

Carbon Capture and Sequestration Legislation In the United States of America



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SOUTHERN STATES ENERGY BOARD
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Southeast Regional Carbon Sequestration Partnership (SECARB) is a regional network of more than 100 stakeholders with a common goal of determining the best approaches for capturing and permanently storing gases that can contribute to global climate change.

The **Southern States Energy Board** is an interstate compact, comprised of governors and state legislators from sixteen southern states, Puerto Rico and the U.S. Virgin Islands, as well as a presidential appointee. The Board's mission is to promote economic development and enhance the quality of life in the South, through innovations in energy and environmental programs, policies and technologies.

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Introduction

At the time of publication, there were 23 states with Carbon Capture and Storage (CCS) related legislation, which are: AZ, MI, NY, PA, CA, IL, KY, MN, OK, VA, CO, FL, IN, KS, LA, MS, MT, ND, NM, TX, WA, WV and WY.

Four states had CCS Bills Pending as of 2011, which are: AZ, MI, NY and PA.

While coal power is associated mainly with the Midwest and Appalachian regions, the states with CCS legislation represent a comprehensive cross section of the country. States differ on their approach to enforcing these bills. Some states, such as Texas, are pushing full steam ahead, yet others, like Montana, awaited an EPA final rule. Some tackle the statute first and regulations second (Wyoming, North Dakota), while others are working to create legislative recommendations (Utah, Illinois, West Virginia). Kansas, among others, has concluded that existing legislative authority is sufficient and is able to move directly to promulgation of final regulations.

This study on state CCS legislation does not include every element addressed by these bills. Instead, it is intended to give an overview of four key areas identified as necessary elements of a broader comprehensive regulatory framework governing CCS activities. The key areas are Project Authority, Pore Space and Carbon Dioxide (CO₂) Ownership, Liability and Financing Sources.

Project Authority: This area addresses which state regulatory agency (SRA) will be charged with developing and administering rules and regulations governing CCS projects. The agency must have the authority to require compulsory joining of all participating interests in the underground storage reservoir and have appropriate permitting authority to require an operator to submit any data necessary to evaluate a proposed CO₂ storage project. Examples of such SRAs are state oil and gas regulatory agencies, state environmental agencies or state public utility commissions.

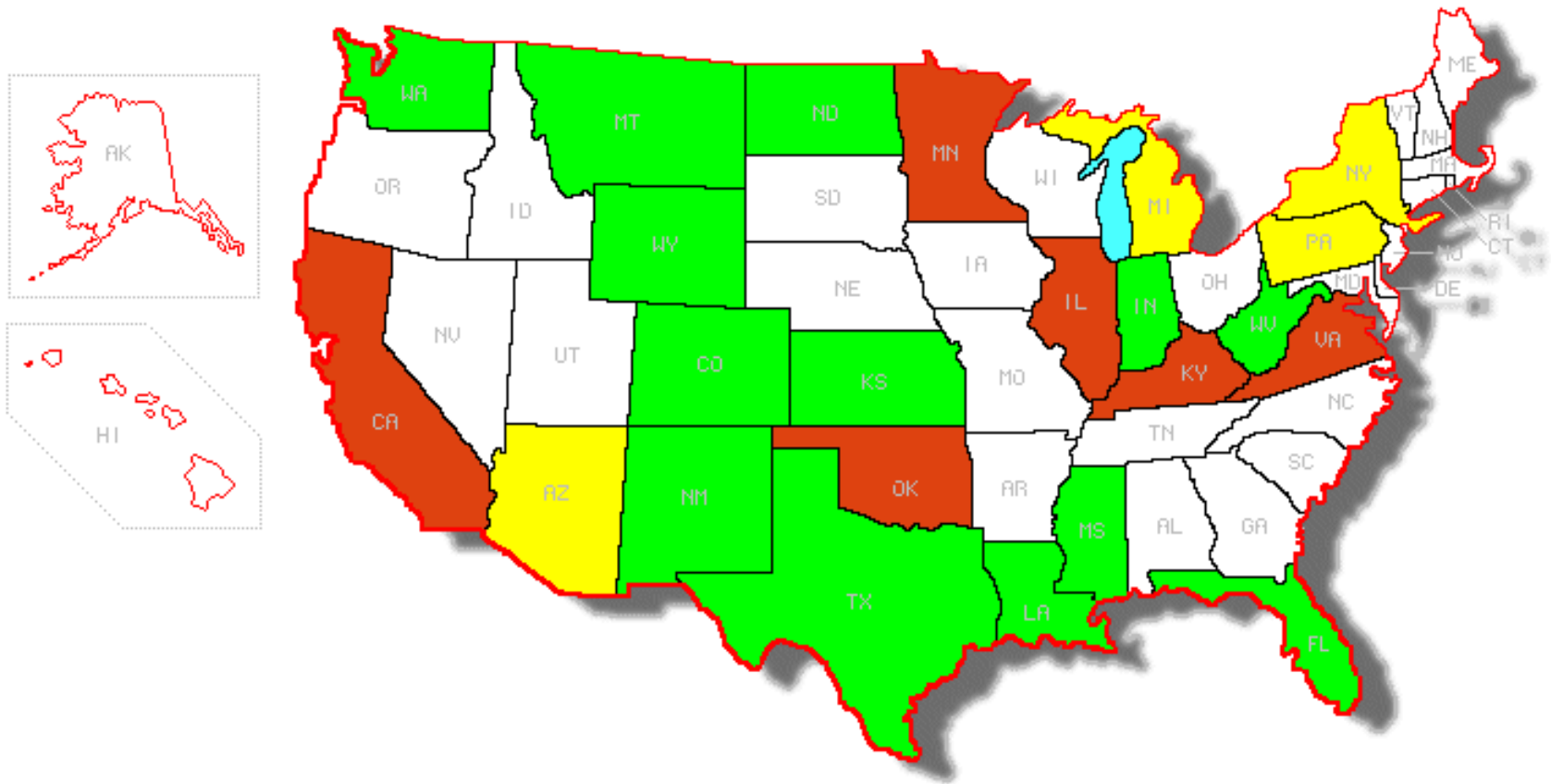
Pore Space and CO₂ Ownership: This area addresses who has the property rights to inject CO₂ into wells and who owns the CO₂ in case of unintended trespass. The right to use reservoirs and associated pore space is considered a private property right in the United States and must be acquired from the owner of those rights. To determine this, states are most likely to follow their traditional common law approach in determining these rights and, in most cases, pore space is deemed to be owned by the surface estate. CO₂, on the other hand, is treated like any other commodity and, in general, is owned by the injector.

Liability: This area addresses what party is liable for the injected CO₂ both during the injection, the closure and the long-term, post closure phase. What party is liable depends, therefore, on the phase of the project. The injection phase is the period of time during active injection. The closure period is the time when the plugging of the well is completed and continues until a future date is reached, usually 10 years after injection activities and the wells are plugged. During these phases, the operator is the liable party. The post closure phase is the period of time beginning when the project is deemed complete, usually marked by the issuance of a Certificate of Completion, and extends for the life of the well. During this phase, liability transfers to the state for monitoring, verification and remediation activities. The injector is then usually released from all liability.

Financing Sources: This area addresses both the costs of the CO₂ injection projects themselves and the long-term costs. For the costs associated with the injection project, many states will give tax incentives in the form of sales tax, income tax or property tax exemptions for qualifying endeavors. Many states have established some type of CCS trust fund to pay for the expense of long-term monitoring, verification and remediation. These trusts tend to be state administered and industry funded on a cost per ton basis.



- - Pending
- - Enacted/Pending
- - Enacted



State	Bill (year)	Project Authority	Pore Space/CO ₂ Ownership	Liability	Financing Source
AZ	SCR 1033 (2011) Pending	Arizona Department of Environmental Quality (ADEQ)			ADEQ is urged to allow the use of commercially available technologies that are designed to be as efficient as is economically practicable, including advanced super-critical pulverized coal, ultra super-critical pulverized coal, and that are designed to be carbon capture and sequestration-compatible, as potential best available control technology.
CA	SB 669 (2011) Pending	State Energy Resources Conservation and Development Commission			Provides for the full recovery in rates of long-term commitments entered into through a contract approved by the commission for electricity generated by zero- or low-carbon generating resources demonstrating new technology, if the commission determines that the commitment would benefit the state's ratepayers, economy, and the environment.
CA	A 1504 (2010) Enacted	Board of Forestry and Fire Protection			Permits fees collected under the Global Warming Solutions Act of 2006 to be used for related studies and analyses.
CO	HJR 1028 (2010) Enacted	U.S. Congress			Urges the United States Congress to pass comprehensive legislation that promotes clean energy jobs and addresses the effects of climate change including CCS technology.
CO	HB 06-1281 (2006) Enacted				Creates a CCS program and provides incentives for IGCC plants.
FL	HB 549 (2007) Enacted Ch. No. 2007-117				Provides incentives for IGCC plants.
IL	SB 1567 (2011) Pending	Carbon Capture and Sequestration Legislation Commission	To be determined by the Commission.	To be determined by the Commission.	
IL	SB 1821 (2011) Enrolled	Illinois Commerce Commission	Pipeline owners	Pipeline owners	Funding is provided by CO ₂ pipeline owners.
IL	SB 678 (2010) Enacted P.A. 96-1491	FutureGen Alliance	Title transfers once injected.	FutureGen has limited liability which only arises out of or resulting from the storage, escape, release, or migration of the post-injection sequestered CO ₂ .	State aided in securing \$1billion for FutureGen.



State	Bill (year)	Project Authority	Pore Space/CO ₂ Ownership	Liability	Financing Source
IL	SB 3686 (2010) Sine Die	Illinois Power Agency	"Initial Clean Coal Facility" or the Illinois Power Agency if requested.	Utility and alternative electric suppliers will have limited liability while in commercial operation.	Requires offsetting of excess emissions.
IL	P.A. 92-0012 (2002) P.A. 93-0167 (2004) P.A. 94-65 (2005) P.A. 94-1030 (2006) P.A. 95-18 (2007)				Incentives for IGCC plants.
IL	SB 1987 (2008) Enacted P. A. 95-1027				Illinois power agency may fund or operate sequestration facility.
IL	SB 1592 (2007) Enacted P. A. 95-0481				Incentives for advanced coal plants in locations where geology is suitable for sequestration.
IL	SB 1704 (2007) Enacted P. A. 95-0018		Illinois to take title to injected carbon dioxide from the FutureGen project.	State assumes any liabilities associated with the sequestered gas both during operation and for long-term liability, as well as any current or future environmental benefits, marketing claims, tradable credits, emissions allocations or offsets.	Exempts the FutureGen project from Illinois tax on electrical generating units.



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
IN	P.L. 105-1989 (1989) P.L. 159-2002 (2002) P.L. 174-2005 (2005) P.L. 191-2005 (2005) P.L. 175-2007 (2007)				Incentives for clean coal technology.
KS	HB 2418 (2010) Enacted Ch. No. 2010-63	State Corporation Commission		Exempts the Commission and the state from assuming liability for the underground storage of carbon dioxide or the maintenance of any carbon dioxide injection well or underground storage of carbon dioxide except as permitted by the Kansas tort claims act.	Fees may be collected by the commission and put into the “carbon dioxide injection well and underground storage fund.”
KS	HB 2419 (2007) Enacted	State Corporation Commission			Property and income tax incentives for CCS.
KS	SB 303 (2006) Enacted				Incentives for IGCC, such as tax credits and an amortization deduction in an amount equal to 55% of the amortizable costs of such new qualifying pipeline for the first taxable year in which such new qualifying pipeline is in production, and 5% of the amortizable costs of such new qualifying pipeline for each of the next nine taxable years.
KY	SB 50 (2011) Enacted KRS 154.27	Pipeline Company	Grants companies constructing carbon dioxide transmission pipelines eminent domain powers.		



State	Bill (year)	Project Authority	Pore Space/CO ₂ Ownership	Liability	Financing Source
KY	HB 259 (2011) Enacted KRS 353.1-.7	Energy and Environment Cabinet		Liability for stored carbon dioxide will pass to the federal or state government.	
KY	HB 1 (2007) Pending				Tax incentives for advanced coal plants.
LA	HB 495 (2010) Enacted Act 193, R.S. 9:1103		Monetary compensation is provided to the owner unless given by a contract or related to Coastal Protection and Restoration Authority.		
LA	HB 733 (2010) Enacted Act 527, R.S. 3:1221	Office of Soil and Water Conservation			Office is to participate in CCS programs.
LA	HB 661 (2009) Enacted Act 517	Office of Conservation	CO ₂ ownership matter of private contract.	Operator is liable during operation; state assumes ownership 10 years after injection is complete; operators and others with interest are released from future liability.	
LA	HB 1117 (2008) Enacted Act 315	State Mineral Board	CO ₂ owned by operator.		
LA	HB 1220 (2008) Enacted Act 315			State Mineral Board may operate and assume responsibility for facilities.	
MI	HB 4399 (2011) Pending	Department of Environmental Quality	Owner(s) having a property interest.		Fees will be put into the “Mineral Well Regulatory Fund.”
MI	HB 4401 (2011) Pending	Department of Environmental Quality	Owner(s) having a property interest.	Project owner is immune from civil liability.	CCS project funded by the Owner and must be approved by the Department.



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
MI	HB 6522 (2010) Pending	State Tax Commission	CCS equipment is seen as industrial property.		
MI	HB 4016 (2009) Pending	Department of Environmental Quality			Provides a business tax credit for certain costs incurred during carbon dioxide sequestration and capture.
MI	Draft Bill	Department of Environmental Quality	Pore space owned by surface owner.	Operator is liable during operation; state assumes liability upon issuance of Certificate of Completion.	Carbon Dioxide Storage Facility Trust Fund
MI	SB 775 (2009) Pending	Department of Environmental Quality	CO2 ownership begins with operator and transfers to state 10 years after Notice of Completion.	Operator is liable during operation; state assumes liability 10 years after Notice of Completion.	Carbon Dioxide Storage Facility Trust Fund
MN	HB 1669 (2011) Pending	The State of Minnesota			The state is reserving credits for CCS in current or future state lands.
MN	SF 145 (2007) Enacted Ch. 136				Incentives for IGCC.
MS	SB 2723 (2011) Enacted 53-11-1	State Oil and Gas Board	At least a majority interest in the property rights is required. Sequestration wells, buildings and equipment utilized in geologic sequestration are owned by the storage operator, which includes pipelines. The owner of the carbon dioxide shall have no right to gas, liquid hydrocarbons, salt, or other commercial minerals.	To the Owner(s)	Carbon Dioxide Storage Fund
MS	HB 1459 (2009) Enacted 27-65-19				Income tax of 1.5% on businesses that sell CO2 for EOR or sequestration.



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
MT	SB 285 (2011) Enacted 82-11-183	Board of Oil and Gas Conservation in consultation with the Department of Environmental Quality and the Department of Natural Resources and Conservation	The geologic storage operator has title to the geologic storage reservoir and may transfer title of the reservoir and the stored carbon dioxide to the state.	If the title is not transferred to the state, then the Operator accepts liability.	
MT	SB 498 (2009) Enacted	Board of Oil and Gas Conservatory with comments from Department of Environmental Quality	Pore space owned by surface owner. CO2 owned by operator.	Operator is liable during operation; state assumes long term liability.	
MT	HB 3 (2007) Enacted				Tax incentives for gasification plants that sequester CO2.
ND	SB 2318 (2011) Enacted	Legislative Management			Legislative Management will look to the possibility of CO2 storage easements.
ND	SB 2034 (2009) Enacted 57-51.1-03				Tax incentives for Enhanced Oil Recovery (EOR) with CO2.
ND	SB 2095 (2009) Enacted 38-22 Repealed 38-08-24	Industrial Commission	CO2 owned by operator.	Operator is liable during operation; state assumes long term liability.	
ND	SB 2139 (2009) Enacted		Pore space owned by surface owner; severance prohibited.		
ND	SB 2221 (2009) Enacted 57-60-01; 57-60-02.1 Amended 57-60-03				Tax incentives for coal plants that capture CO2.
NM	SB 994 (2007) Enacted Ch.229				Incentives for energy facilities to capture and sequester CO2.



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
NY	A03182 (2010) Pending	Administered by the Department of Environmental Conservation (DEC)	The operator has ownership of the CO2 and the landowners have ownership of the pore space.	Default liability is to the Operator unless contracted to the owner.	Relates to a pilot program to enable the capture and storage of carbon dioxide and establishes the carbon capture and sequestration act. This bill would have no significant fiscal impacts on the state.
NY	A05836 (2010) Pending	NY Department of Environmental Conservation	Pore space owned by surface estate owner.	Operator is liable during operation; state assumes long term liability after 10 years.	
NY	A08802 (2010) Pending	NY Department of Environmental Conservation	Pore space owned by surface owner. CO2 owned by operator.		
NY	Advanced Clean Coal Power Plant Initiative (2006)				Incentive program for advanced coal plants with sequestration.
OK	SB 2024 (2010) Pending	Corporation Commission			
OK	SB 610 (2009) Enacted	Corporation Commission for fossil fuel bearing formations; Department of Environmental Quality for all others	CO2 owned by operator. Does not alter the incidents of ownership, or other rights, of the owners of the mineral estate or adversely affect enhanced oil or gas recovery efforts in the state. Prohibits the use of eminent domain to be used by a private operator.		The Petroleum Storage Tank Release Environmental Cleanup Indemnity Fund and Program and the Leaking Underground Storage Tank Trust Fund. State water/wastewater loans and grants, revolving fund, and other related financial aid programs including federal funding.



State	Bill (year)	Project Authority	Pore Space/CO ₂ Ownership	Liability	Financing Source
PA	HB 2405 (2010) Pending	Pennsylvania Public Utility Commission	CCS facility owns the Co ₂ once transferred. State will allow the lease of state lands for CO ₂ pipelines.	CCS facilities receive liability of CO ₂ , once transferred, and the coal combustion plant will become immune. Operators of CCS facilities have the same rights and subject to the same penalties as the Solid waste Management Act, but Administrative penalties cannot exceed \$50,000. Upon Closure of a CCS facility, liability is transferred to the state.	Carbon Dioxide Indemnification Fund
TX	HB 1796 (2009) Enacted Ch. 382	General Land Office and the Bureau of Economic Geology to build and operate a carbon dioxide repository on state-owned, offshore, submerged land.	CO ₂ owned by state for offshore sequestration.	School Land Board is liable during operation for offshore sequestration, but liability is not relieved from a producer of CO ₂ prior to it being stored.	Permanent School Fund, state grants
TX	SB 1387 (2009) Enacted Section 27.002	Railroad Commission has jurisdiction over the injection of CO ₂ into wells for production of oil or gas.	CO ₂ owned by operator, unless otherwise agreed.		Anthropogenic Carbon Dioxide Storage Trust Fund
TX	HB 469 (2009) Enacted Ch. 490	Comptroller			Tax incentive for energy projects that capture and sequester CO ₂
TX	HB 3732 (2007) Enacted Ch. 447	State Energy Conservation Office			Incentives for advanced energy projects, including advanced coal, such as “The advanced clean energy project grant and loan program.”



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
VA	SB 247 (2010) pending	Department of Mines, Minerals and Energy	CO2 owned by operator, transfer to Commonwealth upon issuance of Certificate of Project Completeness.	Operator liable during operation. Transfers to Commonwealth upon issuance of Certificate of Project Completeness.	Carbon Dioxide Storage Facility Trust Fund
VA	SB 1416/HB 3068 (2007) Enacted Ch.933	State Corporation Commission (SCC)			Incentives for advanced coal plants
WA	SB 6001 (2007) Partially Vetoed Ch. 307	Department of Ecology			
WV	HB 2860/SB 396 (2009) Enacted Ch. 97	Department of Environmental Protection	Will be determined by recommendations from the CCS working group	Civil liability exists for any loss of fish or any other aquatic life.	
WY	HB 17 (2010) Enacted Ch. 52	Water Quality Division of the Department of Environmental Quality		Requires liability insurance policies for geologic sequestration site permittees.	Wyoming geologic sequestration special revenue account, funded by monies collected from entities permitted to operate geologic sequestration sites in Wyoming. Appropriates \$200,000 to fund the reclassification of a position within DEQ to help with the rule making and financial assurance duties imposed by this legislation
WY	HB 58 (2009) Enacted Ch. 50		CO2 owned by operator.	Operator liable during operation. No person is liable for the consequences of injecting carbon dioxide simply because they own the pore space, have the ability to control the pore space or have given consent to the injection.	



State	Bill (year)	Project Authority	Pore Space/CO2 Ownership	Liability	Financing Source
WY	SB 1 (2008) Enacted Ch. 48				Funding for sequestration site evaluation and advancement of clean coal and carbon management activities (\$1.2 million)
WY	HB 90 (2008) Enacted Ch. 30	Department of Environmental Quality			\$250,000 given to the working group for related expenses such as permitting.
WY	HB 89 (2008) Enacted Ch. 29		Owner of the surface estate owns the pore space in all strata below the surface. Pore space owned by surface owner, may be severed.	Legal requirements for notice to real property owners are not required for pore space owners unless the law specifically identifies those owners as being required to be notified.	

