



Session 1: CO₂ Pipelines for geologic sequestration

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Resolving the Legal and Regulatory Challenges to Geologic Sequestration of CO₂—A CCSReg Project Workshop

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Today around 50 Mt of CO₂ are transported through 3600 miles of pipeline annually

This a larger pipeline network than many realize, but it pales in comparison to what may be required for sequestration of billions of tons of CO₂ per year.

There is **no need to build an expansive network overnight**—in a carbon constrained world with CCS, the network will evolve from point-to-point and regional connections over decades.

However, the regulatory framework for pipelines must be clarified to facilitate development of the links in this network.



There is no consistent federal regulatory framework for CO₂ pipeline rates and access

Federal Energy Regulatory Commission (FERC)	Disclaimed jurisdiction over CO ₂ pipelines under the Natural Gas Act
Surface Transportation Board (STB)	No position on whether it has jurisdiction over CO ₂ pipelines (its predecessor, the ICC, disclaimed jurisdiction).
Bureau of Land Management (BLM)	Imposes the equivalent of a common carrier obligation on CO ₂ pipelines crossing Federal lands.
Pipeline and Hazardous Materials Safety Administration (PHMSA)	Clear jurisdiction over safety regulation for CO ₂ pipelines.

Lack of access to eminent domain authority and inconsistent state rules will slow development

Likely property rights needs: access to a federal siting process, federal eminent domain authority, and a streamlined permitting process for projects on federal lands—especially multi-state projects and some intrastate projects.

Economic regulation hurdles: resolve and address the shape of any rules on transportation rates and access and whether pipelines will need to serve as common carriers.

The CCSReg project recommends creation of an "opt-in" federal regulatory regime

- This regime would provide the Federal Energy Regulatory Commission (FERC) with authority to consider and grant or deny applications for federal siting permits for new CO₂ pipelines built to transport CO₂ for purposes of permanent sequestration.
- The federal siting permit should provide the pipeline with federal eminent domain authority.
- New CO₂ pipelines would be subject to the current system unless they opt into the federal regulatory regime by filing for and obtaining a federal siting permit.
- We also recommend streamlining the permitting process for CO₂ pipeline projects on federal lands.

The federal program requires pipelines to offer capacity on a non-discriminatory basis

Pipeline must conduct an open season, size pipeline to accommodate creditworthy shippers that contract for capacity, and make unused capacity available on nondiscriminatory basis.

Rates are contractually established, but –

(C) In cases where the pipeline and the shipper cannot agree on rates and terms and conditions of service, that rates and terms and conditions of service are not unreasonable.

These recommendations keep the existing state system of regulation

- The current system of state siting and economic regulation for existing CO₂ pipelines would continue to apply to existing pipelines and to new pipelines that do not opt into the federal program.
- Moreover, the existing pipeline safety regulatory framework has demonstrated it is sufficient to ensure safe operation of CO₂ pipelines would be retained.

Questions for discussion

- Does the "opt-in" federal framework, as described here, provide significant benefits over the current state-based systems.
- Would existing pipelines be disadvantaged by allowing competitors to obtain federal siting authority?
- Is there another model, federally coordinated or not, that would provide for reduced complexity in pipeline siting and access?
- Will this work for EOR?