CHARLES D. GORECKI

CEO

Energy & Environmental Research Center (EERC), University of North Dakota (UND) 15 North 23rd Street, Stop 9018, Grand Forks, North Dakota 58202-9018 USA 701.777.5355 (phone), 701.777.5181 (fax), cgorecki@undeerc.org

Charles D. Gorecki is CEO of the Energy & Environmental Research Center (EERC), where he leads a multidisciplinary science, engineering, and support team of over 280 people who focus on research and development (R&D) leading to demonstration and commercialization of innovative energy and environmental technologies. Mr. Gorecki oversees efforts to address these issues through strategic initiatives including carbon capture, utilization, and storage (CCUS); oil and gas technologies; hydrogen; energy and water sustainability; and rare-earth elements and critical minerals research.

Prior to his current position, Mr. Gorecki served as Director of Subsurface R&D at the EERC, where he was responsible for developing and managing programs and projects focused on conventional, unconventional, and enhanced oil and gas production; geologic storage of CO₂; geothermal; and other energy and environmental research. In this role, he served as Program Manager for the Plains CO₂ Reduction Partnership and the Bakken Production Optimization Program, two major collaborative industry–government programs.

Mr. Gorecki holds an M.Eng. degree in Petroleum Engineering and a B.S. degree in Geological Engineering from the University of North Dakota. He has authored and coauthored numerous papers and given presentations on a variety of topics in the United States and throughout the world.

ABSTRACT Updates on Integrated Carbon, Utilization, and Storage Projects in North Dakota Charles D. Gorecki

This presentation will provide an update on the carbon capture, utilization, and storage (CCUS) work in the Plains CO₂ Reduction (PCOR) Partnership region within North America. Over the past 20 years, the Energy & Environmental Research Center (EERC) at the University of North Dakota has been working to understand the potential for CCUS in the central interior of North America. Today, we are seeing the results of these efforts, with the first wave of incentivedriven, commercial CCUS projects being developed and initiated in our region. Much of this recent activity has been focused in North Dakota because of a combination of great geology, primacy to regulate CO₂ injection, federal tax credits and other incentives, and comprehensive laws related to long-term liability of injected CO₂ and pore space ownership. These strategic advantages will be presented along with an update on several CCUS projects in North Dakota, including the Red Trail Energy (RTE) carbon capture and storage (CCS) project. RTE began commercial CO₂ injection on June 16, 2022, and is also the site of a research collaboration between the EERC, RTE, the Research Institute of Innovative Technology for the Earth, and the U.S. Department of Energy National Energy Technology Laboratory to develop the next generation of cost-efficient long-term monitoring tools and validate them against established methods for monitoring CCS.