

School of Energy Resources Update  
March 23, 2022

1. SER Academics program update:
  - a. SER has recently emphasized increasing enrollment in its academic program and is now seeing results. For example, for the following Fall, in January 2021 SER had 3 admitted students, while in March 2022 SER has 17 admitted students.
  - b. SER and the College of Law have submitted the quick start proposal for a 3+3 program in which students could earn a BS in Energy Resource Management and Development and a Juris Doctorate in six years. In addition to being a recruiting tool, this program may help retain top-performing students interested in attending law school.
  - c. SER, CANR, and Haub are collaboratively progressing a notice of intent for an undergraduate certificate in land administration.
  - d. SER and CEAS are advancing a notice of intent to collaborate on an undergraduate certificate in carbon capture storage and utilization and storage.
2. SER is in the process of hiring several research staff positions, many of which are soft funded. It is currently challenging to hire and retain entry-level researchers.
3. SER has officially launched two new Centers of Excellence.
  - a. The Hydrogen Energy Research Center welcomed the arrival of its new director. In addition to the research projects already in house, this center will support the state of Wyoming in its bid with other states to apply for a hydrogen hub funded by the Infrastructure Investment and Jobs Act (IIJA).
  - b. The Nuclear Energy Research Center is charged with organizing campus efforts on nuclear energy and to catalyze overall capacity building. To that end, NERC has announced two opportunities to incentive faculty and student nuclear research this spring. The first, is designed to encourage researchers to submit competitive research grants, and the second provides summer research funding for graduate assistants in master's, doctoral, MBA or law degree-level programs. In addition, SER has been collaborating with Idaho National Lab to identify internship opportunities for UW students.
4. SER's Center for Economic Geology Research (CEGR) continues its research on carbon storage, hydrogen and critical minerals research. Select highlights include:
  - a. In SER's flagship CO<sub>2</sub> storage project, the Wyoming CarbonSAFE project, two wells have been completed to Class VI standards (the type of wells required for CO<sub>2</sub> injection). These are the first wells completed to Class VI standards in Wyoming. The next steps in the project are to complete interference testing using the two wells. In addition, the team is designing and permitting, but not constructing, all the wells necessary for a commercial-scale CO<sub>2</sub> storage project (at least 2 million tons of CO<sub>2</sub> per year and a total of at least 50 million tons).
  - b. The CORE-CM projects, which are focused on building new industries in carbon ore, rare earths and critical minerals in the Powder River Basin and the Greater Green River Basin, held stakeholder meetings, with over 100 entities involved in those projects.

5. SER's Center of Excellence for Carbon Capture & Conversion (CCCC) continues to progress research and technology development associated with the future of Wyoming coal.
  - a. SER is working with the UW legal team to prepare a contract for field demonstration construction of a coal refinery, which will require approval from the BOT.
  - b. The coal-derived building products demonstration house is now under construction in close proximity to the High Bay Research Facility (HBRF), where the civil engineering students are preparing the materials.
  
6. The Center for Energy Regulation and Policy Analysis (CERPA)
  - a. A paper on the global rare earth element industry is now available on SER's website.
  - b. CERPA staff completed a survey on Wyoming residents' perspectives on various forms of energy production and that study is also available on SER's website. The survey was part of the DOE-funded Intermountain West Energy Sustainability & Transitions (I-WEST) initiative.
  
7. The 3D Visualization Center
  - a. Kyle Summerfield has taken over as acting manager of the 3D Viz Center with the departure of Emma Jane Alexander. SER will continue to work with stakeholders across campus, especially those focused on digital innovation, to ensure the Viz Center is well integrated.