

## Case Studies of State Regulatory and Legal Treatment of Carbon Dioxide (CO<sub>2</sub>) Injection and Other Analogs

A national regulatory framework for siting and managing carbon capture and sequestration (CCS) projects in the U.S. has yet to be established. Many states, however, do have experience governing the underground injection of CO<sub>2</sub> for enhanced oil recovery, or storage of natural gas. The matrix below was developed to provide snapshots of different experience and legislation in selected states including California, Illinois, Indiana, Kentucky, Michigan, Texas, and Wyoming. Existing regulations and liability precedents may be important to consider when siting CCS projects, and these case studies show the wide range of treatment that these analogs receive from state to state. Looking at the diversity of regulatory considerations in just these seven states illustrates the potential challenges of siting CCS projects across the U.S. However, the matrix also shows some similarities among how states treat these issues, and will help inform the emerging process for the development of future frameworks or regulations.

The following areas/issues were investigated for each state:

- **Regulatory Authority** – agencies in each state that have the authority to regulate oil & gas, water, and environmental resources
- **Experience with CO<sub>2</sub> Injection** – existing projects, and institutional capacity & resources to regulate
- **Surface Liability** – assignment of liability for damage to agricultural lands, private property, and public safety
- **Subsurface Liability** – assignment of liability for geophysical trespass, damage to hydrocarbon resources, and groundwater contamination.
- **Existing EOR/EGR** – existing enhanced oil or gas recovery projects
- **Existing Well Abandonment Regulations**
- **Accounting Linkages** – existing CO<sub>2</sub> regulations that may address liability directly or indirectly
- **Existing Monitoring Regulations**
- **Natural Gas Storage** – existing underground natural gas storage projects

The information in the matrix was compiled by assessing existing regulations, case law, analogs, and through conversations with state regulators. These seven states were chosen to obtain a geographically diverse sample set of some of the major states that address these topics.

The matrix was developed by the liability working group of WRI's Carbon Capture and Storage Project ([carboncapture.wri.org](http://carboncapture.wri.org)). This working group is part of a larger effort by WRI and stakeholders to develop guidelines that will ensure safe, transparent, and efficient deployment of CCS projects.

For ease of reading and printing, the matrix is provided in two parts. The full set of background research is also available separately.