collaborative work directly with the oil and gas industry in the State. Our focus is minimizing potentially stranded oil reserves and adding revenue to the State of Wyoming through additional severance taxes from increased production.

- Currently leading 9 collaborative projects with industry partners in Wyoming basins.
- Launched a new Cost-Share RFP (Request for Proposal) focused on improving oil recovery in Wyoming fields. Proposals are due by December 15th, and we anticipate awarding 3 projects with total EORI funding of approximately \$300,000.
- Community and Industry Engagement
  - EOR Insights (Platform for Interactive Industry Meetings) continues quarterly.
    - Latest event held on November 15, 2023, with Rob Creager, Executive Director of the Wyoming Energy Authority
  - In the final steps before releasing our updated interactive Wyoming Reservoir Information Tool (WYRIT II), which provides users access to reservoir information and data for Wyoming fields and reservoirs.
  - Upcoming presentations at the SPE (Society of Petroleum Engineers)/WGA (Wyoming Geological Association) at their December and January meetings in Casper and at the 28th Annual CO<sub>2</sub> Conference in Midland, TX in December.