

# PCOR PARTNERSHIP ATLAS

6TH EDITION | 2021

Making Safe, Practical Carbon Capture, Utilization, and Storage Projects a Reality





# PCOR Partnership ATLAS

*6th Edition | 2021*

*Compiled and Created by*

Wes Peck, Assistant Director for Subsurface Strategies  
Earl Battle, Graphic Designer  
Kari Suedel, Senior Digital Media Specialist and Photographer  
Kyle Glazewski, Senior Analyst, Data/GIS Team Lead

*PCOR Partnership Management*

Kevin Connors, Assistant Director for Regulatory Compliance and Energy Policy  
James Sorensen, Director of Subsurface R&D  
John Hamling, Director of Subsurface Initiatives  
Charles Gorecki, CEO  
Ed Steadman, Vice President for Research  
John Harju, Vice President for Strategic Partnerships

*Published by the*

Energy & Environmental Research Center (EERC)  
2021

The PCOR Partnership is a group of public and private stakeholders working together to enable deployment of carbon capture, utilization, and storage (CCUS) of CO<sub>2</sub> emissions from stationary sources in the upper Great Plains and northwestern regions of North America. The PCOR Partnership is led by the EERC at the University of North Dakota with support from the University of Wyoming and the University of Alaska Fairbanks and is one of four competitive awards by the U.S. Department of Energy National Energy Technology Laboratory under the Regional Initiative to Accelerate CCUS.



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*Printed in the United States of America and available from:*

*Energy & Environmental Research Center (EERC)  
Grand Forks, ND 58202*

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# ACKNOWLEDGMENTS

This atlas was made possible through the contributions and efforts of numerous groups from throughout the United States and Canada. We acknowledge the PCOR Partnership partners for their efforts in providing much of the information used for the assessments and for cooperating with us in producing a regional portfolio for public use. We also extend our appreciation to the various federal, state, and private organizations and university groups for their cooperation in our search for data.

Several members of the PCOR Partnership research team from the EERC provided valuable input to this effort through the production of technical publications, presentations, and outreach materials. This body of work provided the foundation from which this atlas was created.

The following EERC staff focused on the execution of PCOR Partnership efforts in 2019–2021. This atlas was possible because of their creative energy and collective efforts:

Heather Altepeter, Scott Ayash, Nicholas Azzolina, César Barajas-Olalde, Matthew Belobraydic, Nicholas Bosshart, Barry Botnen, Aldjia Boualam Djezzar, John Brunner, Shaughn Burnison, Matthew Burton-Kelly, Brock Callina, Kevin Connors, Charlene Crocker, Janet Crossland, Chantsalmaa Dalkhaa, Sofiane Djezzar, Thomas Doll, Neil Dotzenrod, Janelle Ensrud, Carrie Fagerland, Ian Feole, Zahra Finnigan, Kyle Glazewski, Charles Gorecki, John Hamling, John Harju, Jun He, Loreal Heebink, Erin Hoffert, Lonny Jacobson, Melanie Jensen, Tao Jiang, Lu Jin, Nicholas Kalenze, John Kay, Ryan Klapperich, Scott Klara, Stacy Kouba, Justin Kovacevich, Jason Laumb, Remington Leger, Kerryanne Leroux, Jacob Loing, Nessa Mahmood, Michelle Manthei, Nicole Massmann, Thomas McGuire, Colin McNabb-Seidl, Austin McRae, Jake Meyer, David Nakles, John Oleksik, Samantha Olson, Wesley Peck, Lawrence Pekot, Joshua Regorrah, Trevor Richards, Wayne Rowe, Arellys Salazar Hernandez, Steven Schlasner, Kari Schmidt, Rhonda Shirek, Steven Smith, James Sorensen, Nicholas Stanislawski, Edward Steadman, Catherine Stevens, Joshua Strege, Kari Suedel, Meghan Taunton, Merry Tesfu, Michael Warmack, Neil Wildgust, Cody Williamson, Jib Wilson, Xue Yu, and Agustinus Zandy.

This material is based upon work supported by the U.S. Department of Energy National Energy Technology Laboratory under Award No. DE-FE0031838.



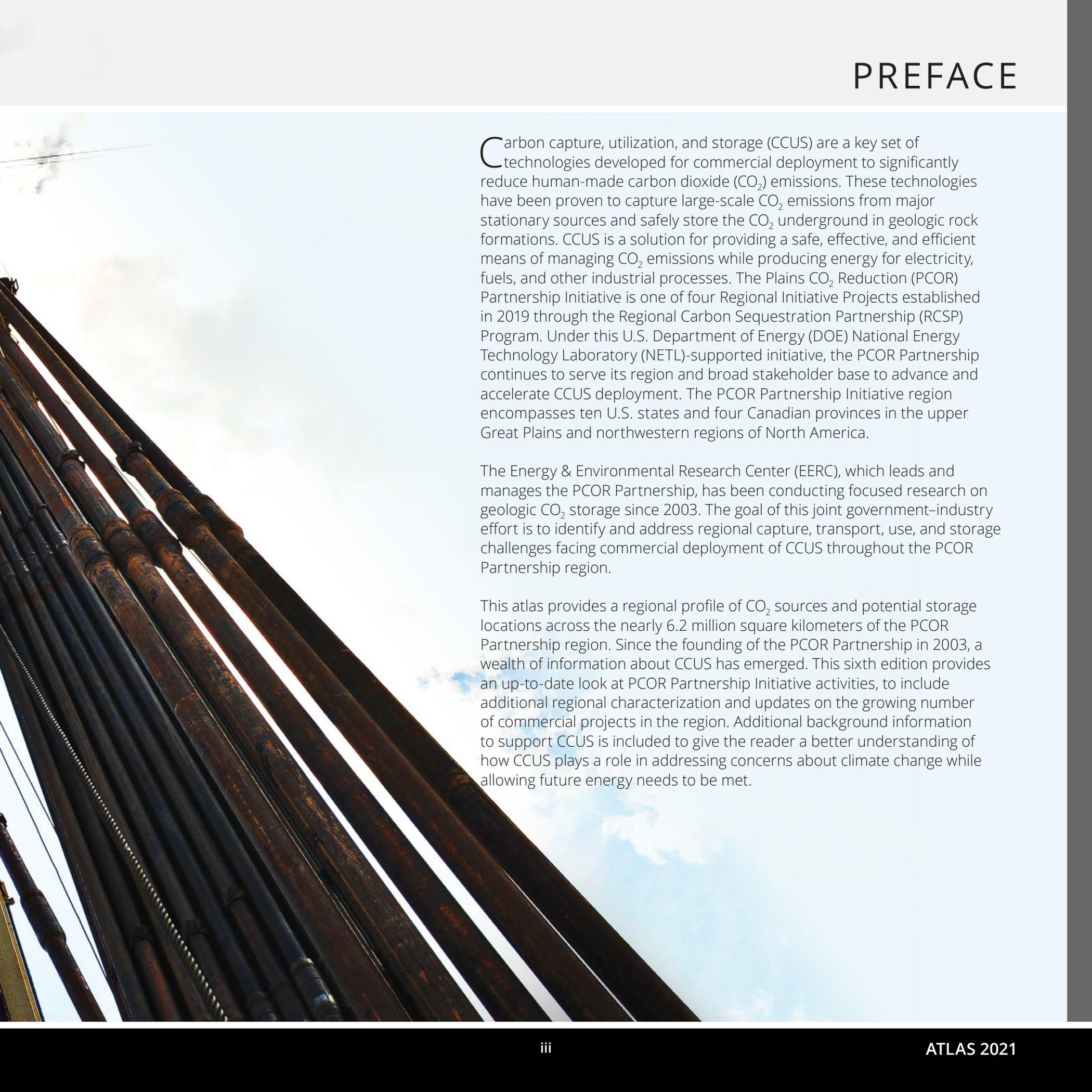
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# PREFACE



Carbon capture, utilization, and storage (CCUS) are a key set of technologies developed for commercial deployment to significantly reduce human-made carbon dioxide (CO<sub>2</sub>) emissions. These technologies have been proven to capture large-scale CO<sub>2</sub> emissions from major stationary sources and safely store the CO<sub>2</sub> underground in geologic rock formations. CCUS is a solution for providing a safe, effective, and efficient means of managing CO<sub>2</sub> emissions while producing energy for electricity, fuels, and other industrial processes. The Plains CO<sub>2</sub> Reduction (PCOR) Partnership Initiative is one of four Regional Initiative Projects established in 2019 through the Regional Carbon Sequestration Partnership (RCSP) Program. Under this U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL)-supported initiative, the PCOR Partnership continues to serve its region and broad stakeholder base to advance and accelerate CCUS deployment. The PCOR Partnership Initiative region encompasses ten U.S. states and four Canadian provinces in the upper Great Plains and northwestern regions of North America.

The Energy & Environmental Research Center (EERC), which leads and manages the PCOR Partnership, has been conducting focused research on geologic CO<sub>2</sub> storage since 2003. The goal of this joint government-industry effort is to identify and address regional capture, transport, use, and storage challenges facing commercial deployment of CCUS throughout the PCOR Partnership region.

This atlas provides a regional profile of CO<sub>2</sub> sources and potential storage locations across the nearly 6.2 million square kilometers of the PCOR Partnership region. Since the founding of the PCOR Partnership in 2003, a wealth of information about CCUS has emerged. This sixth edition provides an up-to-date look at PCOR Partnership Initiative activities, to include additional regional characterization and updates on the growing number of commercial projects in the region. Additional background information to support CCUS is included to give the reader a better understanding of how CCUS plays a role in addressing concerns about climate change while allowing future energy needs to be met.