

CARBON CAPTURE UTILIZATION AND SEQUESTRATION (CCUS)

CARBON MANAGEMENT LEADER

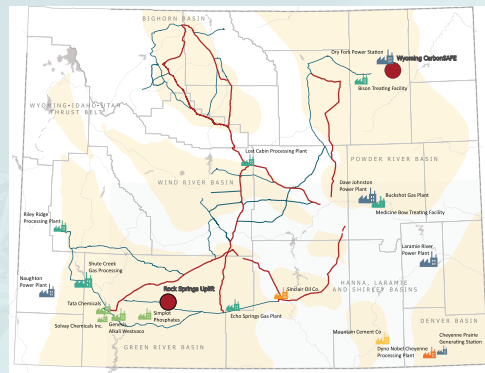
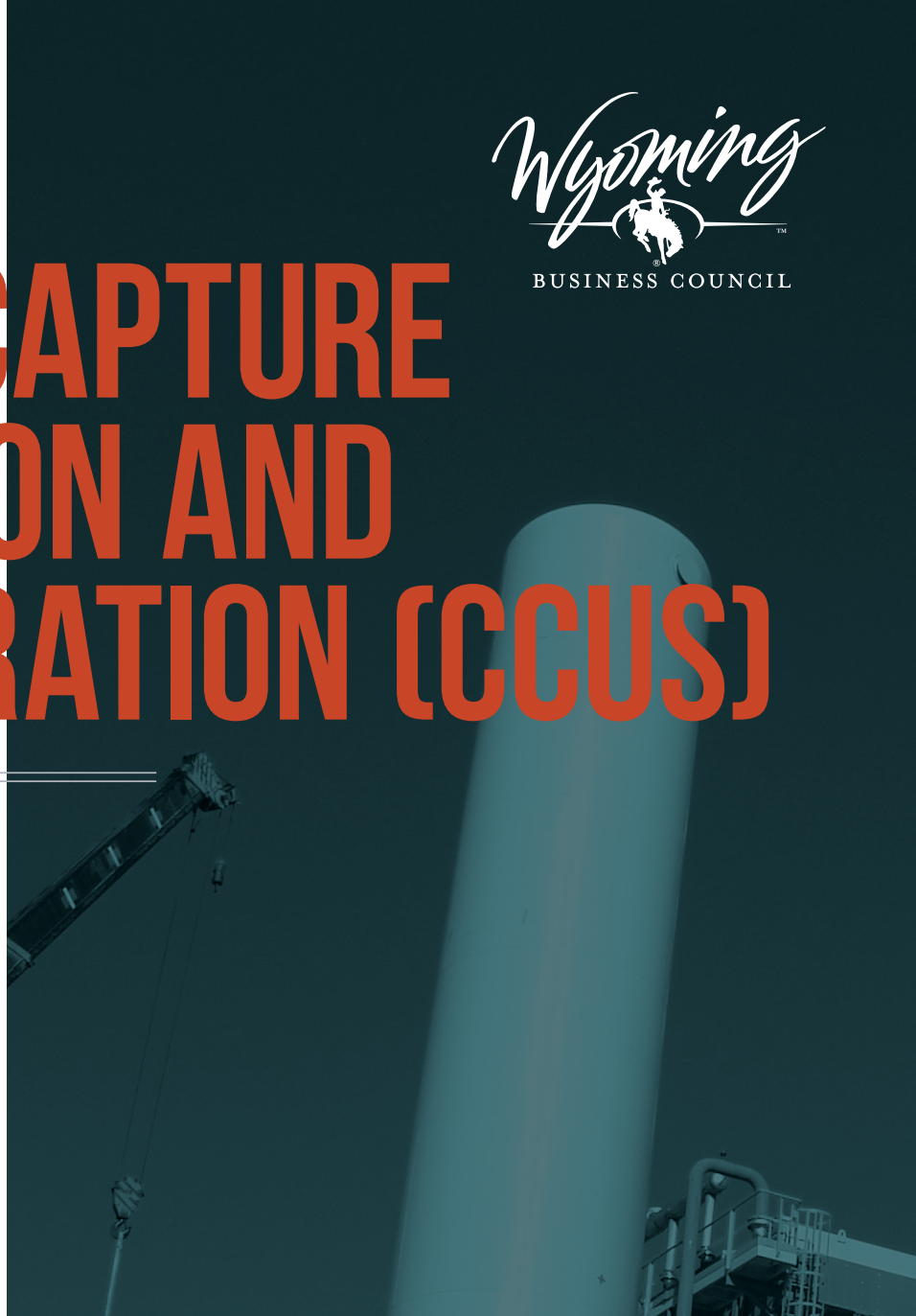
With an abundance of natural resources, Wyoming is known as the “Energy State,” and for good reason. Wyoming consistently ranks high in traditional, emerging, and renewable energy sources.

BUSINESS ENVIRONMENT

Wyoming has been a leader in energy for more than 100 years and is home to a highly-skilled, well-trained workforce with a high energy IQ. Wyoming knows what it takes to support major energy projects, and the state has a history as the nation’s leader on energy issues.

POTENTIAL

With the existing pipelines for transporting, using, and storing CO₂ in place, Wyoming is ready for continued CCUS development. The Wyoming Pipeline Corridor Initiative allocated corridors for the future use of pipelines associated with CCUS. Approximately 2,000 miles of pipeline corridors throughout Wyoming have been identified as essential. In terms of sequestration, Wyoming has Class VI wells primacy for CO₂ injection and geological formations suited for sequestration. The Enhanced Oil Recovery Institute has in-depth mapping demonstrating the potential for CCUS.



CO₂ SOURCES

INDUSTRY TYPE SIZED BY CAPTURABLE CO₂

- Power Plants
- Gas Processing
- Trona
- Cement Processing
- Refinery
- Chemical Manufacturing
- CO₂ Storage Projects

WYOMING PIPELINE CORRIDOR INITIATIVE

- Lateral Line
- Trunk Line
- Geologic Storage

The Wyoming Pipeline Corridor Initiative (WPCI) aims to establish corridors on public lands dedicated for future use of pipelines associated with carbon capture, utilization and storage (CCUS), enhanced oil recovery (EOR) and delivery of associated petroleum products.





A FUTURE FOR CCUS IN WYOMING

WYOMING CARBONSAFE PROJECT

Wyoming CarbonSAFE is focused on investigating the feasibility of practical, secure, permanent geologic storage of carbon dioxide (CO₂) emissions from coal-based electricity generation facilities near Gillette, Wyoming. The study will include the collection of data from these formations and will also investigate regulatory and business issues related to implementing a CO₂ storage site in the region.

EXXONMOBIL

The company plans to expand existing carbon capture and storage operations at its LaBarge, Wyoming facility, which has already captured more CO₂ than any other facility in the world. The expansion project will capture up to 1 million metric tons of CO₂, in addition to the 6-7 million metric tons already captured each year.

INTEGRATED TEST CENTER

One of the only such facilities in the world and the largest in the U.S., the Integrated Test Center provides space for researchers to test Carbon Capture, Utilization and Sequestration (CCUS) technologies using 20 MW of actual coal-based flue gas at the Basin Electric facility. Along with testing capture technologies, additional research looks at taking flue gas and turning it into a marketable commodity. The ITC is one of the few research and testing facilities at an operating coal-fired power plant, allowing for real-world testing at an active power plant, alleviating typical concerns over being able to transfer technology from a lab to a plant.

SUPPORTED INDUSTRY RESEARCH & TRAINING PROGRAMS

UNIVERSITY OF WYOMING SCHOOL OF ENERGY RESOURCE'S CENTER FOR ECONOMIC GEOLOGY RESEARCH (CEGR)

CEGR research scientists actively collaborate with industry, the state of Wyoming, local governments, and national laboratories to characterize Wyoming's vast subsurface resources for carbon dioxide sequestration, oil and gas recovery, and mineral extraction.

FOR MORE INFORMATION

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