NORTH DAKOTA IS A GREAT PLACE FOR CCUS

CARBON CAPTURE, UTILIZATION, AND STORAGE (CCUS) ADDRESSES AN ENVIRONMENTAL CHALLENGE, AND NORTH DAKOTA IS A GREAT PLACE TO DO IT.

Scientists are concerned that increased greenhouse gases from human activities are contributing to climate change.

Carbon dioxide from North Dakota’s energy development and consumption is one of those greenhouse gases.

CCUS reduces CO₂ emissions from large, stationary sources.

WHAT IS CCUS?

Carbon capture, utilization, and storage is a method of significantly reducing CO₂ emissions to the atmosphere.

1. CAPTURE
   CO₂ at the source (instead of releasing it into the atmosphere)

2. TRANSPORT
   the CO₂ to an injection site (usually by pipeline)

3. STORE
   the CO₂ permanently in geologic layers thousands of feet underground

WHY NORTH DAKOTA IS A GREAT PLACE FOR CCUS!

- **Multiple large sources of carbon dioxide emissions that are important to the economy and quality of life in a variety of ways**
- **These CO₂ sources include various industrial plants:**
  - Agricultural processing (ethanol)
  - Coal-based facilities (electrical generation, gasification)
  - Produce energy
  - Provide economic benefits like jobs
THE RIGHT GEOLOGY FOR SAFE, PERMANENT STORAGE IN DEEP, DEEP ROCK LAYERS

STABLE GEOLOGY
✓ Very low risk for seismic events

CAP ROCKS
✓ Impermeable rocks prevent salty water and CO₂ from leaving the injection zone

INJECTION ZONES
✓ Porous rocks containing salty water
✓ Older oil fields that might use CO₂ to produce more oil while permanently storing CO₂
✓ North Dakota's potential injection zones are large enough to hold all the CO₂ from coal-based energy facilities

CO₂ SOURCES LOCATED NEAR POTENTIAL PERMANENT STORAGE SITES

THE RIGHT REGULATORY, INDUSTRY, AND POLICY ENVIRONMENT
✓ Structure to oversee safe, permanent CO₂ injection and storage
✓ Authority to regulate CO₂ injection wells
✓ Long-term liability laws for the permanently stored CO₂
✓ State regulatory agencies familiar with the state's subsurface geology
✓ Experience with CO₂ pipelines

SUPPORT THE DEVELOPMENT OF CCUS IN NORTH DAKOTA AS A CLEAN ENERGY STRATEGY.
LEARN MORE AT UNDEERC.ORG