

# Deal looks to widen state's research for CO2 capture

## Center for Carbon Removal proposes incubator system

CHEYENNE — Wyoming officials are teaming up with a California-based institute to help researchers discover new ways to use coal so that it doesn't contribute to climate change.

The Wyoming Infrastructure Authority and Oakland, California-based Center for Carbon Removal will work together to solicit new research into removing and making use of greenhouse gases from power plant emissions, the agency and institute announced Friday in Jackson.

The Infrastructure Authority is pledging \$250,000 toward research in cooperation with the center's Carbon Recycling Labs project. The money will be awarded after others have contributed \$1 million for those projects, authority Director Jason Begger said.

"It really is kind of a business incubator network for these projects. And perhaps the greatest thing that this partnership gives us is access to both financial and intellectual capital outside Wyoming," Begger said. "It is sort of the thought leaders in this carbon recycling effort coming together to say, 'OK, what do we need to do to make these things a reality?'"

The Integrated Test Center being built at the Dry Ford Station power plant north of Gillette is perfect partner for the center's research incubator plan, said Miriam Swaffer, spokeswoman for the Center for Carbon Removal.

"The opportunity there is ... this may be complimentary in developing some of these industries that are in different levels of development," she said. "We and government

are so excited to bring these new technologies and to test them out is a real attraction for us. We're real interested in how do we create the next economy and mitigate climate change."

Wyoming produces more coal than any other state. But coal-fired power is under growing scrutiny as a major source of greenhouse gases that contribute to climate change. Coal, meanwhile, faces tough competition from cheaper and cleaner-burning natural gas as fuel source for electrical generation.

Wyoming's coal producers suffered their worst year in decades in 2016, laying off hundreds of workers and grinding through three major bankruptcy reorganizations. The downturn also has dealt a blow to Wyoming's state government, contributing to looming annual K-12 education spending shortfall of about \$250 million.

The infrastructure authority already is a partner in a lab being built at a Gillette-area power plant where researchers will test ways to capture and possibly use carbon dioxide from the flue stream. The Integrated Test Center will host part the \$20 million NRG COSIA Carbon XPRIZE, a contest to put carbon dioxide from coal and gas-fired power plants to profitable use. Twenty-seven teams from six countries have advanced to the second round of competition.

Teams will try out their ideas at the center at Basin Electric's Dry Fork Station during the contest's third round, scheduled to begin in February.

The Wyoming Infrastructure Authority's partnership with the Center for Carbon Removal will encourage research at the University of Wyoming, a planned carbon products research center in Gillette and the Integrated Test Center, where the XPRIZE contest is scheduled to conclude in 2020.

The Center for Carbon Removal, begun in 2015, is a nonprofit working to encourage a variety of approaches to curtailing climate change. "Wyoming is building the

infrastructure to position itself as an engineering and corporate leader in the emerging carbon conversion industry,” center Director Noah Deich said in a news release.

In addition to the incubator, the center also has an interest in seeing those potential new carbon industries bolster and diversify Wyoming’s economy, Swaffer said.

“How do we bring jobs to coal states like Wyoming?” she said. “At the end of the day (all involved) are really interested in solving climate change. The reason this all works together is it provides a tax credit to companies that capture and use carbon emissions.”

Whether you’re a believer in climate change or not, the end goal is capture carbon dioxide emissions and repurpose that CO<sub>2</sub> into other clean, profitable products, Swaffer said.

“We really see this as there is no way to meet our goals set forth in the Paris Agreement and what the international and U.S. has committed to if we don’t figure out how to economically capture and reuse CO<sub>2</sub>,” she said.