



PUBLIC SUMMARY

Carbon GeoCapture, Black Hills Energy, and Black & Veatch are partnering to demonstrate how low-cost, low-carbon intensity dispatchable power can now be produced using Wyoming coal-fired and natural gas-fired power plants. This effort involves working with unmineable coal seams to naturally filter carbon dioxide from power plant flue gases, reducing significantly the cost of carbon capture, use and storage for those power plants.

CGC has modernized and commercialized the approach, enabling for the first time cost-effective carbon management for power plants and providing a viable and sustainable path to meet the fast-growing power needs of data center, residential and industrial users.

This project has been underway since 2022 and significant funds have been invested to date. In the proposed work, the partners will establish an ongoing test bed at the Neil Simpson Complex to support full scale deployment of the approach at that facility and to demonstrate the same potential for power plants serving data centers in southeast Wyoming.

The potential impacts of the project are significant:

- Demonstration of a paradigm shift in the power industry's ability to supply low cost, low carbon dispatchable power,
- Utilization of 213 gigatons of carbon dioxide sink capacity in Wyoming coals, representing \$308 billion in surface and pore space use payments, and
- Production of 360 trillion cubic feet of natural gas stranded in Wyoming coals, representing \$100 billion in payments to minerals owners and the State and 10,000+ gigawatts of potential power.

Success in this project will catalyze Wyoming's transition to a more sustainable future and lead the world in showing how that transition can be made gracefully and pragmatically.

The test bed will cost \$9,900,000 to establish. Black Hills Energy has agreed to provide \$4,950,000 of that budget, and the partners are seeking matching funds from the WEA EMF program.