Shopping for State Constitutions: Gift Clauses as Obstacles to State Encouragement of Carbon Sequestration

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INTRODUCTION

Climate change is an urgent, worldwide problem that threatens catastrophic consequences to humanity.[1] The anthropogenic emissions of greenhouse gases ("GHGs"), especially carbon dioxide ("CO_2"), have caused and continue to contribute to this problem.[2] GHGs cause warming through a mechanism of "radiative forcing," which means that the gases accumulate in the atmosphere and allow less solar radiation to escape, effectively trapping that heat here on earth.[3] One of the solutions to this problem is to lower GHG emissions from the energy sector, a primary source of such emissions.[4] There are many ways of doing this, including: 1)

1. Conference of the Parties to the United Nations Framework Convention on Climate Change, Copenhagen, Den., Dec. 7–18, 2009, *Report of the Conference of the Parties – Addendum, Part Two: Action Taken by the Conference of the Parties at Its Fifteenth Session*, dec. 2/CP.15, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010) [hereinafter Copenhagen Accord], *available at* http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=4; *see* Conference of the Parties to the United Nations Framework Convention on Climate Change, Bali, Indon., Dec. 3–15, 2007, *Report of the Conference of the Parties – Addendum, Part Two: Action Taken by the Conference of the Parties at its Thirteenth Session*, dec. 1/CP.13, U.N. Doc. FCCC/CP/2007/6/Add.1 (Mar. 14, 2008) [hereinafter Bali Action Plan], *available at* http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3; IAN ALLISON ET AL., THE COPENHAGEN DIAGNOSIS, 2009: UPDATING THE WORLD ON THE LATEST CLIMATE SCIENCE (2009) [hereinafter COPENHAGEN DIAGNOSIS], *available at* http://www.ccrc.unsw.edu.au/Copenhagen/Copenhagen_Diagnosis_LOW.pdf; INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (Rajendra Pachauri & Andy Reisinger eds., 2007) [hereinafter IPCC REPORT] (synthesizing the IPCC working groups' study of the causes, effects, and mitigation of climate change).

2. United Nations Framework Convention on Climate Change art. 2, May 9, 1992, 1771 U.N.T.S. 107 (entered into force Mar. 21, 1994); Copenhagen Accord, *supra* note 1; Bali Action Plan, *supra* note 1; COPENHAGEN DIAGNOSIS, *supra* note 1, at 5–7; IPCC REPORT, *supra* note 1.

3. COPENHAGEN DIAGNOSIS, *supra* note 1, at 7; IPCC REPORT, *supra* note 1, at 37.

4. Ralph E.H. Sims et al., *Energy Supply*, *in* CLIMATE CHANGE 2007: MITIGATION 251 (Bert Metz et al. eds., 2007) [hereinafter IPCC ENERGY REPORT] (analyzing the role of various

switching to renewable sources of energy, such as wind and solar;[5] 2) switching to more efficient sources of energy, such as nuclear power;[6] or 3), the focus of this Note, capturing the GHGs emitted during energy production, such as by carbon capture and sequestration ("CCS").[7] CCS is the process of capturing CO_2 emissions when burning coal to produce electricity and storing that CO_2 in such a way that it will not enter the atmosphere.[8] CCS will likely be a major part of any climate change solution, because coal is a major source of the world's electricity, and lowering emissions from coal-fired power plants will be a necessary step in the transition to renewable sources of energy.[9]

Legal academic literature has addressed many of the relevant facets of renewable energy, including tax incentives, liability issues, how these technologies fit into the current framework of energy law, and how they work within emerging legal structures (such as cap-and-trade schemes).[10] The legal aspects of CCS, however, have

energy sources as potential solutions to climate change); S. Pacala & R. Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, 305 SCIENCE 968, 969–72 (2004).

5. IPCC ENERGY REPORT, *supra* note 4, at 272–80; Pacala & Socolow, *supra* note 4, at 969.

6. STEPHEN ANSOLABEHERE ET AL., THE FUTURE OF NUCLEAR POWER: AN INTERDISCIPLINARY MIT STUDY (2003), *available at* http://web.mit.edu/nuclearpower; JOHN M. DEUTCH ET AL., UPDATE OF THE MIT 2003 FUTURE OF NUCLEAR POWER 4 (2009), *available at* http://web.mit.edu/nuclearpower/pdf/nuclearpower-update2009.pdf.

7. *See generally* Edward Rubin et al., *Technical Summary*, *in* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE SPECIAL REPORT, CARBON DIOXIDE CAPTURE AND STORAGE 17–51 (Bert Metz et al. eds., 2007) [hereinafter IPCC CCS REPORT], *available at* http://www.ipcc.ch/pdf/special-reports/srccs/srccs_wholereport.pdf; HIRANYA FERNANDO ET AL., CAPTURING KING COAL: DEPLOYING CARBON CAPTURE AND STORAGE SYSTEMS IN THE U.S. AT SCALE 7 (2008).

8. IPCC CCS REPORT, *supra* note 7, at 3; FERNANDO ET AL., *supra* note 7, at 7–8.

9. IPCC CCS REPORT, *supra* note 7, at 20 (predicting that the world's energy supply "will continue to be dominated by fossil fuels until at least the middle of the century").

10. *See generally* Sara C. Bronin, *Solar Rights*, 89 B.U. L. REV. 1217 (2009) (describing the debate over solar rights); Sanya Carleyolsen, *Tangled in the Wires: An Assessment of the Existing U.S. Renewable Energy Legal Framework*, 46 NAT. RESOURCES J. 759 (2006) (outlining historical, legal, and policy frameworks for renewable energy policy); John C. Dernbach, *U.S. Policy*, *in* GLOBAL CLIMATE CHANGE AND U.S. LAW 61 (Michael B. Gerrard ed., 2007) (providing background on U.S. participation in climate change law, both international and domestic); Adam M. Dinnell & Adam J. Russ, *The Legal Hurdles to Developing Wind Power as an Alternative Energy Source in the United States: Creative and Comparative Solutions*, 27 NW. J. INT'L L. & BUS. 535 (2007) (describing the growth of wind power in the United States); Michael B. Gerrard, *Introduction and Overview*, *in* GLOBAL CLIMATE CHANGE AND U.S. LAW 1 (Michael B. Gerrard ed., 2007) (providing a comprehensive overview of U.S. legal aspects of climate change); Jeffry S. Hinman, *The Green Economic Recovery: Wind Energy Tax Policy After Financial Crisis and the American Recovery and Reinvestment Tax Act of 2009*, 24 J. ENVTL. L. & LITIG. 35 (2009)

received less thorough treatment. Scholars have identified and analyzed property rights and liability issues,[11] and they have argued for particular legal responses—at both the state and federal levels—to deal with these issues.[12] However, the current literature has ignored the significance of state constitutional limitations on public spending and state debt.

Both states and the federal government want to incentivize the development of the socially beneficial CCS technology, as it currently faces notable barriers to market entry.[13] Some aspects of CCS technology are still not well developed,[14] and CCS also involves many substantial risks, including groundwater contamination, earthquakes, explosions, and CO_2 leaks which would contribute to climate change.[15] These risks will be present for thousands of years,

(examining and evaluating U.S. renewable energy tax policy); Isa Lang, *Wrestling with an Elephant: A Selected Bibliography and Resource Guide on Global Climate Change*, 100 LAW LIBR. J. 675 (2008) (providing a concise, annotated bibliography of sources dealing with law, climate change, and renewable energy); Donald N. Zillman & Raymond Deeny, *Legal Aspects of Solar Energy Development*, 1976 ARIZ. ST. L.J. 25 (1976) (examining governmental activity in the field of solar energy development).

11. Alexandra B. Klass & Elizabeth J. Wilson, *Climate Change and Carbon Sequestration: Assessing a Liability Regime for Long-Term Storage of Carbon Dioxide*, 58 EMORY L.J. 103, 133–45 (2008) (describing liability issues with property rights, trespass, negligence, negligence per se, nuisance, strict liability, abnormally dangerous activities, and damages). *See also* THE INTERSTATE OIL & GAS COMPACT COMM'N TASK FORCE ON CARBON CAPTURE AND GEOLOGIC STORAGE, STORAGE OF CARBON DIOXIDE IN GEOLOGIC STRUCTURES: A LEGAL AND REGULATORY GUIDE FOR STATES AND PROVINCES (2007) [hereinafter IOGCC], *available at* http://www.gwpc.org/e-library/documents/co2/IOGCC%20Master%20CO2%20Regulatory%20Document%209-2007.pdf; Victor B. Flatt, *Paving the Legal Path for Carbon Sequestration from Coal*, 19 DUKE ENVTL. L. & POL'Y F. 211 (2009); Peter S. Glaser et al., *Global Warming Solutions: Regulatory Challenges and Common Law Liabilities Associated with the Geological Sequestration of Carbon Dioxide*, 6 GEO. J.L. & PUB. POL'Y 429 (2008).

12. IOGCC, *supra* note 11, at 3 (favoring state regulation of CCS); Flatt, *supra* note 11, at 218–20 (recommending federal preemption of local land-use restrictions), 224–29 (recommending several options for a comprehensive federal liability scheme); Glaser et al., *supra* note 11, passim (discussing several regulatory issues and solutions for geologic sequestration, but expressing no preference for state or federal regulation); Klass & Wilson, *supra* note 11, at 172–78 (recommending a primarily federal adaptive regulatory framework for CCS).

13. FERNANDO ET AL., *supra* note 7, at 9–10; IOGCC, *supra* note 11, at 9–12; *Western Businesses Warn EPA Liability Rules May Sink CCS Projects*, INSIDE EPA WEEKLY REPORT, Oct. 23, 2009.

14. *See* FERNANDO ET AL., *supra* note 7, at 10–16 (detailing the stages of development for various CCS components).

15. *See* Flatt, *supra* note 11, at 219–22 (providing a brief discussion of the risks associated with CCS technologies); Glaser et al., *supra* note 11, at 432–34 (providing a more technical and detailed discussion). *See also* Evan Mills, *The Role of U.S. Insurance Regulators in Responding*

long beyond the life of the company using the technology.[16] The government, having the institutional capacity to deal with such long-term risks, must then take control of CCS storage sites and make the prospect of long-term liability palatable for CCS developers.[17] Among technologies addressed toward mitigating climate change, this challenge of long-term liability is unique to CCS and nuclear power; this Note focuses on CCS. Renewable energy technologies have no similar problems, and states' plans to deal with CCS's long-term liability problem raise state constitutional difficulties.

With the proper incentives, private companies can develop CCS so that it is commercially available and used to cut coal plants' CO_2 emissions on an industrial scale.[18] States want to provide the best incentives for CCS developers so to attract these businesses.[19] The best incentive package that states can offer is indemnification against all long-term liability coupled with short-term financial incentives.[20] However, a majority of states have constitutional provisions that potentially prohibit such indemnification and thus alter the landscape of state competition for CCS developers.

These state constitutional provisions are called "gift clauses," and

to Climate Change, 26 UCLA J. ENVTL. L. & POL'Y 129 (2008) (discussing the general climate risk from the perspective of the insurance industry); Elizabeth J. Wilson, Timothy L. Johnson & David W. Keith, *Regulating the Ultimate Sink: Managing the Risks of Geologic CO_2 Storage*, 37 ENVTL. SCI. & TECH. 3476 (2003) (examining the risks and regulatory history associated with geologic CO_2 sequestration); Sumit Som, Student Article, *Creating Safe and Effective Carbon Sequestration*, 17 N.Y.U. ENVTL. L.J. 961, 968–71 (2008) (detailing safety and atmospheric risks of storage).

16. INT'L RISK GOVERNANCE COUNCIL, REGULATION OF CARBON CAPTURE AND STORAGE 23 (2008), *available at* http://www.irgc.org/IMG/pdf/Policy_Brief_CCS.pdf; Som, *supra* note 15, at 981.

17. IOGCC, *supra* note 11, at 9–12; JOHN P. MARTIN, N.Y. STATE ENERGY RESEARCH AND DEV. AUTH., CARBON DIOXIDE CAPTURE AND SEQUESTRATION: DEVELOPING A REGULATORY STRATEGY FOR NEW YORK STATE 73–74 (2009) [hereinafter NYSERDA REPORT], *available at* http://www.nyserda.org/programs/environment/emep/10498%20CCS%20Regulatory%20Final%20Report%202009.06.10.pdf.

18. IOGCC, *supra* note 11, at 9; *see* FERNANDO ET AL., *supra* note 7, at 9.

19. *See* NYSERDA REPORT, *supra* note 17, at 58–62 (discussing numerous policy options to incentivize CCS development, including Texas and Illinois statutes that offered various protections); Klass & Wilson, *supra* note 11, at 121–23 (discussing CCS partnership program with Illinois); *see also* TEX. NAT. RES. CODE ANN. § 119 (West 2006) (offering sponsors of CCS projects statutory protections in order to facilitate early project development); 20 ILL. COMP. STAT. 1107/1–999 (repealed by its own terms, Mar. 2011).

20. IOGCC, *supra* note 11, at 11–12 (proposing a closure period and post-closure period structure that amounts to indemnification); *see* NYSERDA REPORT, *supra* note 17, at 58–62.

they prevent a state from lending its credit to private individuals or corporations.[21] These clauses were added to state constitutions in response to disastrous state investments in railroad development, many of which occurred during the Panic of 1837.[22] Many states extended credit to speculative railroad projects that eventually failed, and bankrupted their state creditors in the process.[23] Only some states' clauses retain their original teeth; many others have been watered down with public purpose exceptions.[24]

This Note argues that strict versions of state constitutional gift clauses prevent some states from providing CCS developers with indemnification, because such indemnification would constitute an unconstitutional "debt" of the state. In Part I, this Note describes climate change, CCS technology, the role of CCS in fighting climate change, the risks and liability concerns accompanying CCS, and the roles of federal and state governments in overseeing CCS. In Part II, this Note describes state constitutional gift clauses, their history and policy rationales, and explains how CCS indemnification presents an especially troublesome scenario for gift clause limitations. In Part III, this Note uses the example of New York to argue that CCS indemnification is unconstitutional under strict gift clauses. The Note then suggests and evaluates several other state policy proposals that would be constitutional. This Note will also show that gift clause differences among states could lead to serious problems with CCS development and the response to global warming. Finally, this Note considers alternative financing mechanisms that may pass constitutional muster and proposes a potential federal solution: the preemption of state gift clauses for the purpose of CCS development.

21. Richard Briffault, *The Disfavored Constitution: State Fiscal Limits and State Constitutional Law*, 34 RUTGERS L.J. 907, 911–12 (2003); Ralph L. Finlayson, *State Constitutional Prohibitions Against Use of Public Financial Resources in Aid of Private Enterprises*, 1 EMERGING ISSUES ST. CONST. L. 177, 182 (1988); David E. Pinsky, *State Constitutional Limitations on Public Industrial Financing: An Historical and Economic Approach*, 111 U. PA. L. REV. 265, 279–81 (1963). New York's constitutional language is representative: "The money of the state shall not be given or loaned to or in aid of any private corporation or association, or private undertaking. . . ." N.Y. CONST. art. VII, § 8, cl. 1.

22. Pinsky, *supra* note 21, at 277–78.

23. *See* G. ALAN TARR, UNDERSTANDING STATE CONSTITUTIONS 110–12 (1998); Briffault, *supra* note 21, at 911; Pinsky, *supra* note 21, at 277.

24. Briffault, *supra* note 21, at 912–13; *see infra* Appendix (containing fifty state survey with citations to judicially recognized public-purpose exceptions).

I. BACKGROUND

This Part provides the factual and policy background to CCS and its role in addressing climate change. It then describes the risks of CCS and the liability regimes applicable to those risks. These liability concerns pose a barrier to CCS development, and this Part discusses how a governmental intervention could remove that barrier through various types of financial incentives. Thus, this Part describes the current policy debate regarding whether and to what extent it should be the federal or state governments that take primary responsibility for incentivizing and managing CCS.

A. Climate Change and the Role of CCS

Global climate change is one of the world's largest and most urgent problems: if not addressed swiftly and adequately, it could lead to catastrophic and irreversible consequences.[25] Many consequences of climate change, such as the exacerbation of extreme weather, are already being felt around the world.[26] Emissions of GHGs, especially CO_2, are the primary cause of this problem.[27] The accumulation of GHGs "affect[s] the absorption, scattering and emission of radiation within the atmosphere and at the Earth's surface," resulting in a warming effect.[28] A primary means of reducing CO_2 emissions is to change the production and use of energy; this could be accomplished, for example, by switching to renewable fuels that emit fewer GHGs, or by increasing energy efficiency.[29]

Reducing emissions from coal-fired power plants is a logical first step in combating climate change in the United States. Coal is a

25. *See generally* IPCC REPORT, *supra* note 1 (synthesizing the IPCC working groups' study of the causes, effects, and mitigation of climate change). For a skeptical view of climate change, *see, e.g.*, C.D. Idso & K.E. Idso, *Carbon Dioxide and Global Warming: Where We Stand on the Issue* (1998), CO2SCIENCE.ORG, http://www.co2science.org/about/position/global warming.php (last visited May 11, 2011).

26. *See, e.g.*, COPENHAGEN DIAGNOSIS, *supra* note 1, at 9–10; IPCC REPORT, *supra* note 1, at 30; INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY (M.L. Parry et al. eds., 2007); Richard A. Kerr, *Is Katrina a Harbinger of Still More Powerful Hurricanes?*, 309 SCIENCE 1807 (2005); P.J. Webster et al., *Report: Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment*, 309 SCIENCE 1844 (2005).

27. IPCC REPORT, *supra* note 1, at 37.

28. *Id.*

29. Pacala & Socolow, *supra* note 4.

major source of America's energy: it provides 44.5% of the country's electricity.[30] The substantial size of America's coal reserves, larger than each of America's remaining natural gas and oil resources and amounting to 28.9% of the world's share of coal,[31] suggests that coal will be a part of America's energy portfolio for the foreseeable future. However, coal-fired power plants are also major sources of CO_2, which they emit at a rate greater than that which results from the combustion of other fossil fuels.[32] Given coal's strong presence in the American energy market, it is likely that reducing coal emissions will be part of the solution to climate change, especially since any eventual transition to cleaner or renewable fuels will take decades.[33]

A new technology, CCS, could allow coal-fired power plants to reduce CO_2 emissions dramatically.[34] CCS technology can collect the CO_2 gas that would be emitted and store it underground or beneath the ocean, thereby preventing it from collecting in the atmosphere.[35] There are four steps to this process. First, technology located at the industrial source extracts the CO_2 from the fossil fuel either before or during the industrial process.[36] Second, that CO_2 is compressed in preparation for transport and is then transported to the storage site.[37] Third, the captured, compressed CO_2 is injected into a storage site, such as a geologic repository.[38] Finally, once the storage site is full, it must be properly closed or "capped" so that the stored CO_2 does not leak

30. U.S. ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, DOE/EIA-0348, ELECTRIC POWER ANNUAL 2009 2 (2011) [hereinafter ELECTRIC POWER ANNUAL], *available at* http://www.eia.doe.gov/cneaf/electricity/epa/epa.pdf.

31. BRITISH PETROLEUM, BP STATISTICAL REVIEW OF WORLD ENERGY JUNE 2010, at 32 (2010), *available at* http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2008/STAGING/local_assets/2010_downloads/statistical_review_of_world_energy_full_report_2010.pdf.

32. BRUCE A. ACKERMAN & WILLIAM T. HASSLER, CLEAN COAL/DIRTY AIR (1981); U.S. ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES IN 2007 (2008), *available at* http://www.eia.doe.gov/oiaf/1605/ggrpt/pdf/0573%282007%29.pdf.

33. ELECTRIC POWER ANNUAL, *supra* note 30, at 2 (describing coal's share of U.S. energy); IPCC CCS Report, *supra* note 7, at 20 (predicting that the world's energy supply "will continue to be dominated by fossil fuels until at least the middle of the century").

34. IPCC CCS REPORT, *supra* note 7, at 19, 43.

35. *Id.* at 19.

36. *Id.*

37. *Id.* at 19, 29–30.

38. *Id.* at 19.

out.[39]

Some environmental groups think that this technology falsely promises "clean coal," and that it is an undesirable development—a distraction from the real solutions to climate change.[40] That is, money goes to coal companies[41] instead of to renewable energy development, either slowing down the response to climate change or pushing the problem on to future generations.[42] This Note does not take a position on this policy debate, but recognizes that this policy disagreement could provide ample reason to litigate against CCS development.[43] To the extent that there are gift clause problems with CCS indemnification, litigation is a viable weapon

39. *Id.* at 32.

40. EMILY ROCHON, GREENPEACE, FALSE HOPE: WHY CARBON CAPTURE AND STORAGE WON'T SAVE THE CLIMATE (2008), *available at* http://www.greenpeace.org/usa/Global/usa/report/2008/5/false-hope-why-carbon-capture.pdf; Greenpeace, *American Coalition for Clean Coal Electricity Greenwashing Dirty Coal*, STOPGREENWASH.ORG, http://www.stopgreenwash.org/casestudy_abec (last visited Mar. 23, 2011); *The Basics of Carbon Capture and Sequestration*, SIERRACLUB.ORG (Apr. 2008), http://www.sierraclub.org/energy/factsheets/basics-sequestration.pdf.

41. This Note will use "coal company" or "CCS developer" as shorthand for the types of entities that would engage in CCS activity. Typically, such entities are coal-fired power plants that generate electricity, but some CCS developers are working solely on the injection and storage aspects of the technology. *See infra* note 45.

42. Greenpeace, *supra* note 40 ("Perhaps the most misleading component of ACCCE's campaign is its implication that new and better CCS technologies capable of creating 'near-zero emissions' are right around the corner. In reality, some scientists feel that the earliest CCS technology could be implemented is 2030 and would cost billions."); *Dangerous Distractions: The Wrong Answers to Global Warming*, GREENPEACE.ORG, http://us.greenpeace.org/site/DocServer/distractions.pdf?docID=161 (last visited Apr. 1, 2011) ("We'll never stop global warming if we continue burning coal for energy[,]" and "[e]very dollar spent on energy efficiency and alternative energy like wind and solar goes 7-10 times further than nuclear in reducing our global warming pollution."). Although the latter quote compares renewable energy to nuclear power, the thrust of the claim applies to the other sources that the article disfavors.

43. Environmental groups have a history of bringing (and occasionally winning) lawsuits with novel or long-shot legal theories against their policy opponents (typically industries). *See* Massachusetts v. EPA, 549 U.S. 497 (2007) (environmental groups joined state litigation forcing EPA to regulate CO_2 emissions from automobiles); Connecticut v. Am. Elec. Power, 582 F.3d 309 (2d Cir. 2009), *cert. granted*, 131 S.Ct. 813 (U.S. Dec. 6, 2010) (No. 10-174) (environmental groups joined state-initiated GHG nuisance suit against Midwestern power companies); Felicity Barringer, *Suit Accuses U.S. Government of Failing to Protect Earth for Generations Unborn*, N.Y. TIMES, May 4, 2011, http://www.nytimes.com/2011/05/05/science/earth/05climate.html (reporting on the use of the common law public trust doctrine to argue that the atmosphere is part of the public trust that must be guarded for future generations). The state constitutional gift clauses provide such a legal theory to use against CCS development. If successful, these lawsuits might convince states to use former CCS money for renewable energy projects.

and possibly a source of additional uncertainty for CCS developers.

B. CCS Risks and Liability Concerns

1. CCS Risks

Much CCS technology is still in an early stage of development.[44] Only a few projects around the world currently use this technology on an industrial scale.[45] Nevertheless, the risks are fairly well known. There are four major risks: 1) induced seismicity, 2) acidification of ground water, 3) slow leakage of CO_2, and 4) release of highly pressurized CO_2.[46] First, CCS injection can increase pressure deep below ground and cause seismic events, which could reach a magnitude sufficient to damage property and pose a risk to human lives.[47] Second, CCS could contaminate groundwater and present a public-health risk if CO_2 leaks enter an aquifer or push brine into an aquifer.[48] Third, CO_2 leakage also presents a climate risk: CO_2 could escape the geologic formation and enter the atmosphere, thus contributing to climate change despite the enormous efforts put into preventing its release into

44. IPCC CCS REPORT, *supra* note 7, at 19, 21. However, much of the technology, such as well-drilling and injection, has been used in oil and natural gas contexts for years and is well understood. *See id.* at 31.

45. The major, industrial scale CCS projects are Sleipner in the North Sea, operated by StatoilHydro; Weyburn-Midale in Canada, operated by EnCana; Snovhit in the Barents Sea, operated by StatoilHydro; and Salah, Algeria, operated by BP, Sonatrach, and StatoilHydro. IEA Greenhouse Gas R&D Programme, *CO_2 Capture and Storage*, INT'L ENERGY AGENCY, http://www.ieaghg.org/index.php?/RDD-Database.html (last visited Apr. 2, 2011) (run a search for project type "CO2 Geological Storage Demonstration Projects" to view a comprehensive list of CCS pilot projects, including numerous smaller ones focused on specific aspects of the technology). Note that none of these projects involves coal-fired power plants, but merely the sequestration of CO_2 on an industrial scale.

46. S*ee* Flatt, *supra* note 11, at 219–22 (discussing the risks associated with CCS technology); Glaser et al., *supra* note 11, at 432–34 (a more technical and detailed discussion of the risks); *see also* Wilson et al., *supra* note 15; Som, *supra* note 15, at 968–71. *See generally* Evan Mills, *The Role of U.S. Insurance Regulators in Responding to Climate Change*, 26 UCLA J. ENVTL. L. & POL'Y 129 (2008) (discussing the general climate risk from the perspective of the insurance industry).

47. Glaser et al., *supra* note 11, at 433 ("The increased pressure associated with injecting CO_2 into deep rock formations can result in ground heave, fracturing of cap rock, and even earthquakes. Although most seismic activity induced by underground injection is relatively small (99 percent of events register less than Magnitude 2.5 on the Richter scale, below human detection levels), larger events have been observed, with the largest registering Magnitude 5.5 on the Richter scale.").

48. IPCC CCS REPORT, *supra* note 7, at 34.

the atmosphere.[49] Fourth, failures in the injection well could also lead to a blow-out, which is a highly pressurized release of CO_2.[50] Management of this risk is well developed, as the oil and natural gas well industry has long dealt with similar contingencies.[51] It nonetheless still presents a danger to responding workers and any other nearby people and wildlife.[52] One example of a natural CO_2 release is the 1986 incident in Lake Nyos, Cameroon. There, volcanic activity induced a release of 100 kilotons of CO_2, killing 1700 people and thousands of animals.[53] These hazards are not isolated to a single step of the process, but will be present for the expected millennia of storage.[54] Lastly, although "the fraction [of CO_2] retained in appropriately selected and managed reservoirs is very likely to exceed 99% over 100 years, and is likely to exceed 99% over 1000 years[,]"[55] absolute containment of CCS is likely impossible.[56]

2. Liability for CCS Risks

These risks raise several liability issues at both state and federal levels. A CO_2 release could kill human beings and damage property, giving rise to tort liability under state common law.[57] State environmental statutes could also impose liability. For example, one could be found liable under state law for contaminating groundwater, improperly disposing of waste, or contaminating a site.[58]

Three currently existing federal statutes are also likely to impose

49. *Id.*

50. *Id.*

51. *Id.*

52. *Id.*

53. Glaser et al., *supra* note 11, at 432.

54. *See* Som, *supra* note 15, at 970–71 (discussing how CO_2 leakage over time could not only defeat the purpose of CCS, but lull humanity into a false sense of security and cause humanity to forgo other options, because climate change was thought to have been avoided).

55. IPCC CCS REPORT, *supra* note 7, at 34.

56. Glaser et al., *supra* note 11, at 433.

57. *See* Klass & Wilson, *supra* note 11, at 133–45 (describing liability issues with property rights, trespass, negligence, negligence per se, nuisance, strict liability, abnormally dangerous activities, and damages).

58. *See, e.g.*, N.Y. ENVTL. CONSERV. LAW §§ 15-0514, 27-1313 (McKinney 2011) (protecting groundwater and establishing state superfund program, which allows the state to recover costs for cleaning up a site that was contaminated by a private party).

liability for CCS failures: 1) the Resource Conservation and Recovery Act ("RCRA"), 2) the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and 3) the Safe Drinking Water Act ("SDWA").[59] Cap-and-trade legislation may create additional liability if passed into law.

RCRA contains requirements for disposal of solid and hazardous waste. For these requirements to apply, CO_2 must be classified as a solid waste; additional requirements would apply if CO_2 were classified as hazardous waste.[60] CO_2 will likely be considered a "solid waste," but industry lobbying could lead Congress or the U.S. Environmental Protection Agency ("EPA") to reclassify CO_2 as a commodity, exempting it from these requirements.[61] CO_2 is less likely to be considered a "hazardous waste," but injection procedures or injectate impurities may involve other chemicals meriting this distinction.[62] Industry lobbying has begun to address this, but Congress and EPA have yet to take action on this classification issue.[63] Under RCRA, a private plaintiff could potentially receive injunctive relief compelling the landowner to remediate any imminent harm to human health, in addition to monitoring, investigating, testing, and paying for cleanup costs.[64] RCRA can also be used to sue prior owners if their actions caused a presently existing threat.[65]

CERCLA imposes liability for natural resource damages and for cleanup of contaminated sites. CERCLA liability is contingent on

59. Klass & Wilson, *supra* note 11, at 124–28 (describing CCS liability under RCRA), 128–32 (describing CCS liability under CERCLA); Arnold W. Reitze, Jr., *Federal Control of Carbon Dioxide Emissions: What are the Options?*, 36 B.C. ENVTL. AFF. L. REV. 1, 40–41 (2009) (describing the permitting requirements for CCS under the Safe Drinking Water Act); *Western Businesses Warn EPA Liability Rules May Sink CCS Projects*, INSIDE EPA WEEKLY REPORT, Oct. 23, 2009 ("EPA officials have indicated in their most recent draft proposal that they have little ability to block CERCLA and RCRA application to the [CCS] projects."); *see* 42 U.S.C. § 300h(b)(1)(A) (2006).

60. Klass & Wilson, *supra* note 11, at 126–27.

61. *Id.* at 126.

62. *Id.* at 127.

63. In a recent rulemaking, EPA suggested that RCRA's applicability will be heavily fact-specific: impurity levels of the CO_2 injectate stream will vary "by facility, coal composition, plant operating conditions, and pollutant removal and carbon capture technologies." Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO_2) Geologic Sequestration (GS) Wells, 75 Fed. Reg. 77,230, 77,260 (Dec. 10, 2010) (to be codified at 40 C.F.R. pts. 124, 144–47) [hereinafter Class VI Rule].

64. Klass & Wilson, *supra* note 11, at 125–28.

65. *Id.* at 127–28.

the classification of CO_2 as a hazardous waste.[66] Recovery is limited, however, to response costs.[67] Response costs are "money spent on the investigation and remediation of a release of hazardous substances."[68] Additionally, some related state superfund statutes allow recovery for, inter alia, personal injury, lost profits, and attorneys' fees.[69] CERCLA applies to owners, operators, transporters, and arrangers whose involvement with the site has ceased.[70]

EPA has already begun regulating the underground injection of CO_2 pursuant to the SDWA.[71] Injection sites near drinking water are now classified as "Class VI" wells, and these wells are subject to stringent requirements unique to CO_2.[72] However, EPA's authority under the SDWA is limited to permitting procedures and enforcement mechanisms addressing the potential for migration of injected material into underground drinking water supplies.[73] Injection of CO_2 into geologic sites that do not contain underground drinking water is outside of the scope of the SDWA, meaning that CCS developers could evade SDWA regulations by avoiding sites near underground drinking water.[74]

66. *Id.*; *see also supra* text accompanying note 61. As with RCRA's applicability, EPA indicated that CERCLA applicability would be fact-specific: "CO_2 itself is not listed as a hazardous substance under CERCLA. However, the CO_2 stream may contain a listed hazardous substance (such as mercury) or may mobilize substances in the subsurface that could react with ground water to produce listed hazardous substances (such as sulfuric acid)." Class VI Rule, *supra* note 63, at 77,260.

67. 42 U.S.C. § 9607(a)(4) (2006) (limiting CERCLA liability to response costs, natural resource damages, and costs of a health assessment).

68. 42 U.S.C. § 9601(25) (2006) ("The terms 'respond' or 'response' means [sic] remove, removal, remedy, and remedial action; all such terms (including the terms 'removal' and 'remedial action') include enforcement activities related thereto.").

69. Klass & Wilson, *supra* note 11, at 129–31.

70. *Id.* at 131; *see also* Class VI Rule, *supra* note 63, at 77,230.

71. Reitze, *supra* note 59, at 40–41 (describing the permitting requirements for CCS under the Safe Drinking Water Act); *see* 42 U.S.C. § 300h(b)(1)(A) (2006).

72. Class VI Rule, *supra* note 63, at 77,254–303.

73. Glaser et al., *supra* note 11, at 434–36 (noting also that the SDWA is ill-suited for industrial-scale CCS projects and long-term storage).

74. It is unclear how difficult finding such sites will be. CCS primarily targets saline aquifers, which were previously of little interest to geologic and water-quality study. Further research is required to determine what relationship these aquifers have to drinking water repositories, but the uncertainty of the issue suggests that, at the very least, evasion will require the cost of researching a particular area for sequestration. *See* John Largey & Neil Johnson, *Potential Impacts of GCS to Underground Sources of Drinking Water*, CARBON CAPTURE J., Feb. 12, 2010, at 9, *available at* http://www.carboncapturejournal.com/displaynews.php?NewsID=513.

Re-release of CO_2 into the atmosphere could also result in liability under a regulatory regime for CO_2 emissions, which appears unlikely to be implemented soon.[75] For example, such an emission might be subject to permitting requirements and fines under a cap-and-trade regime or sector-specific CO_2 regulation.

3. Effects of Liability on CCS Development and the Government's Role

The liability concerns identified in the previous section create a high hurdle to market entry.[76] Both state governments and the federal government can play important roles in addressing these concerns. In fact, recognizing this hurdle and the potential public value of CCS, both state and federal governments have already begun to incentivize the development of this new technology.[77]

For example, at the federal level, Congress has provided tax and other financial incentives for CCS in the American Recovery and Reinvestment Act of 2009 ("ARRA"),[78] and the Waxman-Markey bill contained similarly generous provisions.[79] The future of federal

75. *See, e.g.*, Kim Chipman & Brian K. Sullivan, *Disaster Needed for U.S. to Act on Climate Change, Harvard's Stavins Says*, BLOOMBERG, Apr. 29, 2011 (describing many negative signs for GHG regulation by the US: President Obama's failure to pass a GHG bill, declining public opinion concern about climate change, and the election of several Congressional representatives hostile to GHG regulation). Also, some regional regimes for regulating GHGs already exist. *See* MIDWEST GOVERNORS ASS'N, MIDWESTERN GREENHOUSE GAS ACCORD (2007) (an accord signed by Midwestern Governors to set emissions targets and establish a market regime for emissions trading), *available at* http://graphics2.jsonline.com/graphics/news/img/nov07/MGAGreenhouseGasAccord.pdf; REGIONAL GREENHOUSE GAS INITIATIVE, http://www.rggi.org/home (last visited Feb. 21, 2011) (a partnership of Northeastern states regulating GHG emissions); WESTERN CLIMATE INITIATIVE, http://www.westernclimateinitiative.org/ (last visited Feb. 21, 2011) (a group of Western states and Canadian provinces regulating GHG emissions).

76. *Western Businesses Warn EPA Liability Rules May Sink CCS Projects*, INSIDE EPA WEEKLY REPORT, Oct. 23, 2009 (quoting an industry coalition: "These laws, if applied broadly to CCS, would impose significant obligations and potential liabilities not only on project operators, but also potentially on other entities in the CO_2 chain, such as entities producing the CO_2 that is ultimately injected. That would put advancement of CCS commercialization into a deep freeze. Such an outcome would clearly be counter-productive.").

77. Klass & Wilson, *supra* note 11, at 121–23.

78. *See* American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 1131, 123 Stat. 115, 325 (2009), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf.

79. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. §§ 111–116 (2009); PEW CTR. ON GLOBAL CLIMATE CHANGE, IN BRIEF: WHAT THE WAXMAN-MARKEY BILL DOES FOR COAL 1 (2009), *available at* http://www.pewclimate.org/docUploads/brief-what-waxman-markey-does-for-coal-may2010.pdf.

climate legislation, however, is uncertain, as the Obama administration's current energy plan seeks to pass "'bite-sized pieces'" of legislation.[80] Also, the Department of Energy assisted with the financing of a major CCS pilot project, FutureGen, by providing funds upon the project reaching various benchmarks, and by assisting in finding international partners for this venture.[81] The scope of this project recently underwent a dramatic change: the project will now store CO_2 from other plants but will not have its own plant.[82] In the following discussion, this Note will refer to the plans for the original project. Indemnification of the CCS developer, also called FutureGen, for the long-term liability associated with this project was provided by leading state bidders and was a major component in the total governmental financial incentive package.[83] Indemnification is essentially a contract to assume someone else's liability.[84] For example, *A* indemnifies *B* by contract. If *B* commits a tort and incurs liability, *A* has assumed responsibility for that liability and must pay damages, whereas *B* is held harmless for the liability.

A failed House amendment to the bill authorizing financial assistance would have indemnified the FutureGen Project for up to $500 million, providing a federal cushion for the state

80. Katie Howell, *Obama Promises Action on Energy Next Year*, GREENWIRE (Oct. 28, 2010), http://www.eenews.net/Greenwire/2010/10/28/10/; Laura Meckler, *Obama Outlines Energy Plan*, WALL ST. J., Mar. 31, 2011, http://online.wsj.com/article/SB10001424052748703712504576232481675369892.html (describing several independent policy proposals, including a clean energy standard for the U.S., a fleet of vehicles powered by natural gas, and tax credits for electric vehicles, but no comprehensive regulatory system to deal with GHGs).

81. *See Fossil Energy: DOE's FutureGen 2.0 Initiative*, U.S. DEP'T OF ENERGY (Aug. 5, 2010), http://www.fossil.energy.gov/programs/powersystems/futuregen/.

82. U.S. DEP'T OF ENERGY, SECRETARY CHU ANNOUNCES FUTUREGEN 2.0 (2010), *available* at http://www.fossil.energy.gov/news/techlines/2010/10033-Secretary_Chu_Announces_FutureGen_.html.

83. TEX. NAT. RES. CODE ANN. § 119.006 (West 2006); 20 ILL. COMP. STAT. 1107/1–999 (repealed by its own terms, Mar. 2011). Illinois's statute included tax incentives in addition to the indemnification provisions. *But see* Jack Lyne, *Illinois, Texas Sweep Short List for FutureGen's $1-Billion 'Clean-Coal' Project: The Plant's Pollution-Cutting Technology Could Change the Global Energy Picture*, SITE SELECTION (Aug. 7, 2006), http://www.siteselection.com/ssinsider/snapshot/sf060810.htm (describing FutureGen's site-selection criteria and the incentives provided by several states, but concluding that only Texas' indemnification was significant).

84. ERIC MILLS HOLMES & MARK S. RHODES, HOLMES'S APPLEMAN ON INSURANCE § 3.3 (2d ed. 1996) (describing third-party liability insurance and its conceptual relationship to indemnification).

indemnification proposals.[85] Illinois and Texas, the states competing for the siting of this project, each passed legislation indemnifying FutureGen and taking title to the captured CO_2.[86] "Taking title" here means that ownership of the actual CO_2 gas and the site where it is stored would be transferred from FutureGen to the state, so that the state can manage the geologic repository and assume responsibility for any future liability. Taking title is a means of accomplishing indemnification against future liability: by handing over the gas and the site, the sources of future liability, the transferor absolves itself of that future liability. The states would also assume retroactive liability under RCRA and CERCLA for FutureGen's contribution to any problems at the site.[87]

From a risk management perspective, there is a strong argument in favor of a governmental entity taking title from private companies or otherwise ensuring long-term care for sequestered CO_2.[88] The life of a firm might extend for decades, but responsibility for the long-term liability associated with CCS will last for thousands of years.[89] A governmental entity or oversight program is a natural choice to address this concern, as each of these is considered to be more permanent than a business entity and each of these could avoid the moral hazards associated with the limited liability of a business entity.[90] If CCS is to achieve commercial availability in time to help solve climate change, a partnership between government and private parties is necessary.[91]

Either states or the federal government (or both) could fill the requisite governmental role in handling long-term CCS liability. As is the case in most areas of environmental law, there will likely be

85. Klass & Wilson, *supra* note 11, at 149 (citing amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006)).

86. TEX. NAT. RES. CODE ANN. § 119.006 (West 2006); 20 ILL. COMP. STAT. 1107/1–999 (repealed by its own terms, Mar. 2011). Illinois's statute included tax incentives in addition to the indemnification provisions.

87. *See supra* Part I.B.2 for discussion of RCRA and CERCLA liability, from which it follows that states would be liable under these statutes by way of owning the land that potentially contains solid and hazardous waste.

88. Klass & Wilson, *supra* note 11, at 176–77.

89. INT'L RISK GOVERNANCE COUNCIL, POLICY BRIEF: REGULATION OF CARBON CAPTURE AND STORAGE 23 (2008); Som, *supra* note 15, at 981.

90. *See* IOGCC, *supra* note 11, at 9–11.

91. *Id.* (arguing for "an industry-funded and state-administered trust fund as the most effective and responsive 'care-taker' program to provide the necessary oversight during the Post-Closure Period"); *see also* NYSERDA REPORT, *supra* note 17, at 74.

overlapping federal and state authority in some sort of cooperative regime.[92] States are already developing regulatory systems for the property-rights issues that arise from CCS,[93] and EPA has begun regulating CCS injection under the SDWA's Underground Injection Control provisions.[94] Federal legislation and regulations limiting GHGs, as well as the development of comprehensive state regulatory regimes for CCS, are also on the horizon.[95] While the current federal legislation and regulations do not address long-term liability management, some state efforts do.[96] On the specific issue of managing long-term liability for CCS, both federal and state roles are possible. Federal actions could include amending RCRA and CERCLA to exclude CO_2,[97] providing for an insurance system similar to the Price-Anderson Act,[98] or otherwise

92. *See, e.g.*, 42 U.S.C. § 7410 (2006) (requiring state implementation of federally established air quality standards).

93. *See* H.R. 90, 59th Leg., 2008 Budget Sess. (Wyo. 2008) (codified at WYO. STAT. ANN. §§ 30-5-501, 35-11-313 (2011)) (requiring permits from landowners to sequester CO_2); H.R. 89, 59th Leg., 2008 Budget Sess. (Wyo. 2008) (codified at WYO. STAT. ANN. §§ 34-1-152, 34-1-202(e) (2011)) (defining rights of pore space ownership); H.R. 57, 60th Leg., 2009 Gen. Sess. (Wyo. 2009) (codified at WYO. STAT. ANN. § 34-1-152(e) (2011)) (defining rights of mineral deposit ownership); NYSERDA REPORT, *supra* note 17, at 10–13; *see also* IOGCC, *supra* note 11, at 11, 15–22 (outlining legal approaches to property rights with regard to CCS).

94. *See* 42 U.S.C. §§ 300h to 300h-8 (2006) (SDWA Underground Injection Control provisions); 40 C.F.R. §§ 144–148 (2011) (regulations implementing SDWA Underground Injection Control provisions); Reitze, *supra* note 59, at 40–41.

95. Christa Marshall, *Another State of the Union Speech Looms, but Climate Activists Want Action*, N.Y. TIMES, Jan. 25, 2010, http://www.nytimes.com/cwire/2010/01/25/25climatewire-another-state-of-the-union-speech-looms-but-86243.html ("The president also could use looming climate regulations from U.S. EPA to press lawmakers. . . ."). *But see id.* ("Having 'broken his pick' on health care, [American Enterprise Institute analyst Samuel] Thernstrom said, Obama now stands much weaker than he did a year ago. 'He can't get a cap on emissions passed,' Thernstrom said. He argued that the president's best option now is to push for an increase in research, development and deployment of clean energy technologies outside of a climate bill.").

96. NYSERDA REPORT, *supra* note 17, at 42–52; H.R. 58, 60th Leg., 2009 Gen. Sess. (Wyo. 2009) (codified at WYO. STAT. ANN. § 34-1-153 (2011)) (establishing a legal framework for CCS injector ownership rights and liability issues); TEX. NAT. RES. CODE ANN. § 119 (2006); 20 ILL. COMP. STAT. 1107/1–999 (repealed by its own terms, Mar. 2011).

97. NYSERDA REPORT, *supra* note 17, at 49; *see* Klass & Wilson, *supra* note 11, at 127–32 (describing RCRA and CERCLA as "crude tool[s]" to deal with CCS, and suggesting that Congress might take action to address this).

98. Price-Anderson Act, 42 U.S.C. § 2210 (2006) (for the nuclear energy industry, capping payments from individual companies at $15 million per year and indemnifying the companies against any additional liability); Inflation Adjustment to the Price-Anderson Act Financial Protection Regulations, 73 Fed. Reg. 56,451 (2008) (raising cap to $17.5 million

indemnifying utility companies that burn coal.[99] States could also indemnify or incentivize these utility companies,[100] or even make themselves unattractive to CCS development if they so choose.[101]

Striking the proper balance between state and federal involvement is a difficult task. Scholars have proposed three approaches to regulating CCS: 1) a primarily federal system, 2) a primarily state-driven system, and 3) a balance of overlapping federal and state power.[102]

By providing uniform rules, federal legislation arguably provides incentives for good site selection and responsible risk management, along with better assurances of compensation for injured parties when compared to state compensation.[103] This approach could avoid a "race to the bottom" among states, wherein states might lower regulatory standards to attract CCS developers. Federal legislation would provide a regulatory floor, below which states could not go.[104]

A regulatory approach led by the states might prove more advantageous in some respects. States might be able to develop a

per year as an adjustment for inflation).

99. Klass & Wilson, *supra* note 11, at 149 (citing amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006)).

100. 20 ILL COMP. STAT. 1107/1–997 (repealed by its own terms, Mar. 2011); S.B. 1461, 80th Leg., 2007 Sess. (Tex. 2007); NYSERDA Report, *supra* note 17, at 58–62 (discussing numerous policy options to incentivize CCS development).

101. *See* Klass & Wilson, *supra* note 11, at 151 ("Despite the fact that the DOE has withdrawn its support for the FutureGen project, the state legislative activity prior to that withdrawal serves as an example of states competing for lucrative governmental investment. The inverse can also be true: states or counties may actively develop protections to disallow industrial facility development.") In support of this point, Klass and Wilson cite a study of nuclear facility siting and the "not-in-my-backyard" phenomenon. *Id.* at 151, n.212 (citing ROBERT VANDENBOSCH & SUSANNE VANDENBOSCH, NUCLEAR WASTE STALEMATE: POLITICAL AND SCIENTIFIC CONTROVERSIES (2007)).

102. *See, e.g.*, IOGCC, *supra* note 11, at 3 ("A key conclusion of that report was that given the jurisdiction, experience, and expertise of states and provinces in the regulation of oil and natural gas production and natural gas storage in the United States and Canada, the states and provinces would be the most logical and experienced regulators of the geologic storage of carbon dioxide."); Klass & Wilson, *supra* note 11, at 178–79 (favoring a comprehensive federal regulatory approach with state tort liability as a backdrop).

103. Klass & Wilson, *supra* note 11, at 150–54, 178.

104. *Cf.* IOGCC, *supra* note 11, at 3 (favoring states as the primary regulators of CCS); Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race to the Bottom" Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210 (1992) (providing empirical evidence against the existence of the "race to the bottom" phenomenon). *See generally* Klass & Wilson, *supra* note 11 (favoring a comprehensive federal approach to CCS regulation, but cautioning against federal preemption of state tort law).

working regulatory framework more quickly by integrating CCS into their property rights regimes and drawing on their experience in regulating enhanced oil recovery and natural gas storage.[105] States' current regulation of many subterranean activities puts states closer to the action in this area, making them better suited to handle the localized operation, maintenance, and monitoring than are federal agencies.[106] Many states are already well-equipped for such tasks by virtue of having established regulatory systems for the management of oil and natural gas wells.[107]

A combination of these programs might also be desirable. Local expertise in property rights could be coupled with uniform federal standards.[108] For example, federal law could establish uniform safety standards for selection and risk management of geologic repositories, while states would have the primary responsibility for implementing and enforcing those standards. Such a combination of standard-setting by the federal government and implementation by the states has been successfully achieved by the Clean Air Act, in which the federal government establishes National Ambient Air Quality Standards and the states implement them via State Implementation Plans.[109] A healthy regulatory competition that improves regulation by eliminating its inefficiencies might also be a way to combine state and federal regulation.[110] Although the mechanisms of such a theory are underdeveloped in this area, state and federal governments could compete for regulatory space: each

105. *See* IOGCC, *supra* note 11, at 9–10.

106. *See id.*

107. *See generally* Owen L. Anderson, *Geologic CO_2 Sequestration: Who Owns the Pore Space?*, 9 WYO. L. REV. 97 (2009) (describing the current property rights and regulatory regimes for enhanced-oil-recovery projects and their similarity to CCS).

108. *See* Flatt, *supra* note 11, at 238 ("Due to the spectrum of property interests at issue, the diversity of treatment of these interests between the states and the reliance upon the states of these regimes governing existing CO_2 injection sites, federal law should not completely preempt this area of state property law as part of any comprehensive CCS federal legislation.").

109. 42 U.S.C. § 7409 (2006) (requiring EPA to adopt nationally uniform standards regarding air pollutants that endanger the public health or welfare); 42 U.S.C. § 7410 (2006) (requiring states to develop and submit State Implementation Plans to comply with EPA's National Ambient Air Quality Standards).

110. *See, e.g.*, Uri Geiger, *The Case for the Harmonization of Securities Disclosures in the Global Market*, 1997 COLUM. BUS. L. REV. 241, 268–80 (describing and analyzing regulatory competition theory and the prospect of competitive equilibrium in the context of more stringent securities regulation regimes providing the most efficient spaces for investors).

tries to offer the most efficient resolution of particular problems.[111] A possible mechanism here might be for regulators to create increasingly stringent regimes forcing undesirable CCS developers to migrate into another regulatory space.[112]

Policy arguments aside, legal constraints may also inform the optimal balance between state and federal authority. Some state constitutions constrain the use of public money in support of private enterprise, which could make indemnification or other financial incentives unconstitutional.[113] Furthermore, these limitations are not uniform across the states, which could alter the calculus of state competition for CCS.[114] That is, states without fiscal limitations could provide full indemnification, whereas states with stricter fiscal limitations could only provide less valuable financial incentives. This economic distortion could bolster the argument in favor of a stronger federal role in regulating CCS.[115] However, if state regulation is deemed the better choice, then states will have to develop ways to work within (or around) those constitutional constraints.[116]

II. THE GIFT CLAUSE OBSTACLE TO CCS INDEMNIFICATION

This Part introduces the concept of state constitutional gift clauses and provides a taxonomy of spending limitations. The Part then provides the historical basis and policy rationale behind gift clauses; namely, that states lent money to speculative railroad

111. For example, states and the federal government currently compete on issues in corporate governance, such as going-private rules. *See* Mark J. Roe, *Delaware and Washington as Corporate Lawmakers*, 34 DEL. J. CORP. L. 1 (2009).

112. *See generally* CATHERINE BARNARD & SIMON DEAKIN, MARKET ACCESS AND REGULATORY COMPETITION § 2, *available at* http://centers.law.nyu.edu/jeanmonnet/papers/01/012701.html (describing movement across jurisdictional boundaries to select a different legal rule as the traditional mechanism of regulatory competition).

113. *See infra* Part II and Appendix for complete survey and argument.

114. *See* Briffault, *supra* note 21, at 946–47 (expressing doubt about the role that state fiscal limits play in corporate decisions while noting the clear potential for abuse).

115. The economic distortions are countless. For example, a coal company might choose a state with riskier or less cost-effective geologic sequestration sites, because the state with better sites might not have the constitutional authority to provide sufficient financial incentives. Or, coal companies may relocate to states with better financial incentives.

116. *See generally* Briffault, *supra* note 21; James C. Clingermayer & B. Dan Wood, *Disentangling Patterns of State Debt Financing*, 89 AM. POL. SCI. REV. 108, 116 (1995) (finding that limitations on state debt "have no statistically significant impact on net increases in state debt").

development projects, which later failed and sent several states into a fiscal crisis. This Part also describes the two primary interpretations that courts have generally given these provisions: 1) reading an exception for "public purposes" into the text and 2) reading the text strictly and disallowing any credit to private individuals or companies. After pointing out that strict construction jurisdictions are in the minority, this Part applies the policy rationale of that position to CCS indemnification. This Part argues that CCS indemnification presents an even stronger case for prohibition by gift clause than the original railroad crises that precipitated the adoption of the gift clause in the first instance. This Part closes by considering and dismissing some counterarguments to the applicability of gift clauses and to the necessity of indemnifying CCS developers.

A. Introduction to Gift Clauses

State constitutional limitations on public spending come in many different forms. Forty-six states have some form of limit on public spending by the state, typically with some specific prohibition of the state's lending of credit or of the state's ability to own stock in a private enterprise,[117] or with a general bar on using public money

117. This Note includes a fifty state survey with preliminary analysis of gift clause jurisprudence and its application to CCS. *See infra* Appendix. For a more thorough exposition of a fifty state survey, *see* Ralph L. Finlayson, *State Constitutional Prohibitions Against Use of Public Financial Resources in Aid of Private Enterprises*, 1 EMERGING ISSUES ST. CONST. L. 177 (1988). I have updated Mr. Finlayson's list of the states' gift clauses for this footnote. Forty-one states use some permutation of these limitations. Each constitutional provision and the title of the article in which it appears are as follows: ALA. CONST. art. IV, § 94, *amended by* ALA. CONST. amend. 112 (Legislative Department); ARIZ. CONST. art. IX, § 7 (Public Debt, Revenue and Taxation); ARK. CONST. art. XII, §§ 5, 7 (Municipal and Private Corporations), art. XVI, § 1 (Finance and Taxation); CAL. CONST. art. XVI, §§ 6, 17 (Public Finance); COLO. CONST. art. V, § 34 (Legislative Department), art. XI, §§ 1–2 (Public Indebtedness); DEL. CONST. art. VIII, §§ 4, 8 (Revenue and Taxation); FLA. CONST. art. VII, § 10 (Finance and Taxation); GA. CONST. art. III, § VI, para. 6 (Legislative Branch), art. VII, § IV, para. 8 (Taxation and Finance); IDAHO CONST. art. VIII, §§ 2, 4 (Public Indebtedness and Subsidies); IND. CONST. art. X, § 5 (Finance), art. XI, § 12 (Corporations); IOWA CONST. art. VII, § 1 (State Debts), art. VIII, § 3 (Corporations); KY. CONST. §§ 171, 177, 179 (Revenue and Taxation); LA. CONST. art. VII, pt. I, §§ 1, 10, 14 (Revenue and Finance); ME. CONST. art. IX, §§ 14–14-A (General Provisions); MD. CONST. art. III, § 34 (Legislative Department); MASS. CONST. amend. art. LXII; MICH. CONST. art. IV, § 30 (Legislative Branch), art. VII, § 26 (Local Government), art. IX, §§ 18–19 (Finance and Taxation); MINN. CONST. art. XI, §§ 2, 12 (Appropriations and Finances); MISS. CONST. art. 7, § 183 (Corporations); art. 14, § 258 (General Provisions); MO. CONST. art. III, § 38a (Legislative

for non-public purposes.[118] New York's constitutional language is representative of strict prohibitions without a public purpose exception: "The money of the state shall not be given or loaned to or in aid of any private corporation or association, or private undertaking."[119] The Alaska Constitution provides a representative example of the more general prohibition with a public purpose exception: "No tax shall be levied, or appropriation of public money made, or public property transferred, nor shall the public credit be used, except for a public purpose."[120] This Note groups all of these limitations together as "gift clauses" and distinguishes particular prohibitions where appropriate. Specific prohibitions include "credit clauses," "stock clauses," and "current appropriations clauses."[121] Credit clauses prohibit the state's lending of credit to a private corporation or individual, stock clauses prohibit the state's taking stock or investing in a private corporation, and current appropriations clauses impose these requirements on municipalities and local governmental entities.[122]

Department), art. VI, §§ 23, 25 (Local Government); MONT. CONST. art. VIII, §§ 8, 10 (Revenue and Finance); NEB. CONST. art. XIII, § 3 (State and Municipal Indebtedness), art. XV, § 17 (Miscellaneous Provisions); NEV. CONST. art. 8, §§ 9–10 (Municipal and other Corporations); N.H. CONST. pt. 2, art. 5 (General Court); N.J. CONST. art. VIII, §§ II, para. 1, III, paras. 2–3 (Taxation and Finance); N.M. CONST. art. IV, §§ 26, 31 (Legislative Department), art. IX, § 14 (State County and Municipal Indebtedness); N.Y. CONST. art. VII, § 8 (State Finances); N.C. CONST. art. V, § 3, paras. 2–3 (Finance); N.D. CONST. art. X, § 18 (Finance and Public Debt); OHIO CONST. art. VIII, §§ 4, 6, 13 (Public Debt and Public Works); OKLA. CONST. art. X, § 15 (Revenue and Taxation); OR. CONST. art. XI, §§ 5–7, 9 (Corporations and Internal Improvements); PA. CONST. art. VIII, § 8 (Taxation and Finance); R.I. CONST. art. 6, §§ 11, 16 (Legislative Power); S.C. CONST. art. X, § 11 (Finance and Taxation); TENN. CONST. art. II, § 31 (Distribution of Powers); TEX. CONST. art. III, §§ 50, 52 (Legislative Department), art. VIII, § 3 (Taxation and Revenue), art. XVI, § 6 (General Provisions); UTAH CONST. art. VI, § 29 (Legislative Department); VA. CONST. art. X, § 10 (Taxation and Finance); WASH. CONST. art. VIII, §§ 5, 7 (State, County and Municipal Indebtedness), art. XII, § 9 (Corporations other than Municipal); W. VA. CONST. art. X, § 6 (Taxation and Finance); WYO. CONST. art. XVI, § 6 (Public Indebtedness).

118. Five states use a general prohibition: ALASKA CONST. art. IX, § 6 (Finance and Taxation); CONN. CONST. art. I, § 1 (Declaration of Rights); HAW. CONST. art. VII, § 4 (Taxation and Finance); ILL. CONST. art. VIII, § 1 (Finance); VT. CONST. chap. I, art. 7 (Declaration of the Rights of the Inhabitants of the State of Vermont).

119. N.Y. CONST. art. VII, § 8, para. 1.

120. ALASKA CONST. art. IX, § 6.

121. Pinsky, *supra* note 21, at 278–80 (proposing this taxonomy of gift clauses).

122. *Id.*

B. History of Gift Clauses

Gift clauses were adopted in the middle of the nineteenth century as a response to state experience with private enterprise.[123] Many states insured loans or provided capital for private railroad companies.[124] Railroads had great potential for public benefit and could attract new business, but building them was a highly speculative and risky venture.[125] Several private railroad companies failed commercially, especially following the Panic of 1837, and defaulted on loans, leaving the states scrambling to cover their debts and absorbing large losses.[126]

Fed up with government involvement in private speculation, state legislatures began passing constitutional amendments—known as gift clauses—in order to prevent a similar fiscal disaster from reoccurring.[127] Most of these amendments were passed in response to the Panic of 1837.[128] Some state legislatures circumvented these gift clause prohibitions by authorizing municipalities or localities to lend credit or otherwise give public money to private causes, which often led once more to economic crisis and failure.[129] In the late nineteenth century, many states then extended these fiscal limitations to municipalities and local governments to close this loophole in prior provisions.[130]

Yet over time, state courts began to carve out exceptions to these constitutional limitations. For example, some courts created a "public purpose" exception and held that public money could be given to private individuals if it would somehow result in a public benefit.[131] During the Great Depression, many courts read the

123. *See* TARR, *supra* note 23, at 111–12 (1998).

124. *Id.* at 277–82 (describing state involvement with private railroad companies and the instances of default).

125. *Id.* at 277.

126. *Id.*

127. *Id.* at 111–12; David A. Super, *Rethinking Fiscal Federalism*, 118 HARV. L. REV. 2544, 2605–06 (2005) (describing Jacksonian economic theory underlying state spending limitations such as credit clauses).

128. TARR, *supra* note 23, at 112.

129. *Id.* at 113–14.

130. Briffault, *supra* note 21, at 912.

131. *See, e.g.*, Sharpless v. Mayor of Phila., 21 Pa. 147 (1853); Briffault, *supra* note 21, at 912; Super, *supra* note 127, at 2607 ("As the abuses that gave rise to the Jacksonian provisions faded from memory and an industrializing and urbanizing nation put more demands on its state and local governments, states relaxed some of the Jacksonian strictures. Prohibitions on special legislation have been interpreted narrowly, and expanded borrowing has been

prohibitions narrowly and upheld public financing mechanisms for private industry. Courts found a variety of valid public purpose justifications, including: increasing employment,[132] expanding the tax base,[133] and funding individual firms by revenue bonds.[134] Revenue bond programs fund a particular company or industry by selling a set of state bonds to create a special fund that is separated from the state's taxpayer-generated general revenue.[135] This separation from the taxpayers' dollars was often deemed sufficient to validate a program under a gift clause,[136] though not every court agreed.[137]

In the modern era, courts have read gift clause prohibitions even more narrowly and expanded the number and type of financing programs upheld. Currently, state legislatures play a crucial role in determining the validity of a public purpose.[138] Courts are typically hesitant to scrutinize legislative choices in appropriating funds, and hence they proceed with a highly deferential rationality review.[139] Recently accepted public purposes include economic growth, attracting businesses to the area, or even the payment of country

permitted in support of public works projects."). Also, note that for three states (Alaska, Hawaii, and Illinois), public purpose exceptions are included within the text of the state constitution. These three textual public purpose exceptions were enacted in the late twentieth century, coinciding with statehood for Alaska and Hawaii and with the 1970 Constitution for Illinois.

132. Briffault, *supra* note 21, at 913; *see* Common Cause v. State, 455 A.2d 1 (Me. 1983) (upholding state payment to private corporation in order to persuade corporation to remain in state).

133. Briffault, *supra* note 21, at 913.

134. *Id.* at 913, 918–19 (citing B.U. RATCHFORD, AMERICAN STATE DEBTS 446–66 (1941)).

135. *Id.*

136. *Id.* at 918; *see* Robertson v. Zimmermann, 196 N.E. 740, 744 (N.Y. 1935) (upholding debt secured solely by revenues from a public authority).

137. *See, e.g.*, Eakin v. State *ex rel.* Capital Improvement Bd., 474 N.E.2d 62, 67 (Ind. 1985) (rejecting as "debt" a revenue bond scheme to fund a convention center); Newell v. People, 7 N.Y. 9, 93 (1852) (striking down as evasive the use of canal bonds to fund a canal project).

138. *See* Briffault, *supra* note 21, at 914; Clayton P. Gillette, *Local Redistribution, Living Wage Ordinances, and Judicial Intervention*, 101 NW. U. L. REV. 1057, 1064 (2007) ("Recent opinions reveal nearly automatic acceptance of legislative determinations that proposed programs will redound to the public's benefit or do not obligate the locality in the event the project fails."); *see also In re* Okla. Dev. Fin. Auth., 2004 OK 26, ¶ 18, 89 P.3d 1075, 1081 (2004) (discussing prior case holding that courts should defer to legislative judgments of public purpose unless legislature's determination is clearly arbitrary or capricious).

139. Briffault, *supra* note 21, at 914; Gillette, *supra* note 138, at 1064 ("Courts have become more tolerant of local subsidies for economic development, to the point of effectively eviscerating constitutional prohibitions on debt in order to subsidize commercial and industrial enterprises.").

club fees aimed at luring corporate executives.[140] Some commentators have argued that gift clauses are now largely rhetorical and unenforced, and that evasive techniques have allowed states to carry the same level of debt as they would have without gift clauses.[141] These more liberally interpreted gift clauses may pose little problem for CCS indemnification.

Despite this general trend, there are at least seventeen states with what this Note refers to as "strict" gift clauses.[142] Strict gift clauses do not have broad public-purpose exceptions, and courts occasionally use them to strike down programs. New York, for example, retains a strict gift clause with a few specific exceptions added by constitutional amendment.[143] As recently as 2008, New York courts have noted gift clause issues with projects proposing to use public funds yet not falling into one of the specific constitutional exceptions.[144] New York courts, however, have added a few narrow exceptions by refusing to recognize certain financial instruments as creating "debt" within the ambit of the constitutional provision.[145] For states with strict gift clauses like this, indemnifying private companies for CCS liability could pose a problem.

140. Briffault, *supra* note 21, at 914; Gillette, *supra* note 138, at 1064 ("More recent decisions consistently approve subsidies not only to the local poor, but to private enterprises that promise broad-based local benefits, or even to middle-class individuals whose very residence in the city is seen as consistent with the promotion of local welfare."); *see, e.g.*, Mass. Home Mortg. Fin. Agency v. New Eng. Merchs. Nat'l Bank, 382 N.E.2d 1084 (Mass. 1978) (holding that public funding of low-interest mortgages for moderate-income individuals was a valid public purpose).

141. *See, e.g.*, Briffault, *supra* note 21, at 914, 925–27; Clingermayer & Wood, *supra* note 116, at 116.

142. *See infra* Appendix. Seventeen states have strict gift clauses and no subsequent court-created, public-purpose exceptions. It appears that twenty-five other states have strict gift clauses that were later interpreted to include a public-purpose exception.

143. N.Y. CONST. art. VIII, § 1. The exceptions include funding for children who become wards of the state and funding for mental health programs. In addition, there are exceptions for funding for urban renewal. N.Y. CONST. art. XVIII, § 1.

144. *See, e.g.*, People v. Grasso, 861 N.Y.S.2d 627, 639–41 (App. Div. 2008) (noting gift clause considerations that would follow if New York continued state subsidization of the NYSE after its conversion to a for-profit entity, but not deciding the question because the case could be decided on other grounds).

145. *See infra* Part III.F.

C. Unique Facets of CCS Are Especially Troublesome for Gift Clauses

CCS poses a far more challenging gift-clause problem than the historically troublesome but recently accepted uses of public money. The unique features of CCS, coupled with state budgetary difficulties in the current recession, present a strong case for the prohibition of CCS indemnification under gift clauses. The argument here is akin to an originalist one: although times have changed and many public purposes are now deemed acceptable risks, CCS presents a kind of risk far worse than what state constitutional gift clauses were designed to remedy. Originally troublesome state programs consisted of the investment of public capital or state underwriting of a railroad loan; though involving substantial sums of money, these were fairly discrete projects with a foreseeable risk.[146] CCS indemnification, on the other hand, places an uncertain risk of liability on a state for thousands of years.[147] This use of public money is fundamentally different from previously accepted uses, because 1) the magnitude of harm involved, although of low probability, is unknowably large, 2) political accountability functions differently when politicians can externalize risk to the future, and 3) the commitment of public resources has no foreseeable end-date. Similar policy worries motivated the original adoption of gift clauses, but the risks associated with railroad speculation were considerably smaller in scope and in time.[148]

First, the financial risks involved in CCS differ fundamentally from previous activities at the state level. The only analogous long-term indemnification of a large liability is the federally enacted

146. That is, the state would often purchase shares or bonds at a fixed price, or lend money to the railroad. Pinsky, *supra* note 21, at 280. The extent of the state's financial risk was therefore the amount of money invested, which is not an open-ended risk like an uncertain liability for an indefinite period of time.

147. *See* Som, *supra* note 15, at 970–71.

148. Briffault, *supra* note 21, at 947–48 ("With easy access to debt, current elected officials may be tempted to approve projects that are not cost-justified. They can get the credit for the new project, but the blame for the additional taxes needed to pay off the debt will be borne by their successors. With future debts unlikely to become a present campaign issue, ordinary politics may fail to provide effective checks on the decision to incur debt. Thus, constitutional debt limitations may be justified by the lack of effective political controls over the borrowing decision."); *id.* at 948 (describing carrying capacity and future capital-need problems).

Price-Anderson Act, which provides private nuclear power companies with an insurance-like regime.[149] Should a nuclear power company face liability for an accident or violation, the company would pay part of the liability and the federal government would cover the rest, much like a typical deductible in a health insurance policy.[150] The nuclear liability here is analogous in some ways to CCS, as nuclear waste must be stored indefinitely.[151]

CCS risks, however, lack the backdrop of federal protection found in the nuclear waste context. These risks might be too great for a state government alone to take on in the name of the public interest. For example, CO_2 leakage and ensuing climate liability are foreseeable, but insurance companies do not know how to manage and quantify the risk of CO_2 release and calculate the ensuing climate liability.[152] Furthermore, the governing liability regimes that will exist one hundred years in the future are unknown,[153] as is a state's future financial status. Unlike an initial investment of capital or a debt guaranty, which are fundamentally limited by the scope of the project and by interest rates,[154] this risk could be so large as to derail a state's budget entirely.[155] In this

149. *See* Price-Anderson Act, 42 U.S.C. § 2210 (2006); Klass & Wilson, *supra* note 11, at 164–68.

150. *See* Klass & Wilson, *supra* note 11, at 164–68.

151. *See* 10 C.F.R. § 51.23 (2010) (Waste Confidence Finding, describing the NRC's confidence that there will be a geologic repository where nuclear waste can be permanently stored). Note, however, that Price-Anderson caps liability, effectively spreading much of the cost of an accident among the victims, unlike the full indemnification scheme criticized below. This Note will discuss the possibility of insurance mechanisms and caps to temper this critique *infra* in Part IV.

152. *See generally* Mills, *supra* note 15.

153. The establishment of new standards of liability in the future is only a problem for current coal companies insofar as they are retroactive (and insofar as they are still operating in the future), but retroactivity problems have been overcome by environmental legislation before. *See, e.g.*, Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675 (2006) (for example, § 9607(a)(2) applies retroactively: "any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of" is liable for response costs).

154. *See generally* Douglas O. Cook & Lewis J. Spellman, *Firm and Guarantor Risk, Risk Contagion, and the Interfirm Spread Among Insured Deposits*, 31 J. FIN. & QUANTITATIVE ANALYSIS 265 (1996) (discussing guarantor risk with respect to a particular firm in the context of insured deposits).

155. The federal limitation of liability of $500 million per incident suggests the magnitude of liability at issue. *See* Klass & Wilson, *supra* note 11, at 149 (citing amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006)). Also, note that past indemnification policies, such as those for public employees, do not compare to the grand scope of CCS liability.

respect, CCS risks evoke the original rationale of gift clause provisions—to avoid catastrophe. This catastrophic risk rationale undermines the legislature's decision to pursue a project in the public interest. Taking this kind of catastrophic financial risk to benefit a private party should be impermissible under the state constitution's gift clause,[156] and any legislative action claiming that CCS liability indemnification benefits the public should be ruled unconstitutional.

Second, indemnification of CCS liability creates conflicting political incentives for state politicians. CCS indemnification will likely attract industry and benefit the local economy in the short term.[157] CCS indemnification also has long-term benefits—it mitigates climate change.[158] The costs, however, are all long-term. After approximately thirty years, a geologic sequestration site will be ready to cap, and the state will be ready to take ownership of the CO_2 and assume responsibility for the sequestration.[159] This framework of short-term benefits coupled with long-term costs presents a perfect opportunity for political abuse. As Professor Briffault argues, "current elected officials may be tempted to approve projects that are not fully cost-justified. After all, they can

156. There are two caveats to this rather strong statement. First, applying a discount rate over the expected term of CO_2 storage could result in a rather small and manageable risk. *See* Phillip N. Price & Curtis M. Oldenburg, *The Consequences of Failure Should Be Considered in Siting Geologic Sequestration Projects*, 3 INT'L J. GREENHOUSE GAS CONTROL 658, 658–59 (2009) (applying a discount rate to CCS risk). Although deciding to take on that risk would be rational from an economic perspective, the small risk could still have a constitutionally impermissible consequence: bankrupting the state with liability. That is, the state constitutional limitation disallows spending risks that could bankrupt the state, and CCS poses such a risk. Second, states and local entities seem to engage in such risky activity often, e.g., New York City is rebuilding the World Trade Center despite the risk of a terrorist attack. The distinction between this example and CCS, besides the obvious distinction between the risks of bankruptcy and of terrorist attack, is that for CCS, the government entity takes a risk on behalf of a private party. States can engage in such risky activity on their own behalf, but they cannot do so to aid a private party. *See* Pinsky, *supra* note 21, at 283–84 (discussing a similar distinction between "proprietary risk" and "enterprise aid risk").

157. Illinois and Texas's hard-fought competition over FutureGen corroborates this, as does New York's proposal to attract CCS developers with indemnification. *See also* 20 ILL. COMP. STAT. 1107/5 (repealed by its own terms, Mar. 2011) (specifically stating intent of incentive package was to attract project to improve the local environment and economy).

158. *See, e.g.*, Klass & Wilson, *supra* note 11, at 107; *accord* Pacala & Socolow, *supra* note 4.

159. *See* IOGCC, *supra* note 11; NYSERDA REPORT, *supra* note 17, at 48–52. Alternatively, the state could take title to the CO_2 at the time of capture, as opposed to after injection. *See, e.g.*, TEX. NAT. RES. CODE ANN. § 119.002 (West 2006) (indicating that title passes to the state at the time of capture).

get the credit for the new project immediately, while the blame for the additional taxes needed to pay off the debt will be borne by their successors."[160] Such political incentives should, at the very least, increase the scrutiny with which courts view legislative judgments about public purpose.

The third difference between CCS and other gift-clause approved financings is that the commitment of state resources is indefinite. The lifetime of private companies is far shorter than the long-term stewardship of a CCS project,[161] so even the length of a successful capital investment or loan would pale in comparison with the millennia of responsibility for CCS liability. This difference magnifies the policy concerns behind the first and second differences: an uncertain risk is extended indefinitely into the future, and the incentive for shifting costs into the future is even greater.

A general characteristic of indemnification, however, might serve as a counterargument to the applicability of the gift clause here. Indemnification only potentially implicates public money, whereas other financing mechanisms surely involve putting state money forward. For indemnification to implicate public money, there must be a lawsuit that results in a finding of liability.[162] This "gift" of a conditional benefit could constitute a "lesser entitlement" and hence avoid the prohibitions of the gift clause.[163] The distinction here is between a tangible gift, like a sum of money or plot of land, and a "lesser entitlement," which is either a conditional gift or something more intangible.

This counterargument is unconvincing—the lending of state credit is necessarily a risk-based enterprise, and the state does not invest capital up front. That is, public money will only come into play if the borrower defaults on the loan. Indemnification operates the same way: liability must be found before opening the public coffers. In other words, indemnification is the same in substance as

160. Briffault, *supra* note 21, at 917–18.

161. Klass & Wilson, *supra* note 11, at 159 ("As the timeline for CCS projects (hundreds to thousands of years) is incongruous with the lifetime of a private entity, legislators and regulators must develop institutional structures to fund and manage CCS risks over the long term.").

162. *See, e.g.*, Amoco Oil Co. v. Liberty Auto & Elec. Co., 810 A.2d 259 (Conn. 2002).

163. *See* Ruotolo v. State, 631 N.E.2d 90 (N.Y. 1994) (affirming that a tort claim against the State by private individuals did not violate gift clause since the State only gave a lesser entitlement and not a tangible gift).

a loan, but different in form. The case law regarding changes in form such as "lesser entitlements," which avoid implicating the gift clause, is also distinguishable, as those cases typically involve "moral obligation" exceptions.[164] "Lesser entitlements" were able to avoid gift clause prohibitions when the court thought that the more just result was for the state to bear the loss rather than a particular individual, such as with a tort claimant injured by the state.[165] No such moral obligation applies to CCS developers, as the state is not injuring them.

D. Other Financing Mechanisms Avoid the Constitutional Problems of Indemnification

The logic suggesting that gift clauses should preclude state indemnification of CCS may not preclude states from supporting CCS development through other financing mechanisms. Revenue bonds or tax incentives could defray the costs of CCS while avoiding the state constitutional problems that indemnification faces.[166] This Note will evaluate these options and others below.

Indemnification against long-term liability, however, provides the most financially attractive package to CCS "early movers."[167] "Early movers" are those coal companies that research and develop CCS technology before it becomes commercially available and widely used.[168] Subsidizing these companies is essentially equivalent to subsidizing the research and development of CCS technology, so that it can become commercially available more quickly.[169] Revenue bonds, compensation funds, insurance pools, and subject-to-appropriation debt are all means to subsidize that technology, but they do not provide the same degree of certainty or efficiency

164. *Id.* at 95 ("If the waiver of immunity from liability imposed by the Legislature rests on an adequate moral obligation, then the bypass does not offend the no-gift prohibition.").

165. *Id.* at 92.

166. *See infra* Part III.F (evaluating the different available financing mechanisms).

167. *See* NYSERDA REPORT, *supra* note 17, at 43–45 (describing the uncertainty of long-term liability as particularly troubling for early movers).

168. *See* NYSERDA REPORT, *supra* note 17, at 48–52 (describing separate regulatory regimes for "early movers" and mature CCS); Klass & Wilson, *supra* note 11, at 108 (distinguishing between nascent and mature CCS).

169. *See* IOGCC, *supra* note 11, at 9–12; NYSERDA REPORT, *supra* note 17, at 60 ("CCS projects, particularly those involving coal fired power plants, present a variety of significant financial and market risks that could significantly delay deployment.").

that indemnification does.[170] They offer a buffer against catastrophic risk, and might indeed cover the total liability for a single incident, but the total liability of that incident could exceed the coverage ceiling set by one of these mechanisms.[171] For example, a revenue bond or insurance pool might provide $50 million of coverage, which would fully cover a $30 million incident but would not fully cover a $100 million incident. Even if these lesser subsidies would be sufficient to induce an early mover to commence a CCS demonstration project, these subsidies might not be sufficient to attract CCS developers to one state when other states offer full indemnification.

III. STRICT GIFT CLAUSES STRIKE DOWN INDEMNIFICATION; OTHER SOLUTIONS

This Part describes New York's most recent CCS indemnification proposal.[172] It then synthesizes New York's complex gift clause jurisprudence, concluding that the New York Constitution does not allow for a public purpose exception and that the credit clause problem cannot be overcome by providing consideration. This Part also analyzes the New York proposal's suggested precedents for the constitutionality of indemnification: the Brownfield Cleanup Program ("BCP") and the plugging of oil and gas wells. This Part argues that these precedents fail to provide analogous and persuasive justifications for CCS indemnification. This Part then offers and rebuts the analogy to eminent domain cases with public purpose exceptions.

After concluding that CCS indemnification is unconstitutional in New York, this Part proposes and evaluates several other policy options: revenue bonds with a damage cap, subject-to-appropriation debt, indemnification by a public authority, a state-run insurance regime, and a state constitutional amendment via

170. *See* Briffault, *supra* note 21, at 926 ("[These methods] limit the recourse of lenders seeking principal and interests payments to certain funds. As a result they present a slightly greater risk to investors, and thus usually carry a slightly higher interest rate than general obligation bonds. They also involve greater administrative and legal costs . . . .").

171. *See id.* at 922; *see generally* N.Y. STATE MORELAND ACT COMM'N ON THE URBAN DEV. CORP. AND OTHER STATE FIN. AGENCIES, RESTORING CREDIT AND CONFIDENCE: A REFORM PROGRAM FOR NEW YORK STATE AND ITS PUBLIC AUTHORITIES (1976) (describing how New York's general revenues were necessary to bail out the Urban Development Corporation).

172. *See* NYSERDA REPORT, *supra* note 17.

referendum. While all of these suggestions entail either greater delay, greater cost to the state, or less protection for the private developer, the suggestion of a revenue bond system with a damage cap comes closest to providing the benefits of the indemnification proposal.

This Part then analyzes the constitutionality of indemnification under other states' liberal clauses, and finds it constitutionally permissible. The availability of indemnification to some states and not others creates an unfair playing field, resulting in a possible "race to the bottom." To close, this Part argues that gift clause differences among states lead to serious difficulties with CCS development and the response to global warming. In light of these problems, this Note suggests the possibility of federal intervention, such as through a federal statute to preempt state constitutional limitations on CCS indemnification.[173]

A. New York's Indemnification Proposal

The New York State Energy Research and Development Authority ("NYSERDA") published a draft report in July 2009 on CCS in New York.[174] The report analyzes the costs, risks, and benefits of CCS, and posits several policy proposals to encourage CCS development in New York.[175] The primary proposal, as evidenced by its placement in the report and the amount of discussion given to it, seems to be a bifurcated indemnification system, in which early movers receive a better financial package than the average CCS commercial user that is expected to exist in the future.[176] For early movers, project sponsors would be indemnified against all third-party claims and "the statute would expressly provide that project vendors, suppliers and other third parties providing CCS technologies, services or CO_2 injectate materials would be granted a statutory exemption from liability . . . ."[177] The statute would also exempt CO_2 from state

173. This Note recommends federal intervention only as a possible solution to the interstate race to the bottom; it does not take a position on the federalism, states' rights, or decentralized regulatory innovation arguments that might counsel strongly against federal intervention.

174. NYSERDA REPORT, *supra* note 17.

175. *Id.* at 73–75.

176. *Id.* at 48–52.

177. *Id.* at 49.

waste laws and would provide protection against some state tort law theories.[178] For instance, the statute would alter the way in which the doctrines of negligence and abnormally dangerous activities (a strict liability regime) apply to early movers by adding an "intentional misconduct" element, which would require some degree of intent for a finding of tort liability.[179] Mature projects, as opposed to early movers, would be governed by a more stringent regime, which would include several requirements for the operational and closure phases of the project, but would ultimately result in the state taking title to the CO_2 and indemnifying the project sponsor and third parties.[180] The report also suggests bond, pooling, and insurance options.[181]

The report does address gift clause concerns, and, after a brief treatment of the relevant legal arguments, dismisses them.[182] Analogizing CCS indemnification to the BCP and the plugging of natural gas wells, the authors argue that constitutional problems will be avoided since the proposed indemnification law would be generally applicable and for a public purpose.[183] These arguments gloss over important subtleties of gift clause jurisprudence, such as the importance of the specific financial instrument involved in subsidizing the private company. For example, plugging natural gas wells uses a bonding system, not indemnification.[184]

B. New York's Gift Clause Jurisprudence

Gift clause jurisprudence in New York is strict and forceful, and has not fallen prey to the near-total enervation of the gift clause that has occurred in other states. The New York Court of Appeals has sternly rejected the public purpose exception to the gift clause:

178. *Id.*

179. *Id.*

180. *Id.* at 50–52.

181. *Id.* at 52–59.

182. *Id.* at 45–48.

183. *Id.* at 45 ("[The gift clause] has been interpreted by the legislature and New York courts, to allow indemnification by the state only if the indemnification provided is broadly conferred to a class of persons and not a single private person or corporate entity. Relevant indemnification precedents in New York that are consistent with this constitutional provision are discussed below and the liability recommendations that follow are consistent with that precedent.").

184. *Id.* at 47–48; *see* N.Y. ENVTL. CONSERV. LAW § 23-0305(8)(d), (e) & (k) (McKinney 2010); N.Y. COMP. CODES R. & REGS. tit. 6, § 555 (2011).

> However important, however useful the objects designed by the legislature, they may not be accomplished by a gift or a loan of credit to an individual or to a corporation. It will not do to say that the character of the act is to be judged by its main object—that, because the purpose is public, the means adopted cannot be called a gift or a loan.185

As recently as 2008, the gift clause prevented continuation of litigation in which the Attorney General sought a money judgment that would benefit solely a corporation that switched from non-profit status to private status.[186]

The legal standard used by New York courts is whether the act by the government creates a debt of the state in aid of an individual.[187] Debt is found when the state has not accounted for a particular future expenditure. That is, a state can make a single, limited appropriation without creating a "debt" in the gift clause sense, even if that appropriation is for a loan and creates a debt in the standard sense—a loan from one party to another. A "debt" in the gift clause sense, however, is one that extends into the future *without explicit appropriation*, such that future generations will have to bear the costs of the presently made decision to extend credit.[188]

There appear to be some exceptions to New York's gift clause, but they are extremely narrow and do not save CCS indemnification from constitutional infirmity. The public purpose exception embodied in some precedent is illusory, as these instances do not contain decisions on public purpose grounds, but on textually-specified exemptions or some other legal ground. For example, compensation for constitutional takings does not constitute a gift because takings are provided for in the New York Constitution.[189] The same is true for state funding for the removal

185. People v. Westchester Cnty. Nat'l Bank of Peekskill, 132 N.E. 241, 244 (N.Y. 1921).

186. People v. Grasso, 861 N.Y.S.2d 627, 640 (App. Div. 2008) (construing statute narrowly by disallowing continuation of litigation by the Attorney General where continuation would cause problems under the gift clause).

187. People v. Westchester Cnty. Nat'l Bank of Peekskill, 132 N.E. at 244.

188. *See* Briffault, *supra* note 21, at 920–25 ("[B]y nominally limiting its liability, the state or local government avoids creating 'debt.'"); s*ee also* Schulz v. State, 639 N.E.2d 1140, 1149–50 (N.Y. 1994) (upholding a debt with an appropriation). The definition of "credit" here is direct exposure of the state fisc to liability without an intervening legal barrier, such as a liability limitation.

189. *See* Tenn. Gas Transmission Co. v. State, 299 N.Y.S.2d 578, 582–83 (App. Div. 1969) (holding that compensation provided for a taking does not violate gift clause).

of railroad grade crossings.[190] The one public purpose case without a specific constitutional exemption finds that additional fees paid to state employees for work in the private sector is not a gift because the money can be deemed additional compensation.[191] "Moral obligation" cases also present a narrow exception to the gift clause, but these typically involve a waiver of sovereign immunity for a single party.[192] One particularly misleading example of the purported public purpose exception appears in a 1979 Attorney General opinion.[193] The relevant opinion was issued by the Attorney General in response to the New York State Office of Parks and Recreation's request for a ruling on whether the use of public money to restore a historic city hall building would violate the gift clause, where the restoration would proceed by leasing the building to a private developer who would obtain title to the building in

190. N.Y. Op. Att'y Gen. 99 (1952), 1952 WL 81896, at *2–3 (finding that the elimination of a railroad grade crossing for the public benefit and the state's payment of this cost did not violate the gift clause, whereas state payment for railroad improvements not essential to the public good was a violation). N.Y. CONST. art. VII, § 14 specifically authorizes the use of public funds for the elimination of railroad grade crossings.

191. Frontier Ins. Co. v. State, 550 N.Y.S.2d 243, 248–49 (Ct. Cl. 1989) (finding that plan to pay university medical school faculty additional fees for work in private practice did not constitute a gift because payment was deemed additional compensation), *aff'd* 576 N.Y.S.2d 622 (App. Div. 1991). The language in the opinion concerning the promotion of public welfare is dicta and is an alternative justification for the state indemnification plan for the employees, should the indemnification not also be deemed additional compensation. *Id.* at 249.

192. *See, e.g.*, Ruotolo v. State, 631 N.E.2d 90 (N.Y. 1994).

193. N.Y. Op. Att'y Gen. 60 (1979), 1979 WL 34283. It should be noted that opinions issued by Attorneys General do not share the same precedential effect as court decisions. When an agency asks a particular question, the Attorney General may answer that question with a formal opinion, which will bind that particular agency and the Attorney General's enforcement authority. *See generally* Donald C. Arnold & Richard D. Wasserman, *Opinions*, *in* STATE ATTORNEYS GENERAL POWERS AND RESPONSIBILITIES 61 (Lynne M. Ross ed., 1990) (discussing policies and procedures followed by Attorneys General in issuing opinions); Peter E. Heiser, Jr., *The Opinion Writing Function of Attorneys General*, 18 IDAHO L. REV. 9, 9–15 (1982) (describing the function and process of formal opinions). Specifically, an Attorney General cannot argue against a previous Attorney General opinion without some intervening cause such as a new statute. *See generally id.* The opinion also acts as persuasive authority for courts, but courts have vacated attorney general opinions before. *See, e.g.*, Aid for Women v. Foulston, 427 F. Supp. 2d 1093, 1103–04 (D. Kan. 2006) (enjoining an opinion of the Kansas Attorney General where the court found that the Attorney General's opinion was inconsistent with the clear language of the statute being interpreted). Also, it should be noted that this opinion process is somewhat akin to the opinion process followed by the Department of Justice's Office of Legal Counsel, with which some readers might be more familiar.

thirty years.[194] The text of the opinion makes it appear that a public purpose exonerates any project from gift clause prohibitions: "The question has arisen whether the above-described arrangement violates either section 8 of Article VII of the State Constitution or section 1 of Article VIII thereof. . . . It may be stated unequivocally at the outset that historic preservation is a valid public purpose."[195] Later, the opinion takes this position more explicitly: "The Constitution is suffused with prohibitions against the exercise of public power for private benefit, yet it is well established that *incidental* private benefit will not invalidate a project which has for its *primary* object a public purpose."[196]

The specific factual context of the legal authority is implicit in the opinion's public-purpose rationale for rejecting the gift clause argument. All of the cases that the Attorney General cited in support of this rationale deal with eminent domain and condemnation, which are similar to the factual situation at issue in the opinion and which rightly require a public purpose.[197] The Attorney General also analogized this situation to the specific constitutional authorization of using public funds for urban renewal.[198] In these opinions, even the broadest language endorsing a public purpose carve-out to the gift clause turns on a specific constitutional approval. Thus, because there is no specific constitutional approval for any type of state CCS indemnification mechanism, the public purpose rationale in favor of CCS indemnification fails to satisfy constitutional requirements.

C. NYSERDA's Precedents Fail to Justify CCS Indemnification

NYSERDA's analogy to the BCP also fails to support the constitutionality of CCS indemnification. The BCP gives private parties tax incentives and a release from liability when they develop a contaminated property, which would likely not be developed

194. N.Y. Op. Att'y Gen. 60 (1979), 1979 WL 34283, at *1–2.

195. *Id.* at *2.

196. *Id.*

197. *See id.* at *2–3; *see, e.g.*, Denihan Enters., Inc. v. O'Dwyer, 99 N.E.2d 235, 238 (N.Y. 1951) (discussing the public purpose requirement for the use of eminent domain).

198. N.Y. Op. Att'y Gen. 60 (1979), 1979 WL 34283, at *3. *See generally* N.Y. CONST. art XVIII (endorsing urban renewal); Yonkers Cmty. Dev. Agency v. Morris, 335 N.E.2d 327, 332 (N.Y. 1975) (defining "blighted" area).

otherwise.[199] The tax incentives raise no constitutional issue, as the BCP is a law of general applicability with a public purpose and hence is a valid subsidy.[200] The constitutionality of the liability release can be established under a consideration theory: the private party makes a voluntary promise to clean up a contaminated site in exchange for indemnification.[201] The consideration theory is valid here because the state releases only its claims against the private party; it does not indemnify the private party against third-party claims, which means that the state's debt is not involved.[202] NYSERDA's indemnification proposal, on the other hand, does not contain such a voluntary promise by the private party, because promises to comply with the law are not considered voluntary and cannot constitute valid consideration.[203] The BCP also fits into the framework of constitutionally authorized urban renewal,[204] while CCS does not.

NYSERDA's analogy to oil and gas wells also fails to justify indemnification under the gift clause. In New York, private parties who own oil or gas wells can apply for a plugging and abandonment permit from the state Department of Environmental Conservation.[205] The private party, upon being granted a permit, may abandon the well.[206] The state releases its claims against the private party, with the narrow exception of re-plugging and

199. *See generally* N.Y. ENVTL. CONSERV. LAW §§ 27-1401 to -1435 (McKinney 2011) (codifying the Brownfield Cleanup Program).

200. *See* N.Y. CONST. art. XVI, § 1 ("Exemptions from taxation may be granted only by general laws.").

201. *See* N.Y. Op. Att'y Gen. 84 (1948), 1948 WL 46915 (finding that adequacy of consideration can alleviate potential gift clause problems).

202. *See infra* Part III.C for discussion on the applicability of consideration to the credit clause; *see also* N.Y. ENVTL. CONSERV. LAW § 27-1421 (McKinney 2011) (describing the state's release of claims against the private party).

203. This argument assumes that climate regulations would be in place. In New York, such regulations do exist with the Regional Greenhouse Gas Initiative, but that legal background does not yet exist in all states. The voluntariness is also somewhat qualified, since the private party could also buy emission allowances. Furthermore, sequestration is not currently required, and likely only would be required once the technology is readily available. Nevertheless, general compliance with climate regulations remains involuntary.

204. *See* N.Y. CONST. art. XVIII.

205. NYSERDA REPORT, *supra* note 17, at 47–48. General authority for the regulation of this activity with respect to oil and gas wells is set forth at N.Y. ENVTL. CONSERV. LAW § 23-0305(8)(d), (e) & (k). Authority to regulate these activities with respect to solution mining wells is set forth at N.Y. ENVTL. CONSERV. LAW § 23-0305(9). Regulations implementing the P&A permit program are set forth at N.Y. COMP. CODES R. & REGS. tit. 6, § 555 (2011).

206. NYSERDA REPORT, *supra* note 17, at 47–48.

restoration work of the surrounding land.[207] As with the BCP, the state is voluntarily releasing its own claims in these situations, but is not indemnifying the private party against third-party claims. The state, thus, incurs no "debt" in the gift clause sense, meaning it has no credit on the line with regard to the private party.

D. Eminent Domain's Public Purpose Requirement Is Neither Analogous nor Does It Support the Constitutionality of CCS Indemnification

The use of eminent domain in New York has recently resulted in litigation in which the public benefit provided by eminent domain coincides with benefit to a private party.[208] For example, the government entity might remove "blight" from a neighborhood while simultaneously enriching a private developer.[209] In New York, these uses of eminent domain are upheld if there is a valid public purpose.[210] Indemnifying CCS developers could benefit from a similar rationale: the overriding public purpose of fighting climate change trumps any incidental private benefit.

The differences between the application of gift clauses and eminent domain to CCS indemnification quickly overshadow the similarities, however. First, gift clauses and eminent domain are dealt with in separate articles of the New York Constitution.[211] The New York Constitution contains textually explicit terms for the use of money that benefits private parties in the context of eminent domain, whereas there is no such textual public purpose exception for the gift clause. Second, the gift clause inherently contains a

207. *Id.* at 48.

208. Kaur v. N.Y. State Urban Dev. Corp., 933 N.E.2d 721 (N.Y. 2010) (upholding the use of eminent domain to benefit Columbia University, a private institution), *cert. denied*, 131 S. Ct. 822 (2010); Goldstein v. N.Y. State Urban Dev. Corp., 921 N.E.2d 164 (N.Y. 2009) (upholding use of eminent domain that benefitted a private developer where finding of blight provided valid public purpose).

209. *See, e.g.*, Kelo v. City of New London, 545 U.S. 469 (2005) (holding that economic development, primarily benefitting private parties, was a public purpose sufficient to justify a constitutional taking because the taking also benefitted the city).

210. Kaur v. N.Y. State Urban Dev. Corp., 933 N.E.2d 721 (N.Y. 2010) (blight designation is a valid public purpose), *cert. denied*, 131 S. Ct. 822 (2010); Goldstein v. N.Y. State Urban Dev. Corp., 921 N.E.2d 164 (N.Y. 2009) (finding of blight provided valid public purpose).

211. *See* N.Y. CONST. art. VII, § 8, para. 1 (gift clause); *cf.* N.Y. CONST. art. XVIII, § 6 (providing terms on which public money and debt can be given to private parties with respect to public housing); N.Y. CONST. art. I, § 7 (public purpose requirement for eminent domain).

public purpose requirement in that any valid use of the state's credit must be for a public purpose, but showing that a gift furthers a public purpose is not a sufficient condition to escaping gift clause restrictions; it is merely a necessary condition of any successful evasion.[212] That is, an appropriation of public money must first serve a public purpose, and then it must satisfy the additional restrictions of the gift clause. Third, New York courts have not previously employed these provisions of the New York Constitution in aid of interpreting the other, suggesting their distinctiveness.[213] Thus, the analogy to eminent domain fails to lend support to the constitutionality of CCS indemnification in New York.

E. Consideration as a Way to Escape the Gift Clause?

With this clarification of the gift clause doctrine in New York, it seems highly unlikely that CCS indemnification will escape the gift clause by reason of its public purpose. The only remaining doctrinal escape-hatch for CCS indemnification is the argument that indemnification does not constitute a gift, either because it is a "lesser entitlement" or because the private company provided adequate consideration.[214] The adequate consideration argument is essentially one of categorization—the state cannot be giving a gift to a private entity if it is striking a bargain.[215] Indemnification, then, could be seen as a sort of liability insurance, where the consideration for the liability protection is the payment of a premium. Surely insurance companies do not give a gift of liability protection whenever an individual purchases a policy.[216] As the

212. People v. Westchester Cnty. Nat'l Bank, 132 N.E. 241, 244 (N.Y. 1921).

213. *See supra* Part III.B.

214. The "lesser entitlement" argument was rejected above as an alternate justification in a "moral obligation" case. *See supra* notes 163–65 and accompanying text. Nevertheless, the courts have yet to reject this argument and it is one potential route to defend CCS indemnification.

215. Admiral Realty Co. v. City of New York, 99 N.E. 241, 249 (N.Y. 1912) ("The city constructs and leases its subways to the company for a consideration or rental to be paid from the net earnings and it affords to its lessee an opportunity to derive profit from the lease by receipt of a like share of such earnings. There is no gift or loan in this, but an ordinary contract for a consideration just as valid in the case of a municipality as in the case of an individual."); N.Y. Op. Att'y Gen. 60 (1979), 1979 WL 34283; N.Y. Op. Att'y Gen. 84 (1948), 1948 WL 46915 (finding that adequacy of consideration can alleviate potential gift clause problems).

216. Robert H. Jerry, *What is Insurance?*, *in* 1-1 NEW APPLEMAN ON INSURANCE § 1.07 (Jeffrey E. Thomas & Francis J. Mootz, III eds., 2010) (describing the purchase of an

NYSERDA plan currently stands, however, there is no premium. The coal company would provide a surety or bond to cover the cost of operation, maintenance, and monitoring, but it gives no additional consideration in exchange for the indemnification.[217]

Furthermore, consideration might solve the problems with regard to the "gift" but not with regard to the state's lending of credit. The lending of credit to a private party is typically a conceptually distinct prong of gift clauses and is disallowed even if it is part of an otherwise valid bargain.[218] The history of credit limitations in gift clauses supports this proposition: states struck deals with railroad companies by investing in them and guaranteeing their debt, in hopes of a return and a public benefit.[219] Even if coal companies offered something extra in consideration for the indemnification, such as a substantial lump sum up front, it would not overcome the catastrophic risk assumed by the state.[220] Thus, loans from the state to a private entity are prohibited by gift clauses, even if the coal company gives the state something in return.

New York and other states with strict gift clauses and credit limitations are put at a disadvantage compared to those states with public purpose exceptions or without gift clauses altogether. Those states able to indemnify coal companies for CCS liability could provide the certainty needed to develop CCS and the financial incentives to locate in that state once CCS is developed.[221]

insurance policy as a contract in which the payment of premiums is exchanged for insurance coverage).

217. NYSERDA REPORT, *supra* note 17, at 48–52. Alternatively, the utility could be charged a premium for the indemnification, which would be analogous to an insurance policy. This alternative will be discussed below. *See infra* Part III.D.3.

218. *See* Pinsky, *supra* note 21, at 277–80 (distinguishing "credit clauses," "stock clauses," and "current appropriations clauses" as distinct variations of the gift clause).

219. *Id.* at 277–82; *see also* Briffault, *supra* note 21, at 910–12.

220. This claim assumes, of course, that the coal company would not set up some sort of bond as consideration, which would cover all potential liability.

221. IOGCC REPORT, *supra* note 11, at 10 ("Development of these model laws and regulations for geologic storage facilitates more states beginning to put in place this critical legal and regulatory infrastructure for CO_2 storage. This should enable timely and responsible development of CO_2 geologic storage projects and, concomitantly, the continued development of CO_2 geologic storage technology."); Elizabeth J. Wilson, Managing the Risks of Geologic Carbon Sequestration: A Regulatory and Legal Analysis 10–15 (Oct. 2004) (unpublished Ph.D. dissertation, Carnegie Mellon University), *available at* http://people.ucalgary.ca/~keith/Thesis/Wilson_2004_Thesis.pdf (describing areas of legal uncertainty that must be resolved for proper risk management).

As stated above, this skews incentives with regard to risk management and site selection, as CCS developers have the incentive to choose the state that can offer the best indemnification package, not the best geologic site. This incentive structure could create a "race to the bottom," in which states discard or somehow evade their own gift clauses to compete for CCS development.[222] Without incentives to choose safe sites, coal companies could put these states in a perilous situation: a state's bet on indemnification could turn ruinous with an accident at a risky site.[223]

F. What New York Can Do

This Subpart posits and evaluates several constitutional alternatives to indemnification. This Subpart begins by evaluating the use of revenue bonds or other special funds in conjunction with a damage cap, the most promising option for providing investment certainty while avoiding the risk of catastrophic debt for the states. This proposal, however, has the unfortunate disadvantage of limiting compensation in the case of an accident. Second, this Subpart considers the use of subject-to-appropriation debt, which is clearly constitutional but does not provide much certainty for the private developer. Third, this Subpart considers the creation of a state-run insurance program for CCS developers. While this option could function in a mature CCS market with many participants, it is likely inadequate for early movers. Fourth, this Subpart suggests that the state could amend its constitution to allow CCS indemnification. This option would allow for indemnification, with all of its benefits, but would come at the cost of delay and uncertainty.

1. Revenue Bonds/Special Funds with a Damage Cap

Revenue bonds provide states a way to lend their credit without putting all of their credit on the line, such that the credit is secured only by money from a specific and limited fund, not from the

222. *See supra* notes 103–04, 113–16 and accompanying text (describing interstate competition problem).

223. *See* Klass & Wilson, *supra* note 11, at 154–55 (claiming that broad indemnity provisions in the Illinois and Texas statutes "arguably fail to create sufficient incentives for safe site selection or to compensate for potential harm").

state's general revenues.[224] Typically, states would issue bonds that create a revenue pool for a specific project, like building a highway.[225] Should the state need to pay a debt related to that project, the money would be drawn from that pool. Although New York has no case law on the relationship that is required between the fund and the project,[226] some states have adopted a nexus-based test for this relationship. For example, taxes on motor vehicles and drivers' licenses could fund a highway project, because there is a nexus between the taxes that contributed to the fund and the project.[227] Analogously, taxes on energy or revenue from carbon allowances could fund New York's indemnification of coal companies.[228]

This means of securing the indemnification still presents some troublesome uncertainties. First, the amount raised from taxes, bonds, or some combination thereof might not be sufficient to cover the entire liability. If this situation arose, then a party with a valid claim would go uncompensated for the consequences of the accident.[229] Second, this method is constitutionally questionable under strict gift clauses like New York's, since a textual argument exists that this method still involves a full use of the state's "debt," even though that "debt" is not backed by the state's general revenue.[230] If struck down by a court, coal companies could be placed in the perilous position of having to pay a debt that they did

224. Briffault, *supra* note 21, at 918.

225. *Id.* at 919.

226. New York does have some case law concerning specific funds. *See, e.g.*, Robertson v. Zimmermann, 196 N.E. 740 (N.Y. 1935) (upholding debt secured solely by revenues from a public authority); Newell v. People, 7 N.Y. 9, 93 (1852) (striking down as evasive the use of canal bonds to fund a canal project).

227. Briffault, *supra* note 21, at 919.

228. At first glance, this solution might resemble an insurance scheme, in which the coal companies would be contributing to a common fund that would cover the liability for an individual accident. Actually, though, this common fund could be subsidized by other sources of GHG emissions, since energy taxes or revenue from carbon allowances extend to sources of energy other than coal. An economy-wide carbon tax could also be imposed.

229. *See, e.g.*, Frank v. Meadowlakes Dev. Corp., 798 N.Y.S.2d 820, 827 (App. Div. 2005) (noting that if the "[liable] indemnitor is insolvent or defunct, the party entitled to indemnification will not be made whole . . .").

230. *See* Briffault, *supra* note 21, at 919 (finding that cases on specific revenue sources as debt security are not consistent). One possible reason to strike down a revenue bond plan would be a textual interpretation of a credit clause, e.g., finding that the clause disallows all state "debt," not just debt backed by the state's entire general revenue.

not anticipate.[231] The difficulties with adequate compensation are compounded by attempts to solve them: if states put their full credit on the line as a secondary or tertiary (assuming an initial federal layer of protection) security, the indemnification would be even more questionable as a constitutional matter because the entire state fisc would be at risk, not merely a limited fund, even if only as a guarantor.[232]

The state legislature could institute a damage cap to limit the amount of state debt at issue to address the uncertainties associated with a specified fund for indemnification. By coupling a damage cap and a revenue bond system, the state could avoid constitutional difficulties while providing financial certainty to coal companies. The damage cap makes a much stronger case for constitutionality under gift clauses by nominally limiting the amount of debt at issue, much like subject-to-appropriation debt.[233] The cap also assures that coal companies would not be held liable for any part of an accident because the state would cover the amount of damages within the cap and the cap protects the coal companies from any further liability.[234] There is a large downside to this strategy, though. Victims of an accident might arbitrarily be denied due compensation because of the damage cap.[235] Costs of the accident above the damage cap would in effect become negative externalities, spread among the public.

231. *See generally* Itri Brick & Concrete Corp. v. Aetna Cas. & Sur. Co., 680 N.E.2d 1200 (N.Y. 1997) (finding an indemnification agreement invalid, making the proposed indemnitee liable for his negligence).

232. The shell of a specific revenue pool might nominally limit the state's liability enough to pass constitutional muster, but even this arrangement does not have the safety valve of being subject-to-appropriation. *See* Briffault, *supra* note 21, at 921. The presence of a legal obligation, as opposed to yearly appropriation, seems determinative for New York courts. *See* Schulz v. State, 639 N.E.2d 1140, 1149 (N.Y. 1994).

233. *See* Briffault, *supra* note 21, at 920–25 ("[B]y nominally limiting its liability, the state or local government avoids creating 'debt.'"). Professor Briffault gives several examples from the case law: Carr-Gottstein Props. v. State, 899 P.2d 136 (Alaska 1995); *In re* Anzai, 936 P.2d 637 (Haw. 1997); Wilson v. Ky. Transp. Cabinet, 884 S.W.2d 641 (Ky. 1994); Employers Ins. Co. of Nev. v. State Bd. of Exam'rs, 21 P.3d 628 (Nev. 2001); Schulz v. State, 639 N.E.2d 1140 (N.Y. 1994); Fent v. Okla. Capitol Improvement Auth., 1999 OK 64, 984 P.2d 200 (Okla. 1999); Dykes v. N. Va. Transp. Dist. Comm'n, 411 S.E.2d 1 (Va. 1991).

234. *See, e.g.*, Price-Anderson Act, 42 U.S.C. § 2210 (2006) (combining a damage cap with an indemnification regime).

235. Klass & Wilson, *supra* note 11, at 165 ("Opponents contend that liability caps unjustly limit the public's ability to recover full compensation for damages . . . .").

2. Subject-to-Appropriation Debt

Subject-to-appropriation debt involves the issuance of debt, of which indemnification is an example, by a public authority or entity that is subject to yearly appropriation.[236] That is, the security for the debt is the public authority's budget, which means that the general revenues of the state are not committed to the project. States are likely to continue to provide yearly appropriations, so this limitation on debt is mostly nominal.[237] Also, even though this proposal avoids credit clause prohibitions,[238] the state still puts its credit rating at risk if a default occurs.[239] Furthermore, without the security of a legal obligation on the state, there is still a risk that the CCS developer will be left with the liability for a catastrophic accident that the public authority could not cover and that the state does not wish to pay. Overall, subject-to-appropriation debt provides some additional incentives and security to CCS developers, but less than indemnification or a revenue bond with damage cap regimes.

3. Insurance Scheme

Since there is not yet comprehensive, commercially-available insurance for CCS, a state with a strict gift clause could create an insurance system to provide CCS developers with some security.[240] A central feature of insurance, however, is absent in this situation: the ability to assess risk properly.[241] Low premiums might not cover the liability of an accident, and high premiums could deter CCS developers.[242] Also, in the early stages of development, the low

236. Briffault, *supra* note 21, at 920–25.

237. *Id.* at 922–23 (describing the widespread use of subject-to-appropriation debt and the unlikelihood that annual appropriations will not be made due to the adverse impact that such non-appropriation would have on the credit rating of the issuer).

238. *See* Schulz v. State, 639 N.E.2d 1140, 1149–50 (N.Y. 1994); Briffault, *supra* note 21, at 922 (describing how at least thirty-three states use this method of financing to evade gift clause limitations).

239. Briffault, *supra* note 21, at 922–23 (describing how Standard & Poor's will include defaults by public authorities in evaluation of the state's credit).

240. *Cf.* 20 ILL COMP. STAT. 1107/25 (repealed by its own terms, Mar. 2011) (considering the availability of insurance and requiring the state to purchase it if available). *See generally* Mills, *supra* note 15 (describing the barriers to insurance for climate risk and how such insurance is currently unavailable).

241. *See* Mills, *supra* note 15, at 142–43.

242. *See* Flatt, *supra* note 11, at 224–25. The cost differential between coal and other sources of energy might still result in coal remaining profitable despite quite high insurance

number of early movers might prevent an insurance regime from functioning, because there would not be a large pool over which to spread risk.[243]

Despite these problems, the state could still create an insurance program, so long as it is subject to yearly appropriation and does not risk the state's entire revenue.[244] This program, then, shares the same problems as subject-to-appropriation debt: less financial certainty is provided to the industry at a greater cost.[245]

4. State Constitutional Amendment or a Referendum for a Specific Debt

If a state with credit clause limitations wanted to indemnify a CCS developer, it could seek to pass a constitutional amendment or a targeted referendum allowing indemnification. New York's Constitution, for example, allows for constitutional amendments after a majority vote in each chamber of the state legislature and a majority vote of the people directly.[246] Similarly, other states allow exceptions for specific debt projects if approved by a supermajority of the state legislature.[247] Such a constitutional amendment could overturn the entire gift clause or specifically exempt CCS indemnification.

The delay inherent in the political process makes this plan unattractive—a state might have to wait a substantial amount of time before it is able to amend its constitution. For example, New York can amend its constitution if the legislature approves an amendment for two consecutive legislative sessions, separated by a general election, and then submits that amendment for a majority vote by the citizens of New York.[248] In the meantime, other states might have already secured CCS developers. Additionally, states that require supermajority approval of a constitutional amendment face an even higher practical hurdle in getting a sufficient number

premiums.

243. *See id.*

244. *See supra* Part III.F.2 (discussing gift clauses and subject-to-appropriation debt).

245. *See supra* Part III.F.2 (discussing gift clauses and subject-to-appropriation debt).

246. N.Y. CONST. art. XIX, § 1.

247. *See, e.g.*, R.I. CONST. art. VI, § 11.

248. N.Y. CONST. art. XIX, § 1. New York can also amend its constitution through a constitutional convention, and this requires the legislature to approve the convention, submit it to a majority vote by the state's citizens, and then have the majority of citizens approve of the convention's amendment. N.Y. CONST. art. XIX, § 2.

of affirmative votes.

G. Analysis of CCS Indemnification Under Liberal Gift Clauses

The state constitutional analysis of CCS indemnification in those states that have less restrictive gift clauses is quite simple: the only issue is whether CCS indemnification meets the state's textual or judicially-created definition of a valid public purpose. Showing that CCS indemnification is a valid public purpose should be an easy task. Many state courts have looked to economic factors to find a public purpose, such as increasing employment or aiding general economic development, which CCS would most likely do.[249] Helping to mitigate climate change would also likely be a sufficient public purpose, though courts have not yet considered this question. Courts generally show great deference to the state legislature's determination of a public purpose,[250] so addressing climate change is even more likely to be considered a public purpose if the state legislature chooses to so identify it. The fifty state survey in the Appendix to this Note provides more information for completing the analysis under other state constitutions.

H. The Case for Federal Intervention

The effects of these state constitutional differences substantiate the claim that the federal government needs to provide some uniform standard for CCS regulation, although the case for state involvement with local responsibilities is still quite strong. The federal government could pass a law authorizing states to indemnify private companies, as a federal statute can preempt a state constitutional provision.[251] This approach would allow fair competition among the states without extensive federal involvement.[252] Alternatively, the federal government could implement a uniform damage cap or indemnification provision,

249. Briffault, *supra* note 21, at 913; *see supra* notes 138–40 and accompanying text.

250. Briffault, *supra* note 21, at 913.

251. U.S. CONST. art. VI, cl. 2 ("This Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the contrary notwithstanding."); *see, e.g.*, Van Patten v. Jensen, 773 P.2d 62, 67 (Wash. 1989) (holding that federal regulations preempted a state constitutional provision).

252. *See* IOGCC, *supra* note 11, at 9–11 (favoring a state-led approach to CCS regulation).

which would provide a fairer playing field for state competition than does the current system lacking federal regulation.[253] Many other federal options for liability protection and CCS regulation exist, and these have been discussed extensively elsewhere.[254] Each option has its own policy complications, but the problems created by differing gift clauses could call for some sort of federal resolution. Of course, should the above-listed options to side-step strict gift clauses sufficiently narrow the gaps between state packages such that the marginal benefits of full indemnification are more easily outweighed by proper site selection or other factors, then federal intervention might be unnecessary.

IV. CONCLUSION

Those states with gift clauses that are less restrictive than New York's will be able to provide more attractive financial incentive packages for CCS developers.[255] In some states, public purpose exceptions extend to the lending of credit, which means that those states can offer indemnification.[256] CCS developers will likely be drawn to these states, where the uncertainty and risk of liability loom less menacingly.[257] As New York demonstrates, some states will not be able to compete as well, meaning that the possibility of a "race to the bottom" is strong.[258] First, CCS developers might not

253. *See* Klass & Wilson, *supra* note 11, at 175–78 (arguing for a comprehensive federal regulatory framework, which could include damage caps); *cf. id.* at 168 ("[W]hile the use of a liability cap (such as that in the Price-Anderson Act) provides predictability for firms, it may also undermine the credibility of CCS in the eyes of the public. When CCS proponents expound on the safety of the technology while simultaneously lobbying for a damage cap, this contradictory position undermines CCS credibility.").

254. *See* Flatt, *supra* note 11, at 224–29 (discussing multiple options for liability protection and compensation); Klass & Wilson, *supra* note 11, at 149–78 (discussing multiple types of compensation systems, possible regulatory systems, and proposing a comprehensive federal regulatory system).

255. *See supra* notes 94, 100–03 (describing the CCS race to the bottom).

256. *See, e.g.*, ILL. CONST. art. VIII, § 1 ("Public funds, property or credit shall be used only for public purposes.").

257. Presence of coal-fired power plants and availability of appropriate geologic formations are likely more important considerations in siting a CCS project, but financial incentives would still play a role in the competition between states that meet those criteria. *See* Klass & Wilson, *supra* note 11, at 155 (claiming that legal incentives play a role in guiding the behavior of CCS developers when selecting sites); Wilson, *supra* note 221, at 10–15 (describing how legal regimes affect risk management of CCS developers).

258. *See supra* notes 101–04 (discussing the race to the bottom problem with CCS).

go to the states best equipped to handle CCS regulation and stewardship, but instead to states offering the most indemnification.[259] Second, this state competition might increase the risk of bad site selection,[260] and ensuing CCS accidents.[261] Third, the occurrence of CCS accidents or an increased perception of risk could severely hinder CCS development, much like the effect of public opposition to nuclear power.[262]

If CCS development is to move forward and become a valuable weapon in the fight against climate change, it will require financial encouragement and public support. The existence of and differences among states' constitutional gift clauses imperil the realization of both of those necessary conditions. States with an otherwise optimal setting for site selection, risk management, and other cost concerns might not be able to provide the necessary financial support, and interstate competition might lead to increased risk and public opposition. This Note has suggested some ways in which states might come close to the financial incentives of indemnification, and has also suggested the use of a federal statute preempting gift clause limitations in the particular instance of CCS development. The latter option gives states the freedom to compete for CCS developers or make themselves inhospitable to such development without the need for a cumbersome and dilatory constitutional amendment process.

259. Wyoming, for example, is the top coal-producing state in the U.S. and has already started developing a CCS regulatory regime. *See supra* note 93 (describing Wyoming's CCS legislation). Its constitution and gift clause jurisprudence, however, resemble New York's, and indemnification of private parties is likely unconstitutional. WYO. CONST. art. XVI, § 6 ("Neither the state nor any county, city, township, town, school district, or any other political subdivision, shall loan or give its credit or make donations to or in aid of any individual, association or corporation . . . ."); Witzenburger v. State *ex rel.* Wyo. Community Dev. Auth., 575 P.2d 1100, 1111 (Wyo. 1978) (requiring state debt commitments to be subject to yearly appropriation in order to be held constitutional).

260. Kentucky, for example, passed legislation allowing FutureGen to bypass state administrative processes. KY. REV. STAT. ANN. § 278.700 (West 2010); *Kentucky's General Assembly Passes Bill Aimed at Attracting 'FutureGen' to the State*, GLOBAL POWER REP., Mar. 30, 2006, *available at* 2006 WLNR 6222741.

261. Som, *supra* note 15, at 986 ("The most important step that can be taken to prevent leakage is to use only ideal storage sites." (citing M.A. de Figueiredo, D.M. Reiner & H.J. Herzog, *Framing the Long-Term In Situ Liability Issues for Geologic Carbon Storage in the United States*, 10 MITIGATION & ADAPTATION STRATEGIES FOR GLOBAL CHANGE 647, 648 (2005))).

262. Som, *supra* note 15, at 985.

APPENDIX: PROVISIONAL ANALYSIS OF FIFTY STATES' GIFT CLAUSE JURISPRUDENCE, AS APPLIED TO CCS

The following table provides information on the application of each state's gift clause jurisprudence to CCS indemnification. The table provides a citation to each state's gift clause provision(s), if the state has a gift clause. The table also locates any textual or judicial public-purpose exceptions. In the final column the table predicts the constitutionality of CCS indemnification in each state. It should be noted that this fifty state survey provides only a starting point for research and does not claim to offer definitive analysis of any state's law.

State	Gift clause provisions	Textual public purpose exception?	Judicial public purpose exception?	Constitutionality of CCS indemnification?
Alabama	ALA. CONST. art. IV, § 94, *amended by* ALA. CONST. amend. 112	No	Bd. of Revenue & Rd. Comm'rs of Mobile Cnty. v. Puckett, 149 So. 850 (Ala. 1933)	Likely
Alaska	ALASKA CONST. art. IX, § 6	Yes	Dearmond v. Alaska State Dev. Corp., 376 P.2d 717 (Alaska 1962)	Likely
Arizona	ARIZ. CONST. art. IX, § 7	No	Valley Nat'l Bank of Phoenix v. First Nat'l Bank of Holbrook, 320 P.2d 689 (Ariz. 1958)	Likely
Arkansas	ARK. CONST. art. XII, §§ 5, 7; art. XVI, § 1	No	No	Problematic
California	CAL. CONST. art. XVI, §§ 6, 17	No	Oakland v. Garrison, 228 P. 433 (Cal. 1924)	Likely
Colorado	COLO. CONST. art. V, § 34; art. XI, §§ 1–2	No for art. V, § 34 and art. XI, § 1; Yes for art. XI, § 2	*In re* Interrogatory Propounded by Governor Roy Romer on House Bill 91S-1005, 814 P.2d 875 (Colo. 1991)	Likely
Connecticut	CONN. CONST. art. I, § 1	No	Barnes v. City of New Haven, 98 A.2d 523 (Conn. 1953)	Likely
Delaware	DEL. CONST. art. VIII, §§ 4, 8	No	Op. of Justices, 358 A.2d 705 (Del. 1976)	Likely
Florida	FLA. CONST. art. VII, § 10	No	Poe v. Hillsborough Cnty., 695 So. 2d 672 (Fla. 1997)	Likely

State	Gift clause provisions	Textual public purpose exception?	Judicial public purpose exception?	Constitutionality of CCS indemnification?
Georgia	GA. CONST. art. III, § VI, para. VI; art. VII, § IV, para. VIII	No	No	Problematic
Hawaii	HAW. CONST. art. VII, § 4	Yes	State *ex rel.* Amemiya v. Anderson, 545 P.2d 1175 (Haw. 1976)	Likely
Idaho	IDAHO CONST. art. VIII, §§ 2, 4	No	Nelson v. Marshall, 497 P.2d 47 (Idaho 1972)	Likely
Illinois	ILL. CONST. art. VIII, § 1	Yes	People *ex rel.* Douglas v. Barrett, 19 N.E.2d 340 (Ill. 1939)	Likely
Indiana	IND. CONST. art. X, § 5; art. XI, § 12	No	No	Problematic
Iowa	IOWA CONST. art. VII, § 1; art. VIII, § 3	No	No	Problematic
Kansas	None	n/a	n/a	Yes
Kentucky	KY. CONST. §§ 171, 177, 179	No	Dannheiser v. City of Henderson, 4 S.W.3d 542 (Ky. 1999)	Likely
Louisiana	LA. CONST. art. VII, pt. I, §§ 1, 10, 14	No	Ms. Marie Borne, La. Att'y Gen. Op. No. 97-460 (1997)	Likely
Maine	ME. CONST. art. IX, §§ 14–14-A	No	No	Problematic
Maryland	MD. CONST. art. III, § 34	No	City of Frostburg v. Jenkins, 136 A.2d 852 (Md. 1957)	Likely

State	Gift clause provisions	Textual public purpose exception?	Judicial public purpose exception?	Constitutionality of CCS indemnification?
Massachusetts	MASS. CONST. amend. art. LXII	No	*In re* Op. of the Justices, 57 N.E. 675 (Mass. 1900)	Likely
Michigan	MICH. CONST. art. IV, § 30; art. VII, § 26; art. IX, §§ 18–19	No (but 2/3 vote can override)	Falk v. State Bar of Mich., 305 N.W.2d 201 (Mich. 1981)	Likely
Minnesota	MINN. CONST. art. XI, §§ 2, 12	No	No	Problematic
Mississippi	MISS. CONST. art. 7, § 183; art. 14, § 258	No	No	Problematic
Missouri	MO. CONST. art. III, § 38(a); art. VI, §§ 23, 25	Maybe ("excepting in aid of public calamity")	Fust v. Att'y Gen. for the State of Mo., 947 S.W.2d 424 (Mo. 1997)	Likely
Montana	MONT. CONST. art. VIII, §§ 8, 10	No (but 2/3 legislative vote can create a debt)	Willett v. State Bd. of Exam'rs, 115 P.2d 287 (Mont. 1941)	Likely
Nebraska	NEB. CONST. art. XIII, § 3; art. XV, § 17	No	Cosentino v. City of Omaha, 183 N.W.2d 475 (Neb. 1971)	Likely
Nevada	NEV. CONST. art. 8, §§ 9–10	No	Emp'rs Ins. Co. v. State Bd. of Exam'rs, 21 P.3d 628 (Nev. 2001)	Likely
New Hampshire	N.H. CONST. pt. 2, art. 5	No	*In re* Op. of Justices, 190 A. 425 (N.H. 1936)	Likely
New Jersey	N.J. CONST. art. VIII, §§ II, para. 1, III, para. 2–3	No	Roe v. Kervick, 199 A.2d 834 (N.J. 1964)	Likely

State	Gift clause provisions	Textual public purpose exception?	Judicial public purpose exception?	Constitutionality of CCS indemnification?
New Mexico	N.M. CONST. art. IV, §§ 26, 31; art. IX, § 14	No (but general applicability may validate the action)	No	Problematic
New York	N.Y. CONST. art. VII, § 8	No	No	Problematic
North Carolina	N.C. CONST. art. V, § 3, paras. 2–3	No (but direct vote of people may validate action)	Hinton v. Lacy, 137 S.E. 669 (N.C. 1927)	Likely
North Dakota	N.D. CONST. art. X, § 18	No	No	Problematic
Ohio	OHIO CONST. art. VIII, §§ 4, 6, 13	No	No	Problematic
Oklahoma	OKLA. CONST. art. X, § 15	No	No	Problematic
Oregon	OR. CONST. art. XI, §§ 5–7, 9	No	No	Problematic
Pennsylvania	PA. CONST. art. VIII, § 8	No	Tosto v. Pa. Nursing Home Loan Agency, 331 A.2d 198 (Pa. 1975)	Likely
Rhode Island	R.I. CONST. art. VI, §§ 11, 16	No (but 2/3 vote may validate action)	*In re* Advisory Op. to Governor (DEPCO), 593 A.2d 943 (R.I. 1991)	Likely
South Carolina	S.C. CONST. art. X, § 11	No	S.C. Farm Bureau Mktg. Ass'n v. S.C. State Ports Auth., 293 S.E.2d 854 (S.C. 1982)	Likely

State	Gift clause provisions	Textual public purpose exception?	Judicial public purpose exception?	Constitutionality of CCS indemnification?
South Dakota	None	n/a	n/a	Yes
Tennessee	TENN. CONST. art. II, § 31	No	Ragsdale v. City of Memphis, 70 S.W.3d 56 (Tenn. Ct. App. 2001)	Likely
Texas	TEX. CONST. art. III, §§ 50, 52; art. VIII, § 3; art. XVI, § 6	No	Cross v. Dallas Cnty. Flood Control Dist. No. 1, 773 S.W.2d 49 (Tex. App. 1989)	Likely
Utah	UTAH CONST. art. VI, § 29	No	Healthcare Servs. Grp., Inc. v. Utah Dept. of Health, 2002 UT 5, 40 P.3d 591	Likely
Vermont	VT. CONST. chap. I, art. 7	No	Vt. Woolen Corp. v. Wackerman, 167 A.2d 533 (Vt. 1961)	Likely
Virginia	VA. CONST. art. X, § 10	No	Status of Exception Unclear, Almond v. Day, 91 S.E.2d 660, 666–67 (Va. 1956)	Problematic
Washington	WASH. CONST. art. 8, §§ 5, 7; art. XII, § 9	No	No	Problematic
West Virginia	W. VA. CONST. art. X, § 6	No	No	Problematic
Wisconsin	None	n/a	n/a	Yes
Wyoming	WYO. CONST. art. XVI, § 6	No	No	Problematic