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UNIFORM CLIMATE CONTROL

Anthony Moffa *

INTRODUCTION

On July 22, 2019, outspoken climate change advocate Al Gore found himself sitting second chair once again as a bill was signed into law. This time he sat not beside the President of the United States, but rather beside the Governor of New York. Moments after Governor Andrew Cuomo rapidly scribbled his name on the landmark Climate Leadership and Community Protection Act,¹ he passed the pen and paper to a grinning Gore.² A resident of Nashville, Tennessee who holds no elected office in the State of New York, Gore's signature had precisely zero legal effect³—it served ceremonial and publicity purposes only. Among many other ambitious goals, the celebrity-endorsed state law he giddily signed mandates that New York achieve one hundred percent carbon neutrality by 2050.⁴ Al Gore called it "the most ambitious, the most well-crafted legislation in the country." But he was far from its only

^{*} Associate Professor of Law, University of Maine School of Law. The author would like to thank Thea Johnson, Sarah Schindler, and William Sedlack for their thoughtful comments on earlier drafts. Special thanks are due to Michael Gerrard and John Dernbach for their pathbreaking work on model climate policy and their guidance on this theoretical treatment of it. This Article also benefited from the Colloquium on Environmental Scholarship at Vermont Law School and the New Directions in Environmental Law Conference at Yale Law School and Yale School of the Environment. All errors are the author's alone.

^{1.} Climate Leadership and Community Protection Act, 2019 N.Y. Laws 106 (codified in scattered sections of N.Y. ENVIL. CONSERV. LAW and N.Y. PUB. SERV. LAW).

^{2.} Mary Esch, New York's Climate Plan Will Drive Big Changes, If It Works, AP NEWS (July 18, 2019), https://www.apnews.com/12d3074b7ca04233a0dec17b6344bbd0 [https://perma.cc/ZE7G-4FLP].

^{3.} See N.Y. CONST. art. IV (vesting executive power in the Governor and Lieutenant Governor).

^{4. 2019} N.Y. Laws 106, § 2 (codified at N.Y. ENVTL. CONSERV. LAW § 75-0107(1)(b)).

^{5.} New York Climate Plan Sets 30-Year Goal for 100% Renewable Energy, L.A. TIMES (July 20, 2019, 4:47 PM), https://www.latimes.com/world-nation/story/2019-07-20/new-york-climate-plan [https://perma.cc/7QD4-PJ3D].

fan; the law drew widespread praise across the climate policy community—and even from the Hulk.⁶

New York State's bold legislative steps to confront climate change came only months after New York City enacted its own "Green New Deal" on the municipal level to reduce greenhouse gas emissions in the city. In April 2019, in celebration of Earth Day, the New York City Council passed the Climate Mobilization Act, a package of ten bills designed to keep the city on pace with the reductions set by the Paris Climate Agreement. One Councilmember applauded his work as "the single largest carbon reduction effort in any city, anywhere." Some of the media, however, focused on the law's provisions related to environmentally conscious food choices and procurement, claiming the city banned its most famous culinary contribution—the hot dog. 10

New York's state and city lawmaking exemplifies a multijurisdictional approach to the global climate crisis that has taken hold in various places across this and other countries.¹¹ We are ushering

^{6.} Mark Ruffalo (@MarkRuffalo), TWITTER (July 25, 2019, 4:40 PM), https://twitter.com/MarkRuffalo/status/1154491693615333376 ("This is fantastic news. There is a lot to be done and a lot that can be done without congress and the federal government. Big changes can and have been made on the state and regional level as well.") [https://perma.cc/VF2A-CYPB].

^{7.} See Climate Mobilization Act, N.Y.C. COUNCIL, https://council.nyc.gov/data/green/(referring to the law as "#GreenNewDeal4NY") [https://perma.cc/PJ78-SNU8].

^{8.} Climate Mobilization Act, N.Y.C. Council 97 (N.Y. 2019), https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3761078&GUID=B938F26C-E9B9-4B9F-B981-1BB2 BB52A486 [https://perma.cc/8VP5-FQRN]; Climate Mobilization Act Factsheet, N.Y.C. MAYOR'S OFF. SUSTAINABILITY, https://retrofitaccelerator.cityofnewyork.us/sites/default/files/public/MOS%20CMA%20General%20Factsheet.pdf [https://perma.cc/SR57-XAZT]; New York City Passes Climate Mobilization Act, PROGRESSIVE CAUCUS N.Y.C. COUNCIL (Apr. 18, 2019), https://nycprogressives.com/2019/04/18/new-york-city-passes-climate-mobil ization-act/ [https://perma.cc/7N8V-ZKAF]; see also Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104, 27 U.N.T.S. 7.d.

^{9.} Molly Enking, New York City's Newly Passed Green New Deal, Explained, GRIST, (Apr. 18, 2019), https://grist.org/article/new-york-citys-newly-passed-green-new-deal-explained/[https://perma.cc/7SCC-A82E].

^{10.} The Scoop, STUPIDITY: New York City Law Bans Hot Dogs To Stop Climate Change, GATEWAY PUNDIT (Apr. 26, 2019, 7:41 AM), https://www.thegatewaypundit.com/2019/04/stupidity-new-york-city-law-bans-hot-dogs-to-stop-climate-change-video/ [https://perma.cc/VZT3-ZHWL]; see generally LLOYD HANDWERKER, FAMOUS NATHAN: A FAMILY SAGA OF CONEY ISLAND, THE AMERICAN DREAM, AND THE SEARCH FOR THE PERFECT HOT DOG (2017).

^{11.} Building on an insight drawn by Dave Owen in *Cooperative Subfederalism*, 9 U.C. IRVINE L. REV. 177 (2018), this work will treat state and local lawmaking as both important components of the overlapping jurisdictional division of environmental law, particularly

in the next generation of environmental laws, and those laws will largely be authored not by international negotiators or federal legislators, but by state and local officials. Where do these lawmakers, many of them part-time civil servants, look for guidance on bill language to properly address perhaps the most complex environmental challenge of our time? Unfortunately, the most influential provider of model legislation has to this point aligned against proactive climate action. A growing body of resources, including model codes and ordinances, could help fill the void. This work aims to draw attention to the imbalance in model lawmaking. It then examines the growing resources facilitating proactive climate change law at the state and local levels. Finally, it asks how well this model-law ecosystem fits with the principles of federalism in the context of the evolving environmental legal landscape.

Part I will briefly recount the recent history of subnational environmental law in the United States and the scholarly treatment of it. Part II will do the same with the model- and uniform-law movements. Part III will focus on the most successful organization in terms of drafting and promoting model legislation at the subnalevel—the American Legislative Exchange ("ALEC"). Because ALEC's efforts on climate change attempt to entrench inaction for the benefit of its fossil fuel industry members. Part IV examines organizations and resources that facilitate subnational action on climate change. In doing so, it also provides a taxonomy of such law-promoting mechanisms. Part V begins to confront the federalism implications of the model climate law ecosystem, analyzing it first as a policy experiment in the "laboratories of democracy" mold and next as a way for policies to spread from one government to another. The work concludes with a hopeful prescription for more balance in model law advocacy to counteract the distortion of democracy caused by the current situation.

I. STATE AND LOCAL ENVIRONMENTAL LAWMAKING

Much has been written about surges in subnational environmental policymaking in eras of federal government retrenchment. Despite the urgency of the current moment and the association with

the #Resistance movement, state and local environmental law has long been the expected response to federal inaction.¹²

Though President Trump recently touted his administration's environmental record, ¹³ serious observers have rightly been sounding the alarm from at least the announcement of his intention to withdraw the United States from the Paris Climate Agreement. ¹⁴ Environmental Protection Agency ("EPA") Administrators Pruitt and Wheeler laid out agendas based on rolling back federal regulations in many areas, including climate change. ¹⁵ The United

See William W. Buzbee, Contextual Environmental Federalism, 14 N.Y.U. ENVIL. L.J. 108, 113, 115-16 (2005) ("Recent occasional state and local activism during a period of Republican ascendancy and arguable environmental retrenchment cannot establish that a federal environmental role is unnecessary. . . . Recent state enforcement activism proves little about inherent state environmentalism but instead reflects political opportunities opened up by a more anti-environmental shift in federal policy. . . . [W]hen federal environmental action appears to be 'underkill' of what written laws and regulations have historically allowed or required, it creates opportunities for environmentally oriented citizen and state actors (such as state attorneys general) to supplement federal enforcement or challenge the legal adequacy of the newly relaxed regulatory environment."); see also Kirsten H. Engel & Scott R. Saleska, Subglobal Regulation of the Global Commons: The Case of Climate Change, 32 ECOLOGY L.Q. 183, 189 (2005) (arguing that a "domino effect" can manifest for environmental regulation that is stalled at one level of government, but gains traction at another level of government); Charles A. Jones & David L. Levy, North American Business Strategies Towards Climate Change, 25 EUR. MGMT. J. 428, 429 (2007) ("Meanwhile, local government and voluntary initiatives have emerged in response to the perceived lack of guidance from national and international authorities. In the United States and Canada, individual states and new regional associations are formulating policies in areas usually reserved for Federal action.").

^{13.} See President Donald J. Trump, Remarks by President Trump on America's Environmental Leadership (July 8, 2019) ("From day one, my administration has made it a top priority to ensure that America has among the very cleanest air and cleanest water on the planet. We want the cleanest air. We want crystal-clean water, and that's what we're doing and that's what we're working on so hard."), https://www.whitehouse.gov/briefings-statem ents/remarks-president-trump-americas-environmental-leadership/ [https://perma.cc/J2E3-PGNE].

^{14.} President Donald J. Trump, Statement by President Trump on the Paris Climate Accord (June 1, 2017) ("[I]n order to fulfill my solemn duty to protect America and its citizens, the United States will withdraw from the Paris Climate Accord."), https://www.white house.gov/briefings-statements/statement-president-trump-paris-climate-accord/ [https://perma.cc/6TMF-6ZLH].

^{15.} See, e.g., Hearing on the Nomination of Andrew Wheeler to Be Administrator of the Environmental Protection Agency Before the S. Comm. on Env't & Pub. Works, 116th Cong. 12 (2019) (statement of Andrew Wheeler, Nominated to Be Administrator, Environmental Protection Agency) ("Through our deregulatory actions, the Trump Administration has proven that burdensome federal regulations are not necessary to drive environmental progress."); News Release, Envtl. Prot. Agency, EPA Launches Back-to-Basics Agenda at Pa. Coal Mine (Apr. 13, 2017), https://archive.epa.gov/epa/newsreleases/epa-launches-back-basics-agenda-pennsylvania-coal-mine.html ("The coal industry was nearly devastated by years of regulatory overreach, but with new direction from President Trump, we are helping to turn things around for these miners and for many other hard working Americans.")

States thus finds itself in a period of federal retrenchment on environmental policy, and, as scholars predicted and continue to document, ¹⁶ local and state governments have passed laws and enacted policy to fill the void. Globalization contributes to this trend as well, forcing states, who have primary jurisdiction over many aspects of industries within them, to address the transboundary impacts of industrial and commercial activity.¹⁷

Facing a rapidly changing global climate, states and localities have focused their attention on both mitigation and adaptation. Some prominent state-level climate legislation sets greenhouse gas emissions reduction targets. ¹⁸ These laws effectively task state regulators with crafting rules that will force operators within their jurisdictions to make reductions on a timescale consistent with the prescriptions of the United Nations Intergovernmental Panel on Climate Change ("IPCC"). ¹⁹ Other state measures—so-called Renewable Portfolio Standards—require a certain percentage of the

[https://perma.cc/B7FG-4HET].

- 16. See Barry Rabe, Second Generation Climate Policies in the American States: Proliferation, Diffusion, and Regionalization, ISSUES GOVERNANCE STUD., Aug. 2006, at 1 ("Indeed, at the very time federal institutions continued to thrash about on this issue, major new initiatives were launched with bipartisan support in such diverse state capitals as Sacramento, Carson City, Santa Fe, Austin, Harrisburg, Albany, and Hartford. Even Blair has gotten in on the federalism act, negotiating transatlantic climate partnerships with California Governor Arnold Schwarzenegger rather than with a governor-turned-president like George W. Bush."); Michael B. Gerrard & Edward McTiernan, Legal Tools for Cities to Cope with Extreme Heat, N.Y.L.J. (Nov. 7, 2018), https://www.law.com/newyorklawjournal/2018/11/07/legal-tools-for-cities-to-cope-with-extreme-heat/ [https://perma.cc/QJD4-FCFL].
- 17. See Curtis R. Reitz, Globalization, International Legal Developments, and Uniform State Laws, 51 Loy. L. Rev. 301, 303 (2005) (noting that many of the subjects that globalization has brought to the fore are in the first instance the purview of state legislatures, rather than Congress, in the United States).
- 18. See, e.g., ME. STAT. tit. 38, § 576-A ("By January 1, 2030, the State [of Maine] shall reduce gross annual greenhouse gas emissions to at least 45% below the 1990 gross annual greenhouse gas emissions level. . . . By January 1, 2050, the State shall reduce gross annual greenhouse gas emissions to at least 80% below the 1990 gross annual greenhouse gas emissions level."); S. 358, 2019 Leg., 80th Sess. (Nev. 2019) (requiring the state to generate 50% of its electricity from renewable resources by 2030 and setting a goal of carbon neutrality by 2050); 2019 N.Y. Laws 106, § 1 ("It shall therefore be a goal of the state of New York to reduce greenhouse gas emissions from all anthropogenic sources 100% over 1990 levels by the year 2050, with an incremental target of at least a 40 percent reduction in climate pollution by the year 2030"). Other states with similar legislatively set greenhouse gas emissions reduction targets include: California, Colorado, Connecticut, Hawaii, Maryland, Massachusetts, Minnesota, New Jersey, Oregon, and Washington. See State Climate Policy Maps: Greenhouse Gas Emissions Targets, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/content/state-climate-policy/ [https://perma.cc/DY5A-Y5UT].
- 19. See, e.g., 2019 N.Y. Laws 106, § 1 (stating explicitly that the reduction goals for greenhouse gas emissions were set "in line with [U.S. Global Change Research Program] and IPCC projections of what is necessary to avoid the most severe impacts of climate

energy that utilities sell within a state to come from renewable resources, increasing over time.²⁰ At the municipal level, changes to zoning and building codes promote higher-density development and green infrastructure, among many other tools of sustainable development.²¹ In perhaps the most direct example of subnational gap-filling, as the United States government moves to erase its signature from the Paris Climate Agreement, many states and localities have moved to add theirs.²²

The origins of the movement towards subnational environmental lawmaking can be traced at least to the George W. Bush administration.²³ Early in President Bush's tenure, the United States declined to approve the Kyoto Protocol of the United Nations Framework Convention on Climate Change ("UNFCCC") and the Congress failed to pass multiple bills attempting to regulate greenhouse gas emissions at the federal level, such as the prominent McCain-Lieberman legislation.²⁴ In reaction, state-level activity ramped up—with bills introduced across the states to begin to address climate change. Comparing the raw number of bills introduced in various state legislatures exposes the dramatic shift in focus. According to an ALEC publication raising alarm about this activity, in 2006, sixty-eight bills to regulate greenhouse gas emissions were introduced in nineteen different states; in 2007, the

change."); see generally Intergovtl. Panel on Climate Change, Global Warming of 1.5°C (2018).

^{20.} See State Renewable Portfolio Standards and Goals, NAT'L CONF. St. LEGISLATURES (Apr. 17, 2020), https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx [https://perma.cc/B9V4-EY8N].

^{21.} See, e.g., Alec LeSher, Varying Unit Sizes Within Multi-Family and Mixed-Use Buildings, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/brief/good-2/ [https://perma.cc/WC2X-QA5F]; Alec LeSher, Green Roofing, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/brief/green-roofing/ [https://perma.cc/G3JQ-LK2P].

^{22.} As of August 2019, 287 cities and counties, along with ten states, have formally pledged to keep the commitments made in the Paris Agreement. See An Open Letter To the International Community and Parties To the Paris Agreement from U.S. State, Tribal, Local, and Business Leaders, WE ARE STILL IN, https://www.wearestillin.com/we-are-still-declarat ion ("We, the undersigned mayors, county executives, governors, tribal leaders, college and university leaders, businesses, faith groups, cultural institutions, healthcare organizations, and investors are joining forces for the first time to declare that we will continue to support climate action to meet the Paris Agreement.") [https://perma.cc/QQW4-6YGM].

^{23.} See, e.g., John C. Dernbach, Moving the Climate Debate from Models to Proposed Legislation: Lessons from State Experience, 30 ENVTL. L. REP. 10,933 (2000) (providing examples of very early state-level climate mitigation measures).

^{24.} Daniel R. Simmons, *Kyoto Spawn: The Progeny of the Kyoto Protocol, in ENERGY, ENVIRONMENT, AND ECONOMICS: A GUIDE FOR STATE LEGISLATORS 6–7 (Jorge Amselle ed., 5th ed. 2007).*

number of bills increased to 358 in forty-one states.²⁵ In another part of that publication, a researcher reported that twenty-seven states had introduced a total of seventy-four bills supporting Renewable Portfolio Standards in 2007 alone.²⁶ Consistent with those findings, another policy scholar characterized over half of the states as "actively involved in climate change" by the fall of 2006.²⁷ The increase in state-level environmental lawmaking reflected a larger documented shift towards subnational legislation on "international" issues. One prominent study identified some 886 bills and resolutions with "significant international content"²⁸ introduced in the 2001–2002 state legislative sessions, with 306 of these bills and resolutions ultimately being passed.²⁹

As the environmental legal academy caught wind of the emerging body of state and local environmental law, and even contributed to its development, the inevitable philosophical debate over the trend took shape. Prominent scholars argued the existence of a "jurisdictional mismatch" between the decidedly global threat of climate change and the geographically limited reach of state and local lawmaking.³⁰ These scholars saw subnational climate change

^{25.} Id. at 7.

^{26.} Amy Kjose, Issue in Brief: Renewable Portfolio Standards, in ENERGY, ENVIRONMENT, AND ECONOMICS: A GUIDE FOR STATE LEGISLATURES, supra note 24, at 20, 20.

^{27.} Rabe, *supra* note 16, at 1 (reporting that by August 2006 more than half of states had "one or more policies that promise to significantly reduce their greenhouse gas emissions.").

^{28.} Timothy J. Conlan, Robert L. Dudley & Joel F. Clark, Taking on the World: The International Activities of American State Legislatures, 34 J. FEDERALISM 183, 185–86 (2004) (describing searches of bills and abstracts in the Lexis/Nexis state legislative database, using terms to define the category of international issues, such as "international trade," "human rights," "Kyoto Treaty," and specific country names (e.g., Cuba, China, and Mexico)).

^{29.} Id.

^{30.} See, e.g., Jonathan H. Adler, Jurisdictional Mismatch in Environmental Federalism, 14 N.Y.U. ENVTL. L.J. 130, 157 (2005) (decrying as inefficient environmental policy that does not handle problems of national scope at the federal level and more localized problems at the state or municipal level); Daniel C. Esty, Revitalizing Environmental Federalism, 95 MICH. L. REV. 570, 587 (1996) ("Whenever the scope of an environmental harm does not match the regulator's jurisdiction, the cost-benefit calculus will be skewed and either too little or too much environmental protection will be provided."); Richard O. Zerbe, Optimal Environmental Jurisdictions, 4 ECOLOGY L.Q. 193, 245 (1974) ("[W]hile the arguments show the case for local jurisdiction [over environmental regulation] to be strong, important exceptions remain. . . . where there is undue political influence at local levels, where there is sufficient interjurisdictional pollution, and where technological considerations give substantially greater efficiency to larger jurisdictions. . . . ").

law as an egregious violation of the so-called "matching principle," arguing that only the international community, operating through the agreements of national governments, could effectively mitigate *global* warming. Some drew on the familiar trope of a "race to the bottom," worrying that environmental policy amongst individual states would devolve into a competition for business investment and thereby foster a generally deregulatory environment. Much like during the civil rights era, "states' rights" could provide cover for regressive or deregulatory policy. 33

Still others from the "environmental federalism" camp simply saw subnational efforts as the manifestation of the federated republican system in the environmental context.³⁴ For these scholars, the differentiated approaches to climate change—with some

^{31.} See David E. Adelman & Kirsten H. Engel, Adaptive Federalism: The Case Against Reallocating Environmental Regulatory Authority, 92 MINN. L. REV. 1796, 1798 (2008) ("Legal academics have long maintained that an optimal level of government exists for regulating a given environmental problem. The orthodox view, which we refer to as the 'matching principle,' is premised on the elementary economic theory that efficient regulation is possible only when the regulating entity fully internalizes the costs and benefits of its policies. A corollary of this principle is that the regulatory authority should reside at the level of government that roughly 'matches' the geographic scope of the subject environmental problem."); Henry N. Butler & Jonathan R. Macey, Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority, 14 YALE L. & POL'Y REV. 23, 25 (1996) ("The Matching Principle suggests that, in general, the size of the geographic area affected by a specific pollution source should determine the appropriate governmental level for responding to the pollution. There is no need for the regulating jurisdiction to be larger than the regulated activity.").

^{32.} See Adelman & Engel, supra note 31, at 1846 ("Because climate change is caused, in part, by human-induced greenhouse gas emissions from around the globe, climate change is widely regarded as the textbook example of a global commons problem that is best addressed at the national and international levels. It therefore presents a relatively clean case for the matching principle, which predicts that regulation of greenhouse gas emissions at the state level is highly unlikely."). Cf. Peter C. Frumhoff, Richard Heede & Naomi Oreskes, The Climate Responsibilities of Industrial Carbon Producers, 132 CLIMATIC CHANGE 157, 158 (2015) (citing JOHN RAWLS, A THEORY OF JUSTICE (1971) for the proposition that from an ethical perspective the responsibility for solving a problem should fall on those who create it, which counsels for citing climate policy responsibility with corporations and national governments).

^{33.} See Robert V. Percival, Environmental Federalism: Historical Roots and Contemporary Models, 54 MD. L. REV. 1141, 1144 (1995).

^{34.} See Buzbee, supra note 12, at 110 ("While few argue that the federal environmental role is unconstitutional, one common strain among scholars and policymakers is the idea that, due either to constitutional presumptions or the diversity of circumstances among the states, the regulatory norm should be a limited federal role unless some compelling alternative rationale justifies federal leadership.").

states imposing strict greenhouse gas limits³⁵ and others enshrining skepticism in law³⁶—served as a feature deserving of celebration rather than a bug in need of fixing. As the debate matured, a more nuanced view of the jurisdictional problem presented by climate change emerged. Subnational climate change law functioned as neither an existential crisis of mismatched governance nor a full-fledged cause célèbre of states' rights advocates.

Drawing on a developing trend from federalism scholarship, going by many monikers, among them "empowerment federalism," "polyphonic federalism," "interactive federalism," "iterative federalism," 40 and "dynamic federalism," 41 environmental legal scholars, such as William Buzbee, Kirsten Engel, and others, argued that interaction across jurisdictions positively contributes to a dynamic system of environmental governance in the United States. 42 This conception of federalism directly conflicts with the "classical" theory of federalism as applied to environmental law, which produced and venerates the matching principle. 43 That "classical" approach allows for environmental lawmaking only with regard to pollutants with geographically limited effects. 44 Greenhouse gases

^{35.} See, e.g., ME. STAT. tit. 38, § 576-A (Maine's climate change emission reduction requirements).

^{36.} See, e.g., Kan. Stat. Ann. \S 66-1256 (repealing Kansas's renewable energy portfolio requirements and replacing them with voluntary goals).

^{37.} Erwin Chemerinsky, Empowering States When It Matters: A Different Approach to Preemption, 69 BROOK. L. REV. 1313, 1313–16 (2004).

^{38.} Robert A. Schapiro, Polyphonic Federalism: State Constitutions in the Federal Courts, 87 CALIF. L. REV. 1409, 1411-17 (1999).

^{39.} Robert A. Schapiro, Toward a Theory of Interactive Federalism, 91 IOWA L. REV. 243, 285-317 (2005).

^{40.} Ann E. Carlson, *Iterative Federalism and Climate Change*, 103 NW. U. L. REV. 1097, 1099 (2009) (coining the term "iterative federalism" to describe "repeated, sustained, and dynamic lawmaking efforts involving both [state and federal] levels of government").

^{41.} Renee M. Jones, Dynamic Federalism: Competition, Cooperation and Securities Enforcement, 11 Conn. Ins. L.J. 107, 108–10 (2004).

^{42.} See Buzbee, supra note 12, at 108; Engel & Saleska, supra note 12, at 189; Adelman & Engel, supra note 31, at 1846. Interactive federalism has also been embraced outside of the United States. See Reference re Securities Act, [2011] 3 S.C.R. 837, para. 57 (Can.) ("The Supreme Court of Canada, as final arbiter of constitutional disputes since 1949, moved toward a more flexible view of federalism that accommodates overlapping jurisdiction and encourages intergovernmental cooperation—an approach that can be described as the 'dominant tide' of modern federalism." (citation omitted)).

^{43.} Adelman & Engel, supra note 31, at 1802.

^{44.} See Lauren Zajac, Eli Sprecher, Philip J. Landrigan & Leonardo Trasande, A Systematic Review of US State Environmental Legislation and Regulation with Regards to the Prevention of Neurodevelopmental Disabilities and Asthma, ENVTL. HEALTH 8:9, Mar. 26, 2009, at 9 (discussing this phenomenon in a related context, and noting that "some states

present a problem of a different order for the very opposite reason—the negative environmental impacts transcend political borders. To make sense of subnational climate policy, then, state and local lawmakers must embrace a new model of federalism. In other words, a subnational government enacts a law to curb greenhouse gas emissions within its jurisdiction not to eliminate climate change within its jurisdiction (for that is not scientifically possible), but rather to contribute to national and global efforts to act on climate. 45

Some two decades ago Robert Percival presciently foreshadowed the current moment in environmental governance. Writing from a historical perspective, he surmised that "the landscape of federalism appears to be shifting toward the states after decades of moving in the opposite direction."⁴⁶ Federal environmental law rose to prominence in the 1960s and 1970s to address problems of pollution that the common law of the states left unresolved and state legislatures ignored for too long.⁴⁷ Today, the roles have reversed. The federal government has ignored climate change. States and localities have reasserted their power to fill the void, or, at the very least, advance the environmental governance agenda.

II. UNIFORM AND MODEL LAWMAKING

We know that climate law and policy has worked its way all the way down to the smallest governmental units in the American system. From zoning boards to town councils to county commissions to state legislatures—climate law is happening. We also know that generally as the jurisdictional reach of a governmental entity decreases, so do the resources available to the officials in that entity. This combination of factors begs the question—how do the details of this body of law develop? The limited resources of subnational

may choose not to enact regulation or legislation to limit exposures for contaminants that are not commonly experienced or do not originate in that state.").

^{45.} There are, of course, other non-climate-related rationales, or co-benefits, that motivate states to reduce greenhouse gas emissions, such as job creation, economic development, promotion of technological innovation, and reduction of dependency on foreign oil. See Dernbach, supra note 23, at 10,946–49 (arguing that these co-benefits were the primary motivators of early adopter states).

^{46.} Percival, supra note 33, at 1142-44.

^{47.} See id. at 1144, 1158.

governments—financial, technical, scientific, etc.—have constrained and defined lawmaking since long before the climate crisis. For almost as long, nongovernmental or quasi-governmental organizations have tried to bridge that resource gap by drafting and promoting uniform and model state legislation.

The history of efforts to pass model or uniform legislation across the states spans a century of time and a wide swath of subjects. This work will not serve as a comprehensive account of that history. Nonetheless, proper dissection of the climate change policy efforts of subnational actors requires facility with the language and theory of uniform and model law movements in the United States and, to some extent, internationally.

The first important distinction should be drawn between "uniform" laws and "model" laws. 48 Often grouped together, the two approaches differ in significant ways. Much of the underlying justification varies. As the monikers imply, one drafting tool tries to promote uniformity of law across jurisdictions while the other models for lawmakers what the third-party drafters consider sound policy. Advocates draft and promote uniform legislation with the goal that every jurisdiction adopts precisely the same version of the law. With uniform law, the consistency of rules throughout the United States, or even the world, sits as a coequal objective to the underlying substance of the law. Uniformity efforts measure their success largely by the percentage of jurisdictions that adopt the proposed legislation wholesale; a low percentage of adopting states or a high percentage of changes by adopting states indicates a failed effort. Model laws strive for a different objective. The drafters of model laws would no doubt celebrate universal adoption of their proposals, but the underlying substance of the policy imbued

^{48.} See Allison Dunham, A History of the National Conference of Commissioners on Uniform State Laws, 30 L. & CONTEMP. PROBS. 233, 246–47 (1965) (describing the distinction between a model act and a uniform act from the standpoint of the National Conference of Commissioners on Uniform State Laws thusly: "If the Conference has promulgated a uniform act, the Commissioners from each of the states are obligated to attempt to secure passage of the uniform act in their state legislatures in an unamended form. With respect to model acts, on the other hand, the Commissioners from each of the states have no duty other than supplying copies of the various acts to interested organizations in their own states upon request."). In the international legal community, the uniform versus model law paradigm translates into categorization of proposals as either "hard" law or "soft law" with the former including uniformity efforts and the latter model-based efforts. See Cynthia Crawford Lichtenstein, Hard Law v. Soft Law: Unnecessary Dichotomy?, 35 INT'L LAW. 1433, 1433–34 (2001) (distinguishing between "hard" law and "soft law").

in the model enjoys primacy. Model legislation anticipates that jurisdictions will cater it to their individual needs, cherry-picking provisions, changing language, adding more specific prescriptions, and so forth.

The theory undergirding uniform law efforts focuses on when uniformity is desirable and how best to achieve it. In a system of limited central government, states, and localities within them, rightly possess the power to make their own laws. Naturally, those laws will differ from state to state, and even from municipality to municipality. That patchwork of law has for centuries been a defining feature of the United States. In important ways it mimics respect for the diversity of sovereigns in the international governance regime. However, legal scholars and practitioners have long recognized that, particularly for multijurisdictional actors (from large corporations to globetrotting travelers), different rules on certain subjects from place to place impose greater costs than benefits. Indeed, most lawyers would agree on the efficiency of at least some uniformity of law; they would also agree, however, on the impracticality of ceding all jurisdiction to a central government to achieve that uniformity. And so, the debate has for many years raged over the particulars of how to characterize the subjects where uniform laws warrant promotion and how to coordinate jurisdictions in adoption of those uniform provisions.

The generalized rationale for uniform law argues that some circumstances render it socially or economically "necessary."⁴⁹ The oft-cited examples of areas where such necessity arises are interstate commerce and contracts.⁵⁰ A related secondary argument for

^{49.} Dunham, *supra* note 48, at 235 ("[B]oth the state legislation creating the commissions on uniform state laws in the United States and the Constitution of the National Conference of such Commissioners emphasize the duty of the Commissioners to draft uniform laws where uniformity is 'necessary.").

^{50.} See id.; see also Bruno Zeller, The Development of Uniform Laws—A Historical Perspective, 14 PACE INT'L L. REV. 163, 164 (2002) (recounting the story of the United Nations Convention on Contracts for the International Sale of Goods); E. Hunter Taylor, Jr., Foreword: Federalism or Uniformity of Commercial Law, 11 RUTGERS-CAMDEN L.J. 527, 527–29, 552 (1980) (describing the effort from 1945 to 1967 by the National Conference of Commissioners for Uniform State Laws and the American Law Institute that led to the adoption of the Uniform Commercial Code in every state except Louisiana); Roger J. Traynor, Statutes Revolving in Common-Law Orbits, 17 CATH. U. L. REV. 401, 422–23 (1968) ("The Uniform Commercial Code has become a major influence on the development of common law in the federal courts to govern cases involving government contracts and other commercial transactions."); Robert A. Stein, Strengthening Federalism: The Uniform State Law Movement in the United States, 99 MINN. L. REV. 2253, 2258 (2015) (identifying "Business Entity

uniformity suggests that, given a common theory of law, only one policy solution truly embodies the optimal approach; once that policy emerges, all states should adopt it, organically creating uniform law.⁵¹ Still another justification for uniformity focuses on cultural consistency across the nation (i.e., nationalism or patriotism), rather than consistency of legal theory.⁵²

Two organizations dominate the field of uniform law in the United States—the National Conference of Commissioners for Uniform State Laws (NCCUSL or "the Uniform Law Commission") and the American Law Institute ("ALI").53 The Uniform Law Commission carefully targets subject matters for uniformity based on criteria that embody the organization's philosophy. As a threshold matter, the Uniform Law Commission will only draft legislation on subjects that have historically been the purview of state law.⁵⁴ Even concerning those subjects, the Uniform Law Commission will propose legislation only if the organization believes the uniform. bill has a reasonable probability of passage in a substantial number of jurisdictions or its existence will promote uniformity through other means (such as case law or legal education).⁵⁵ The third criterion requires the potential uniformity of law to pass a cost-benefit analysis. 56 Finally, the Uniform Law Commission will not draft and promote legislation on novel or controversial subjects.⁵⁷ Perhaps unsurprisingly, few issues thread the needle of the Uniform

- 51. Dunham, supra note 48, at 235-36.
- 52. See id. at 236; accord NEW PERSPECTIVES FOR A COMMON LAW OF EUROPE 164 (Capelletti ed., 1978) ("[I]t is not only useless, but dangerous to extend attempts at harmonization into fields in which legal differences reflect differences in political or social organisation or in cultural or social mores.").
- 53. See William H. Henning, The Uniform Law Commission and Cooperative Federalism: Implementing Private International Law Conventions Through Uniform State Laws, 2 ELON L. REV. 39, 39–40 (2011); Bruce H. Kobayashi & Larry E. Ribstein, The Non-Uniformity of Uniform Laws, 35 J. CORP. L. 327, 328 (2009) (describing the organizations interested in promoting uniformity of law).
- 54. Fred H. Miller, The Future of Uniform State Legislation in the Private Law Area, 79 Minn. L. Rev. 861, 866–67 (1995).
 - 55. Id. at 866.
 - 56. Id. at 866-67.
- 57. *Id.* ("[S]ubjects that are controversial because of disparities in social, economic, or political policies among the various states are seldom suitable for a uniform law.").

Law, Commercial Law, and Trusts and Estates Law" as three of the "broad subject areas [that] have tended to dominate the work of the ULC over its nearly 125 years of existence"); Frank R. Kennedy, Federalism and the Uniform Commercial Code, 29 BUS. LAW. 1225, 1231 (1974) (discussing the "considerable literature . . . devoted to the relationship between the Uniform Commercial Code and the Bankruptcy Act").

Law Commission's criteria. Those that do find their way into uniform law proposals generally avoid conflicts of laws, while either promoting interstate commerce, filling an urgent need, modernizing an outdated legal structure, or codifying a well-established rule of common law.⁵⁸

An economic analysis supports uniformity of law in subjects where it leads to greater efficiency.⁵⁹ A study of the Uniform Law Commission's proposals found evidence that the most widely adopted proposals did in fact come in areas where uniformity proves most efficient.⁶⁰ The study also found, however, that the Uniform Law Commission endorses some inefficient laws and thereby increases the likelihood of their adoption.⁶¹ Refining this selection process has been the subject of some scholarly attention. Recommended improvements to the uniform law system target the drafting and commentary process, as well as implementation and interpretation across jurisdictions.⁶² Of these, interpretation of uniform laws once enacted presents a potentially insurmountable challenge. Despite language in uniform acts urging uniform interpretation,⁶³ there exists no special binding legal precedent that requires a court of one jurisdiction to follow another. Thus, achieving

^{58.} Henning, supra note 53, at 40.

^{59.} See generally John Linarelli, The Economics of Uniform Laws and Uniform Lawmaking, 48 WAYNE L. REV. 1387, 1392 (2003); see also Larry E. Ribstein & Bruce H. Kobayashi, An Economic Analysis of Uniform State Laws, 25 J. LEGAL STUD. 131, 138–42 (1996) (laying out the comparison of Costs Reduced by Uniformity: (1) Inconsistency Costs; (2) Information Costs; (3) Litigation Costs; (4) Instability Costs; (5) Externalities; and (6) Drafting Costs, with Costs of Uniformity: (1) Exit Costs; (2) Reducing Innovation and Experimentation; and (3) Reducing Local Variation).

^{60.} See Ribstein & Kobayashi, supra note 59, at 132.

^{61.} See id.; see also id. at 172 (reporting "that states with part-time legislatures have a 2 1/2 percent higher probability of adopting uniform laws than states not classified either as part- or full-time legislatures and a 4 percent higher probability of adopting uniform laws than states classified as full-time legislatures").

^{62.} See, e.g., Linarelli, supra note 59, at 1445–46 (suggesting the following "institutional constraints... to promote efficiency improvements in the unification process[:]...A. Commentaries Addressing Efficiency...B. Random Reviews...C. Improving International Institutions"); William M. Hargest, Keeping the Uniform State Laws Uniform, 76 U. PA. L. REV. 178, 180 (1927) (discussing interpretation issues).

^{63.} Hargest, *supra* note 62, at 180 (describing how the following language came to be a part of every uniform law in an effort to force uniform interpretation: "This act shall be so interpreted and construed as to effectuate its general purpose to make uniform the law of those states which enact it.").

the true purpose of uniform law, and consequently reaping its purported benefits, relies on judicial adherence to a duty of prudential precedence. 64

The theory undergirding model law efforts lacks the rigidity of the thinking that supports uniform law and the consequent scholarly debate lacks the fierceness. If a piece of model legislation simply exemplifies the policy preferences of its drafters (while saying little about jurisdictional variation), the objections to the use of the model as a tool rightly tend to focus on the substance of the policy and the political dynamics of the issue area, rather than on the desirability of a common set of legal rules across jurisdictions. 65 Model legislation accrues both benefits and costs to the political system. Model bills and ordinances save lawmakers time and money. Third parties pay experts and lawyers to assist them in drafting and then provide a prepackaged, vetted proposal for politicians to offer. 66 The debate on the adoption of the policy can move forward more quickly and focus on the specific substance of the policy, rather than whether to make law on the subject at all. As one might imagine, these benefits of model legislation prove a significant advantage in the context of climate change, where complex science and policy abound and the status quo for subnational actors

^{64.} Some courts have at least given lip service to such a duty. See, e.g., Aetna Chem. Co. v. Spaulding & Kimball Co., 126 A. 582, 585 (Vt. 1924) ("In view of this requirement, decisions of the highest courts in other states having such enactment, involving its interpretation or construction, are precedents of more than persuasive authority. Speaking generally, they are precedents by which we are more or less imperatively bound in cases where similar questions are presented."); Stewart v. Hansen, 218 P. 959, 960 (Utah 1923) ("If, therefore, the section of the Uniform Sales Act here in question has been construed by the court of last resort of any state in which the Uniform Sales Act is in force, then I conceive it to be the duty of this court to follow such construction in order to comply with the spirit and purpose of section 5183, supra, and to maintain the uniformity of the provisions of the Uniform Sales Act. It would be utterly futile for the legislatures of the several states to adopt uniform laws upon any subject if each court of the several states followed the notion of its members with regard to how a particular provision should be construed and applied.").

^{65.} See Alan Watson, Comparative Law and Legal Change, 37 CAMBRIDGE L.J. 313, 315 (1978) ("[L]aw develops by transplanting, not because some such rule was the inevitable consequence of the social structure and would have emerged even without a model to copy, but because the foreign rule was known to those with control over law making and they observed the (apparent) benefits which could be derived from it. What is borrowed, that is to say, is very often the idea.").

^{66.} See Kobayashi & Ribstein, supra note 53, at 343—44 (describing the model lawmaking process of the National Conference of Commissioners for Uniform State Laws); Loren Collingwood, Stephen Omar El-Khatib & Benjamin Gonzalez O'Brien, Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy, 47 Policy Stud. J. 735, 736 (2018) (listing as one of the advantages of "sustained organizational interests" the ability to use their expertise to shape model legislation).

is to defer to the federal government. Unsurprisingly, climate change has not been among the subjects that the Uniform Law Commission's limited model law program has addressed, leaving the issue largely to issue-oriented interest groups.⁶⁷

Debate persists about the effects of the increasing availability and promotion of model legislation on the democratic political system. Those in favor of the practice cite some of the advantages discussed above, stressing that, particularly in the context of resource-constrained state legislatures, expert-refined models improve the overall quality of the ultimate legislation.⁶⁸ One scholar contends that model legislation "safeguards federalism" by providing prepackaged alternatives to national or neighbor-state policies. 69 On the other hand, it remains inarguable that the true authors of many bills offered in state legislatures across the country are interest group experts, rather than duly elected representatives. That reality, some scholars argue, privileges those with more resources, allowing them to write the laws that govern their activity unchecked by the democratic process. 70 This piece contributes to that federalism debate in the specific context of climate change.

Uniformity efforts have largely stayed away from climate change policy, indeed avoiding environmental law writ large. The existence of highly visible efforts to combat climate change by international governance regimes (i.e., the UNFCCC) and the federal government (i.e., Congress and EPA) might very well explain the lack of serious consideration for a coordinated uniform law effort at lower jurisdictional levels. On a deeper level, climate change does not neatly fit the characterization of a subject matter primed for uniformity. Certainly, on a general level climate change demands unified action to reduce greenhouse gas emissions. How-

^{67.} Transcending its moniker, the Uniform Law Commission has over the years developed a model act procedure, using it sparingly either where uniformity efforts have failed or have been deemed substantially unnecessary. Dunham, *supra* note 48, at 247.

^{68.} See Mary A. Kroeger, Plagiarizing Policy: Model Legislation in State Legislatures 3, 5 (May 1, 2015) (unpublished manuscript), https://www.dropbox.com/sh/i4ud5e6tyap1qp 2/AACRSIANXFLC8U5Ln9Bn6usca/Kroeger_SPPC.pdf?dl=0 [https://perma.cc/DA84-EK US].

^{69.} See John D. Nugent, Safeguarding Federalism: How States Protect Their Interests In National Policymaking 77–79, 87–88 (2012).

^{70.} See Kroeger, supra note 68, at 3-4.

ever, neither the theoretical nor the practical frameworks discussed above would endorse a uniform approach to how and how much individual jurisdictions reduce greenhouse gases. From a theoretical perspective, the only social and economic necessity is net global reduction, which can be achieved by a wide array of policies across jurisdictions. Even more telling, the idea that one optimal policy solution has emerged and deserves universal adoption is, at this point, very premature. Environmental law is an area that has traditionally allowed different states to take varying approaches to the precise management of their resources, even when a federal statute exists. From a practical perspective, climate change fits the definition of a novel and controversial topic; expect the Uniform Law Commission to continue to steer clear of it.

In contrast, model climate change legislation has existed in various forms for quite some time. A cursory search reveals discussion of model state laws, climate action plans, and regulations, as well as model municipal ordinances, dating back to the early 2000s.⁷² The sources of these models of climate policy have spanned the political spectrum, with one of the most prolific model policies essentially abdicating responsibility for curbing greenhouse gases.⁷³ Despite some prominent early successes that themselves functioned as models,⁷⁴ subnational actors looking to seriously address climate change have not benefited from coordinated efforts to draft and promote particular provisions. On the other side, as discussed

^{71.} See Robert L. Rabin, Federalism and the Tort System, 50 RUTGERS L. REV. 1, 6 (1997) (pointing out the selective adoption across the United States of nuisance and trespass law principles as applied to water and pollution); see also, e.g., Turner v. Big Lake Oil Co., 96 S.W.2d 221, 226 (Tex. 1936) ("In Texas we have conditions very different from those which obtain in England.").

^{72.} See generally Kirsten H. Engel, Mitigating Global Climate Change in the United States: A Regional Approach, 14 N.Y.U. ENVIL. L.J. 54 (2005).

^{73.} See, e.g., Resolution in Response to EPA's Plan to Regulate Greenhouse Gases Under the Clean Air Act, ALEC (Jan. 9, 2014), https://www.alec.org/model-policy/resolution-response-epas-plan-regulate-greenhouse-gases-clean-air-act/ [https://perma.cc/688Z-DLR5]; see also Jill Richardson, ALEC Exposed: Warming Up to Climate Change, PR WATCH (July 27, 2011, 2:01 AM), https://www.prwatch.org/NODE/10914 (reporting that fourteen states had passed resolutions urging the United States Congress to legislatively prohibit the EPA from regulating greenhouse gas emissions under the Clean Air Act) [https://perma.cc/BK7W-K2EY].

^{74.} In the northeastern United States, seven states formed the Regional Greenhouse Gas Initiative ("RGGI") and developed a "Model Rule" that created a framework for a regional carbon trading market. See A Brief History of RGGI, REGIONAL GREENHOUSE GAS INITIATIVE, https://www.rggi.org/program-overview-and-design/design-archive [https://perma.cc/TMB7-W72K]. States then passed laws and regulations based on that model. Id.

in more detail below and documented by investigative journalism and academic study, 75 a well-funded, strategic campaign has made significant headway against substantive subnational policy. 76

The unbalanced influence of model law in the climate change space threatens the health of the planet and our democracy. As explained below, the climate policy debate theoretically presents conditions quite favorable to the functioning of "laboratories of democracy" federalism. However, the power disparity of the current model law market skews the results of the policy experiment. Confronted with the scientific consensus on the existence of climate change⁷⁷ and the concern among citizens, ⁷⁸ one might expect lawmakers to demand a set of model policies ready-made for quick implementation to address the problem. The states as laboratories should be testing different policy approaches and selecting from a menu of models. Instead, the lobbying efforts behind the most timid, or, more accurately, counterproductive model policies still command outsized attention of lawmakers in many states. The next Part will unpack the success of one such entity, the American Legislative Exchange Council ("ALEC") and discuss some of the political science research explaining ALEC's influence. If that influence can be effectively balanced by some of the newer climate policy efforts described later, climate federalism would present an interesting test case for environmental federalism more broadly and a measure of the continued viability of a federalist system of

^{75.} See, e.g., Molly Jackman, ALEC's Influence over Lawmaking in State Legislatures, BROOKINGS (Dec. 6, 2013), https://www.brookings.edu/articles/alecs-influence-over-lawmaking-in-state-legislatures/ ("Most common were bills pertaining to immigration and the environment, followed by those relating to guns and crime.") [https://perma.cc/7LBP-6FAL].

^{76.} See id. ("Most common were bills pertaining to immigration and the environment, followed by those relating to guns and crime.").

^{77.} See Scientific Consensus: Earth's Climate is Warming, NAT'L AERONAUTICS & SPACE ADMIN., https://climate.nasa.gov/scientific-consensus/ ("Multiple studies published in peer-reviewed scientific journals show that 97 percent or more of actively publishing climate scientists agree: Climate-warming trends over the past century are extremely likely due to human activities." (footnote omitted)) [https://perma.cc/QLT6-X2KV]; see generally INTERGOVTL. PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS (2013), https://www.ipcc.ch/report/ar5/wg1/ [https://perma.cc/X69J-B886].

^{78.} See Lydia Saad, Americans as Concerned as Ever About Global Warming, GALLUP, (Mar. 25, 2019), https://news.gallup.com/poll/248027/americans-concerned-ever-global-war ming.aspx (reporting a series of opinion poll numbers that showed, among other things, that two-thirds of Americans believe that climate change is caused by human activities and classified a majority of Americans as "concerned believers") [https://perma.cc/H3UU-K3MD].

government comprised of overlapping jurisdictions in the twentyfirst century.

III. ALEC'S SUCCESSES

Model legislation has been a tool of modern politics for some time. Perhaps the most prolifically adopted, and derisively criticized, model laws have been born of ALEC, a conservative policy organization.⁷⁹ ALEC describes itself as "nonpartisan"⁸⁰ and retains tax-exempt status as a nonprofit organization, but its origins reveal the political philosophy at the core of its proposals. ALEC began in the 1970s and early 1980s as a response to what some conservative thinkers believed to be the expansion of big government at the expense of states' rights;81 the "Powell Memorandum" of 1971 laid the intellectual roots of the organization.82

Though its policy preferences may have derived from conservative political ideology, ALEC's organizational structure and strategy blazed a new path:

[ALEC] is a unique policy organization that combines several older modalities of governance (special interest lobbying and advocacy)

^{79.} ALEC describes itself as a "nonpartisan, voluntary membership organization," but then immediately claims its members are "dedicated to the principles of limited government, free markets and federalism." About ALEC, ALEC, https://www.alec.org/about/ [https:// perma.cc/GBQ7-2UA5]. See also Jackman, supra note 75 (reporting that Republicans sponsored more than ninety percent of the ALEC-based bills introduced during the 2011-2012 state legislative session and stating unequivocally that what distinguishes "ALEC from other lobbying ventures is that it partners with corporations whose interests span the space of conservative issues"); Eric R. Hansen & Joshua M. Jansa, Bill Complexity and Text Borrowing in State Policy Diffusion 4 (Mar. 25, 2019) (unpublished manuscript), https://pdfs.se manticscholar.org/e4e5/be765ba0b215948023d33cc85d4cb461c2e8.pdf (stressing ALEC's prominence but noting that other similar organizations also influence lawmaking through campaigns pushing model legislation) [https://perma.cc/7G2V-6JEB].

ALEC, supra note 79.

Rebecca Cooper, Caroline Heldman, Alissa R. Ackerman & Victoria A. Farrar-Meyers, Hidden Corporate Profits in the U.S. Prison System: The Unorthodox Policy-Making of the American Legislative Exchange Council, 19 Contemp. Just. Rev. 380, 381 (2016) ("ALEC was founded in 1973 by Paul Weyrich, Lou Barnett, and Henry Hyde in response to concerns that Republican President Richard Nixon was favoring big government. Weyrich also co-founded other notable conservative groups, including The Heritage Foundation, The Moral Majority, and the Council on National Policy." (citation omitted)).

^{82.} Id. (The memorandum was "entitled 'Attack of American Free Enterprise System' [and] written by Lewis Powell to Eugene B. Sydnor, Jr., then chairman of the U.S. Chamber of Commerce's Education Committee"); see also id. (citing Richard Viguerie's contemporary account, THE NEW RIGHT: WE'RE READY TO LEAD (1981), for the assertion that ALEC was created to be the state-level arm of the national conservative movement that grew out of the Powell Memorandum).

while it also exemplifies many of the newer modalities of governance, such as its use of internal "partnerships," its location as a node within larger policy networks, its "think tank" status, its complex or creative political and discursive strategies, and its largely successful attempt to privatize the policy process.⁸³

ALEC's greatest strength lies in its vast network connecting moneyed individual and organizational supporters, other policy-oriented nongovernmental organizations, and elected officials themselves.⁸⁴ ALEC differs from other lobbying organizations by directly involving that latter group; it claims twenty percent of Congress, eight governors, and twenty-five percent of state legislators as members.⁸⁵ ALEC brings together private members with government members to draft, and ultimately introduce, model legislation.⁸⁶ ALEC boasts that its members outperform Democratic legislators in passing legislation by an impressive 2:1 margin.⁸⁷

ALEC functions as the legislative composition brain of a three-headed political beast. The State Policy Network provides the background academic studies, opinion journalism, and legislative testimony.⁸⁸ And the group Americans for Prosperity drums up grassroots political support through advertising and other means.⁸⁹ Together these organizations have achieved legislative successes across the country on a wide range of topics on behalf of the conservative movement.

^{83.} Gary L. Anderson & Liliana Montoro Donchik, Privatizing Schooling and Policy Making: The American Legislative Exchange Council and New Political and Discursive Strategies of Education Governance, 30 EDUC. POL'Y 322, 324–25 (2016).

^{84.} See Collingwood et al., supra note 66, at 742.

^{85.} Id.

^{86.} Id.; see Alexander Hertel-Fernandez, How the Right Trounced Liberals in the States, DEMOCRACY: J. IDEAS (Winter 2016), https://democracyjournal.org/magazine/39/how-the-right-trounced-liberals-in-the-states/ ("[I]nside the legislatures themselves, many representatives and senators, especially Republicans, are members of ALEC, which invites them to serve alongside business lobbyists and right-wing advocacy groups on national task forces that prepare "model" bills that the legislators can advance at the state and local level, with assistance from ALEC staffers.") [https://perma.cc/PKE9-N3K7].

^{87.} Collingwood et al., supra note 66, at 742 (citing STRATEGIC PLAN 2016–2018, AM. LEGISLATIVE EXCHANGE COUNCIL (2016), https://www.alec.org/app/uploads/2016/06/ALEC-Strat-Plan-Final-051616.pdf [https://perma.cc/2JS2-57M9]).

^{88.} Hertel-Fernandez, supra note 86.

^{89.} Id.

ALEC closely held data and selectively published reports of its own activity for decades. Its prominence was well known and accepted but went largely unconfirmed. Rigorous study of the organization's efforts proved impracticable. In the wake of a recent investigative journalism report finding and making available reams of data on ALEC's activities, 90 the organization's work has been exposed to journalistic and scholarly scrutiny. 91 Political scientists routinely cite ALEC as the most famous example of an interest group that successfully promotes its own model legislation. 92 There now exists significant empirical evidence to support that claim and quantify ALEC's influence.

A now-famous Brookings Institution study utilized text analysis to examine bills introduced during the 2011–2012 legislative session in statehouses across the country and made three significant topline findings: (1) "ALEC model bills are, word-for-word, introduced in our state legislatures at a non-trivial rate"; (2) "they have a good chance—better than most legislation—of being enacted into law"; and (3) "the bills that pass are most often linked to controversial social and economic issues."⁹³ According to the study, 132 bills based on ALEC models were introduced, with twelve (nine percent) becoming law.⁹⁴

Another even more recent study utilized quantitative text analysis to examine ALEC's influence on state legislation targeted specifically at so-called "sanctuary cities." Unsurprisingly, the study confirmed that ALEC model legislation formed the basis of antisanctuary city legislation in multiple states. Looking specifically at the number of ALEC members who served in state legislatures and controlling for other factors, the statistical analysis demonstrated that "a count of ALEC-affiliated legislators by state [was]

^{90.} See ALEC Exposed, CTR. FOR MEDIA & DEMOCRACY, https://www.alecexposed.org/wiki/ALEC_Exposed (last updated Feb. 23, 2017) [https://perma.cc/P89Q-JFP8].

^{91.} See Cooper et al., supra note 81, at 385 (citing studies from 2010 and 2012 as evidence of independent confirmation of ALEC's legislative success).

^{92.} See Hansen & Jansa, supra note 79.

^{93.} Jackman, supra note 75.

^{94.} Id.

^{95.} See generally Collingwood et al., supra note 66.

^{96.} Id. at 758.

predictive of anti-sanctuary legislation in 2017, but not of pro-sanctuary legislation in the same year."97

One very large study of over seven million proposed bills tracked and compared the influence of over sixty groups drafting model legislation. That study found that ALEC led by a wide margin in getting their bills introduced and passed. Paccording to the data analyzed therein, over 7400 ALEC model bills were introduced, with over 1400 passing (almost a twenty percent success rate). The study also showed that ALEC steadily increased its influence in terms of bills introduced until 2013, and has maintained a steady number of bills passing even since that peak.

A very recent study employed a novel tool dubbed the "Legislative Influence Detector," or "LID," to analyze bills introduced in state legislatures. ¹⁰² Set to use its broadest parameters, the tool identified over 5500 ALEC-related bills introduced in state legislatures; narrowing the scope to avoid bills that had been reintroduced with only minor changes and similar overlap, the tool still found over 1800 ALEC-written bills in the dockets of state legislatures. ¹⁰³ Of those, over 160 passed into law, yielding a nine percent success rate. ¹⁰⁴

The bills identified in these and similar political science studies of ALEC cover a range of topics, including a number related to the natural environment. While climate change sits among the suite of issues ALEC targets with model language, the suggested uniform provisions tend to favor its industry backers and affiliates. Despite the organization's deep ties to states' rights, ALEC's model climate legislation package has the effect of limiting the ability of enacting states to engage in regulation of the environment. ¹⁰⁵ In ALEC's

^{97.} Id. at 758-59.

^{98.} See Kroeger, supra note 68, at 11, 13.

^{99.} Id. at 17.

^{100.} Id.

^{101.} Id.

^{102.} Matthew Burgess, Eugenia Giraudy, Julian Katz-Samuels, Joe Walsh, Derek Willis, Lauren Haynes & Rayid Ghani, *The Legislative Influence Detector: Finding Text Reuse in State Legislation*, SIGKDD (Aug. 13, 2016), https://www.kdd.org/kdd2016/papers/files/adf0831-burgessA.pdf [https://perma.cc/4BAZ-FNZX].

^{103.} Id.

^{104.} Id.

^{105.} Charles A. Jones & David L. Levy, North American Business Strategies Towards Climate Change, 25 EUR. MGMT. J. 428, 435 (2007); see also id. (listing the following groups

own guide for state legislators on the topic, it defines its mission as providing "a comprehensive strategy for energy security, production and distribution in the states consistent with Jeffersonian principles of free markets and federalism." ¹⁰⁶

In all, ALEC has at least eleven different model bills related to climate change and the environment, laced with provisions that benefit corporations and greenhouse gas emitters. ¹⁰⁷ The content of these proposals should come as no surprise given ALEC's membership. ¹⁰⁸ Indeed, large fossil fuel companies sit as members of the ALEC task force that drafted its model climate change legislation. ¹⁰⁹

The most proactive piece of model climate legislation offered by ALEC merely attempts to establish an "Interstate Research Commission on Climatic Change."¹¹⁰ The organization pushed that bill in 2013, well after established scientific bodies, like the IPCC, ¹¹¹

as allied with ALEC in these anti-climate policy efforts: the Coalition for Affordable and Reliable Energy, the Cooler Heads Coalition, the American Council for Capital Formation, and the Center for Energy and Economic Development).

- 106. ALEC National Board, *ALEC Energy Principles*, in ENERGY, ENVIRONMENT, AND ECONOMICS: A GUIDE FOR STATE LEGISLATORS, supra note 24, at 59, 59.
- 107. See ALEC Model Legislation, in ENERGY, ENVIRONMENT, AND ECONOMICS: A GUIDE FOR STATE LEGISLATORS, supra note 24, at 65, 66–88 (including the following legislative titles: "A General Resolution on Climate Change"; "Offshore Energy Resources Act"; "State Data Access Act"; "State Data Quality Act"; "State Sovereignty for Air Quality and Visibility Act"; "Resolution in Opposition of Carbon Dioxide Emission Standards"; "Performance Based Permitting Act"; "Power Plant Siting Act"; "Conditioning Regulation of Non-Pollutant Emissions on Science Act"; "Verifiable Science Act"; "Expert Evidence Act"); see also Frumhoff et al., supra note 32, at 165 (characterizing ALEC's model legislation as "aimed at repealing renewable energy standards and regional climate policy initiatives in US states").
- 108. See Frumhoff et al., supra note 32, at 165 (identifying some of the largest fossil fuel companies in the world as active members of ALEC, including Peabody Energy and ExxonMobil on the "Enterprise Council" and Chevron, Shell, and ConocoPhillips on the "Energy, Environment and Agriculture Task Force").
- 109. See id. (identifying the "Energy, Environment and Agriculture Task Force" as the source of the model legislation discussed herein); see also id. at 161 (according to their research, just ninety companies (eighty-three fossil fuel companies and seven cement manufacturers) produced sixty percent of total industrial CO2 and methane emissions from 1751 to 2010).
- 110. See Interstate Research Comm'n on Climatic Change Act (Am. Legislative Exchange Council 2013), https://www.alec.org/model-policy/interstate-research-commiss ion-on-climatic-change-act/) ("ALEC's model Interstate Research Commission Act on Climatic Change is designed to address scientific and economic aspects of the issue of climatic change through the development of a multistate research commission. Key components of the bill include: state support of basic and applied research; and creation of research commission.") [https://perma.cc/LUF8-RAFX].
- 111. The IPCC was established in 1988 and had released four comprehensive "Assessment Reports" by 2013. See About the IPCC, IPCC, https://www.ipcc.ch/about/ [https://

had definitively shown the existence of climate change, projected its impacts, and modeled mitigation pathways. The affirmative policies ALEC suggests (i.e., solutions other than research and delay) include "updating emergency preparedness plans and improving communications and response time among disaster agencies, police forces, hospital workers, and local, state, and federal agencies." ¹¹²

The promotional literature accompanying ALEC's model legislation takes an even more partisan tone, arguing not only in favor of the model policies but also explicitly against other approaches in the marketplace of ideas. The materials include a list of alleged "myths" about climate change; most of them directly attacking scientific consensus. ALEC's ultimate position: "any serious attempt to stabilize carbon dioxide levels via regulation would be

perma.cc/6KZE-NXRY]; Reports, IPCC, https://www.ipcc.ch/reports/ [https://perma.cc/DPX9-5PGT].

112. Policy Tools for Energy Sustainability: What Works and What Doesn't, in ENERGY, ENVIRONMENT, AND ECONOMICS: A GUIDE FOR STATE LEGISLATORS, supra note 24, at 61, 61

113. See, e.g., id. at 63 (arguing that "[t]ransferable greenhouse gas credits will: (1) provide an incentive to fuel switch from coal to natural gas and drive up prices; (2) grow the greenhouse lobby of Enron-like companies seeking to profit from energy rationing schemes; and (3) create the institutional framework for a future Kyoto-style emissions cap-and-trade program").

114. Kelli Kay, Top 10 Myths About Global Warming, AM. LEGIS. EXCHANGE COUNCIL (2005), https://www.prwatch.org/files/ALEC%20Climate%20Myths.pdf [https://perma.cc/LR B5-UWTF].

MYTH 1: Scientists have conclusively proven that human activity is causing the earth to warm.

MYTH 2: Earth's temperature has risen to an unnatural level over the last century.

MYTH 3: The ice caps are melting and sea levels are rising.

MYTH 4: Extreme weather phenomena are increasing due to global warming.

MYTH 5: Global warming threatens fragile ecosystems and may cause threatened and endangered species to become extinct.

MYTH 6: The U.S. Government believes the theory of global warming has been proven and supports capping greenhouse gas emissions.

MYTH 7: Adhering to the Kyoto Protocol and other carbon dioxide reduction schemes will decrease earth's temperatures.

MYTH 8: Adhering to the Kyoto Protocol and other carbon dioxide reduction schemes will be relatively inexpensive.

MYTH 9: Multi-pollutant regulation, which includes both EPA criteria pollutants and greenhouse gases, is an inexpensive, "no-regrets" method for improving air quality.

MYTH 10: Renewable energy technology can immediately replace all fossil fuels.

both futile and economically devastating."¹¹⁵ Through its materials ALEC arms legislators with model bill text and, perhaps more importantly, arguments to make on the floor against proactive climate legislation. The most cynical interpretation of this strategy suggests an attempt to co-opt the lawmaking process by effectively turning elected officials into automatons.

In case there was any doubt as to whether these strategies work, one of the studies referenced above dispels it. According to the Brookings Institution study, two of the top five most frequently introduced bills in the 2011–2012 legislative session related to climate change: "The Disclosure of Hydraulic Fracturing Fluid Composition Act" and the "ALEC State Withdrawal from Regional Climate Change Initiative." In the face of this widespread counterproductive legislative movement, one would hope to see to an equally organized opposition. Unfortunately, that has not historically been the case.

IV. LAW PROMOTION EFFORTS ON THE OTHER SIDE

As scholars and commentators have lamented, no organization has as effectively advanced model legislation from a progressive perspective. A number of possible reasons for this void exist, but lack of trying is not one.

The cheekily named American Legislative and Issue Campaign Exchange ("ALICE") began as a counterpunch to ALEC. The organization aimed to provide a "one-stop web-based public library of progressive state and local laws" on a wide variety of issues in state and local policy. 117 Scholars compared this group unfavorably with ALEC's aggressive approach, strong and ideologically connected network, exceptional funding, and wide spectrum of advocacy. 118 Studies of ALICE and other progressive networks revealed

^{115.} Policy Tools for Energy Sustainability: What Works and What Doesn't, supra note 112, at 64.

^{116.} Jackman, *supra* note 75 (the first bill, despite its deceptive moniker, actually increased "trade secret" protection for fluid composition, and the second bill legislatively decreed that participation in such a regional scheme would benefit the adopting state).

^{117.} Welcome to ALICE!, ALICE, https://web.archive.org/web/20140222034945/http://www.alicelaw.org/.

^{118.} See Gary L. Anderson & Liliana Montoro Donchik, Privatizing Schooling and Policy Making: The American Legislative Exchange Council and New Political and Discursive Strategies of Education Governance, 30 EDUC. POL'Y 322, 350 (2016).

lags in all these attributes and a resultant lack of effect on the political system, or even the policy conversation. ALICE never attained the notoriety of ALEC. One study, discussed above, compared the two organizations and found that ALICE-produced model legislation appeared about half as often as ALEC legislation (though it passed at a similar rate). 120

Following the 2014 midterm elections, which resulted in significant losses for Democratic candidates nationally, ALICE combined with two other progressive organizations and rebranded as the State Innovation Exchange ("SiX"). 121 SiX's mission statements sound very much like ALEC's. The organization purports to ensure that state legislators have the support they need to advance and defend progressive policies on the issues that matter and holds an annual convening of hundreds of state legislators from across the nation. 122 SiX drafts and shares model legislation on a number of topics, including climate change. As of 2018, however, SiX had failed to exert influence comparable to ALEC's. 123 One Democratic state legislator colorfully said that ALEC alternatives like SiX are "barking Chihuahua[s] compared to an 800-pound gorilla [ALEC]." 124

The numbers compiled so far confirm that drab assessment. In New Jersey, a decidedly progressive state, one researcher found over 600 proposed ALEC bills and fewer than fifty bills written by SiX. 125 Although this disparity obviously reflects the relative youth of SiX as an organization, it does not necessarily bode well for the group's influence going forward. On a positive note, across all states, the most popular SiX bills concerned the same subjects as

^{119.} See id.

^{120.} See Burgess et al., supra note 102 (reporting LID findings of 960 ALICE-written bills using a strict definition (compared with 1816 ALEC-written bills), eighty-four (nine percent) of which passed (comparable to ALEC's rate of nine percent)).

^{121.} FAQs, St. Innovation Exchange, https://stateinnovation.org/faqs/ [https://perma.cc/4U8C-3UEZ].

^{122.} Vision and Mission, ST. INNOVATION EXCHANGE, https://stateinnovation.org/about/vision-and-mission [https://perma.cc/9D6U-NWAR].

^{123.} See Collingwood et al., supra note 66, at 761 n.2.

^{124.} Alan Greenblatt, ALEC Enjoys a New Wave of Influence and Criticism, GOVERNING (Dec. 2011), https://www.governing.com/topics/politics/ALEC-enjoys-new-wave-influence-criticism.html [https://perma.cc/A4Z3-3FTF].

^{125.} Kroeger, supra note 68, at 16.

the most popular ALEC bills, demonstrating at least some directly oppositional political force. 126

On the subject of climate change in particular, the field of political influence has historically been tilted against environmental protection. "Most scholars agree that political processes tend to generate suboptimally lax environmental regulation and that this bias exists in large part because diffuse environmental interests are out-lobbied by more concentrated and powerful business interests." ALEC's institutional advantage has only exacerbated this obstacle to subnational climate policymaking.

An emerging set of initiatives outside of the traditional partisan political landscape may begin to balance the deficit of effective, progressive model law provisions with respect to climate change. Some relatively new resources have begun to gain traction with academics and policymakers by consolidating and producing model subnational environmental policy. These efforts largely fit within three archetypes: (1) a library or map simply compiling existing laws, regulations, and policies after enactment; (2) a menu of model, and existing, laws, regulations, and policies expressing preference for some over others; or (3) a publication of policy pathways to achieve climate change mitigation objectives.

In the first category, the Center for Climate and Energy Solutions ("C2ES") maintains a "Policy Hub" that includes "State Climate Policy Maps" replete with citations to the laws underlying the graphic. 128 In the second category, a team of land-use academics and planners, under the direction of Professor Jonathan Rosenbloom, have launched the Sustainable Development Code, which provides a "menu" of municipal code provisions aimed at, among other things, environmental problems like climate change, invasive species, and water conservation. 129 On the international stage

^{126.} Id. at 17.

^{127.} Adelman & Engel, supra note 31, at 1805 (first citing Richard L. Revesz, Federalism and Environmental Regulation: A Public Choice Analysis, 115 HARV. L. REV. 553, 571 n.95 (2001); and then citing Brian J. Gerber & Paul Teske, Regulatory Policymaking in the American States: A Review of Theories and Evidence, 53 POL. RES. Q. 849, 862–63 (2000)).

^{128.} State Climate Policy Maps, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/content/state-climate-policy/ [https://perma.cc/DY9T-QZKX].

^{129.} See Sustainable Development Code, SUSTAINABLE DEV. CODE, https://sustainablecit.ycode.org/ [https://perma.cc/H4CA-JLNF].

and in the third category, the Deep Decarbonization Pathways Project has channeled the efforts of national research teams to "chart[] practical pathways to deeply reducing greenhouse gas emissions in their own countries." ¹³⁰ In the United States, this effort directly led to a campaign and publication from the Environmental Law Institute entitled *Legal Pathways to Deep Decarbonization in the United States*. ¹³¹

A. Policy Maps

Policy mapping fits into the category of model or uniform law-making only because it facilitates the spread of one jurisdiction's legal regime through copying. Compilations of existing subnational climate laws and policies serve this function even if the underlying material was not drafted for the purpose of replication elsewhere. The organizations creating the policy maps need not do so as part of an explicit model law effort; the maps stand on their own as educational and research resources.

A number of online resources exist in the climate policy mapping space. The effort put forth by the Center for Climate and Energy Solutions¹³² is emblematic. The organization touts its mission as "to advance strong policy and action to reduce greenhouse gas emissions, promote clean energy, and strengthen resilience to climate impacts." One important component of that mission includes the development of "Policy Hubs" for various levels of government—local, state, federal, and international—enacting laws targeting greenhouse gas emissions and climate change more broadly. The state law hub includes a series of interactive policy maps that visually indicate the states with certain types of climate policies (such as "Greenhouse Gas Emissions Targets" or "Electricity Portfolio Standards") and provides detailed descriptions of

^{130.} About DDPP, DEEP DECARBONIZATION PATHWAYS PROJECT, http://deepdecarbonization.org/about/ [https://perma.cc/E28E-SPH2].

^{131.} Legal Pathways to Deep Decarbonization in the United States (Michael B. Gerrard & John C. Dernbach eds., 2019).

^{132.} C2ES launched in 2011 as the successor to the Pew Center on Global Climate Change. See generally About C2ES, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/about/ [https://perma.cc/3HGH-DSKA].

^{133.} Id.

^{134.} See, e.g., Policy Hub, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/category/policy-hub [https://perma.cc/V67K-PRXK].

those policies, including links to where they are enshrined in state law. 135

Another prominent example comes from the National Conference of State Legislatures ("NCSL"),¹³⁶ which serves a decidedly nonpartisan compiling and reporting function. In North Carolina, a somewhat unique state agency housed at North Carolina State University,¹³⁷ the North Carolina Clean Energy Technology Center, maintains a "Database of State Incentives for Renewables & Efficiency."¹³⁸ The agency puts front and center its core interest in promoting the "clean tech' sector in North Carolina,"¹³⁹ which belies its purely educational function. Even more explicitly using an educational platform to do some advocacy work, Georgetown Climate Center provides both the Adaptation Clearinghouse¹⁴⁰ and the State Energy Analysis Tool.¹⁴¹

These and other mapping tools, in particular the C2ES and NCSL products, epitomize the impartial, information-provision approach. These types of matter-of-fact tools describe the state-level laws and regulations they compile, largely leaving advocacy by the wayside. Such an approach benefits academics and policy wonks who wish to conduct independent cross-state analyses. On the other hand, devoid of well-funded advocacy and direct connections to state lawmakers, C2ES could hardly expect to have the impact of ALEC. NCSL's touted "bipartisan" stature makes it an unlikely

^{135.} State Climate Policy Maps, supra note 128 (separately mapping states with respect to these five policy types: Greenhouse Gas Emissions Targets; Carbon Pricing Policies; Electricity Portfolio Standards; Decoupling Policies; and Low Carbon and Alternative Fuel Standards).

^{136.} See State Renewable Portfolio Standards and Goals, supra note 20.

^{137.} About Us, N.C. CLEAN ENERGY TECH. CTR., https://www.nccleantech.ncsu.edu/about-us ("The N.C. Clean Energy Technology Center was founded in December 1987 as the North Carolina Solar Center. For the last 30 years, the Center has worked closely with partners in government, industry, academia, and the non-profit community while evolving to include a greater geographic scope and array of clean energy technologies.") [https://perma.cc/TSB3-LJWU].

^{138.} See Database of State Incentives for Renewables & Efficiency, N.C. CLEAN ENERGY TECH. CTR., https://www.dsireusa.org [https://perma.cc/4ZUK-5SXU].

^{139.} See About Us, N.C. CLEAN ENERGY TECH. CTR., supra note 137 ("As a result of this evolution, the Center has grown into a state agency respected for its assistance to the burgeoning 'clean tech' sector in North Carolina, as well as one of the premier clean energy centers of knowledge in the United States.").

^{140.} See Adaptation Clearinghouse, GEORGETOWN CLIMATE CTR., https://www.adaptationclearinghouse.org [https://perma.cc/F78T-XSDK].

^{141.} See State Energy Analysis Tool, GEORGETOWN CLIMATE CTR., https://www.georgetownclimate.org/clean-energy/sea.html [https://perma.cc/X7ZJ-E3FL].

source of effective law promotion as well. These organizations and others in the policy mapping space are probably fine with that, content to retain relatively nonpartisan reputation at the expense of more potential influence.

B. Policy Menus

Dipping more than a toe into the lobbying side of the pool, policy menus provide lawmakers with climate policy choices—some based on laws in other jurisdictions, some models—and direct them towards designated "best" options. These tools differ from the maps in that they more explicitly advocate some approaches over others and can include model laws that no jurisdiction has yet put in place. Again, a solid number of organizations have begun to put forward policy menus online. This work will highlight two prominent efforts that have focused on advancing optimal local climate policy through municipal ordinances, zoning codes, and the like—the Sabin Center's Model Municipal Ordinance project and the Sustainable Development Code.

Columbia Law School established the Sabin Center for Climate Change Law to "develop[] legal techniques to fight climate change, train[] students and lawyers in their use, and provide[] up-to-date resources on key topics in climate change law and regulation." The Sabin Center has been active in all modes of model policy germination. Its website includes resources that fit squarely within the policy-mapping typology. The Sabin Center's leader, Professor Michael B. Gerrard, coedited Legal Pathways to Deep Decar-

^{142.} The Sabin Center, SABIN CTR. FOR CLIMATE CHANGE L., https://climate.law.columbia.edu [https://perma.cc/79CL-RSR9].

^{143.} See, e.g., Climate Change Laws of the World, SABIN CTR. FOR CLIMATE CHANGE L., https://climate.law.columbia.edu/content/climate-change-laws-world (Describing a collaboration with the Grantham Research Institute on Climate Change and the Environment that catalogues the laws, regulations, policy statements, and other directives at the national government level) [https://perma.cc/CAX3-C66F]; Municipal Green Building Law Database, SABIN CTR. FOR CLIMATE CHANGE L., https://climate.law.columbia.edu/content/municipal-green-building-law-database ("As a complement to our model ordinances project, the Sabin Center has compiled several databases of municipal green building laws. These include: Nationwide database of municipal green building laws applying to public buildings; Nationwide database of municipal green building laws applying to private buildings New York State database of municipal green building, alternative energy, and energy efficiency laws Nationwide database of local green building incentives.") [https://perma.cc/HW3C-27JL].

bonization in the United States and now devotes resources to building out those pathways. 144 However, as one of its earlier projects, the Sabin Center developed and promoted model laws of its own. Specifically, through the Model Municipal Ordinances project, the Sabin Center drafted, and promoted in New York, model ordinances for green buildings, commercial wind, and residential solar. 145 The Sabin Center undertook this project with identified weaknesses of local lawmaking in mind. According to their materials, the ordinances avoid common "drafting problems and legal pitfalls" and help fill the resource gap that prevents municipalities from expertly addressing climate change. 146

In drafting its model ordinances, the Sabin Center drew from existing municipal ordinances and the expertise of its staff and affiliates. 147 Though designed in the first instance for use by New York jurisdictions, the model ordinances also intentionally include broad and easily adaptable provisions to facilitate replication across the country. 148 That explicit goal contrasts with the policy maps described above. Still significantly different from ALEC, the Sabin Center does not have members in municipal government to introduce its model ordinances. The models are also limited in scope to a few key areas where localities might have the greatest effect on climate mitigation.

A more expansive model law resource for local governments just arrived on the scene in the past year. The Sustainable Development Code ("SDC")—a project led by Professor Jonathan Rosenbloom and drawing on a network of academics, urban planners, and former local government officials—set out "to help all local governments build more resilient, environmentally conscious, economically secure, and socially equitable communities." ¹⁴⁹

^{144.} See LEGAL PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES, supra note 131, at xxxviii.

^{145.} Model Municipal Ordinances, SABIN CTR. FOR CLIMATE CHANGE L., https://climate.law.columbia.edu/content/model-municipal-ordinances (listing "Model Municipal Green Building Ordinance and Supporting Material," "Model Municipal Wind Siting Ordinance," and "Model Small-Scale Solar Siting Ordinance") [https://perma.cc/6KUL-B2EZ].

^{146.} See id.

^{147.} See id.

^{148.} See id.

^{149.} About, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/about/ [https://perma.cc/5E9Y-42CL].

The SDC tries to accomplish that lofty goal through an innovative online tool that organizes and evaluates municipal code provisions on a variety of topics. The online platform allows interested government officials to select a set of amendments to municipal development codes from a menu of options categorized by issue chapter (e.g., "Energy") and sub-issue subchapter (e.g., "Solar Energy"). 150 In all, the SDC has seven chapters divided into thirty-two subchapters. Within each subchapter, the SDC offers twenty-five to thirty-five recommended amendments to municipal codes, falling into three categories: "removing obstacles' (what in the existing code is harming your community), 'create incentives' (where can we look to encourage developer, homeowner, and others' actions), and fill regulatory gaps (what are the minimum standards your community will accept)."151 Law and planning experts develop these recommendations by synthesizing the efforts of municipalities across the county; every recommendation comes with examples of its implementation. The SDC's experts also rate each individual recommendation as either "Good," "Better," or "Best." 152

Relevant to the focus of this piece, the SDC makes many recommendations that would help promote energy efficiency, reduce emissions, and even provide climate resiliency. However, it also helpfully includes a subchapter specifically titled "Climate Change." Within that subchapter reside over thirty recom-

^{150.} See Subchapters, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/subchapters/ [https://perma.cc/WR5N-CV3B].

^{151.} About, SUSTAINABLE DEV. CODE, supra note 149.

^{152.} See, e.g., Chapter 1.1 Climate Change, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/chapter/chapter-1/1-1/ [https://perma.cc/2RLB-2N8J]; see also About, SUSTAINABLE DEV. CODE, supra note 149 ("Each of the recommendations then has a brief designed by and for public officials, staff, experts and the public. The briefs consist of three key sections: introduction, effects, and examples. The introduction explains the recommendation to amend the code. The effects section explains how adopting the recommended ordinance may affect the community and code. Each brief then provides 2–3 examples of local governments, which have adopted the recommendation. The SDC explains each example in plain language. In addition, the SDC concludes with an additional 3–6 examples of local governments, which have adopted the recommendation. Here, the SDC provides citations, links, and one sentence describing the ordinance.").

^{153.} See Chapter 1.1 Climate Change, SUSTAINABLE DEV. CODE, supra note 152.

mended amendments to municipal ordinances, ranging from "Alternative Pedestrian Routes to Parking Areas, Neighborhoods, and Businesses"¹⁵⁴ to "Green Roofing."¹⁵⁵

The sheer power of the information and analysis that the SDC tool provides local lawmakers is to the author's knowledge unparalleled. In many ways the tool far surpasses even what ALEC puts together with much higher levels of funding. However, the SDC only very recently launched; so, the depth of the institution's outreach and advocacy efforts remains to be seen. As ALEC's successes demonstrate, an organization's network incorporating the actual government decisionmakers can prove vital to the spread of the policy it promotes. SDC already has a strong network in the professional and academic communities of relevance; branching out to include sitting government officials would give the organization a chance to push back against ALEC's efforts in the same space.

C. Policy Pathways

The final category of emerging efforts in the model law provision game encompasses more forward-thinking, less concrete proposals based on defined mitigation objectives. The initiatives in this category set a goal, perhaps based on the IPCC's assessment, and then lay out a number of potential policy pathways to reach it. The pathway approach emerged on the international policymaking scene to translate the high-level, multinational climate mitigation goals to actionable policy at all jurisdictional levels. These projects abound. ¹⁵⁶ One interesting and ambitious example of this modality

^{154.} See Kyler Massner, Alternative Pedestrian Routes to Parking Areas, Neighborhoods, and Businesses, Sustainable Dev. Code, https://sustainablecitycode.org/brief/alternative-pedestrian-routes-to-parking-areas-neighborhoods-and-businesses/ (providing specific examples from Bannock County, Idaho; Atlantic Beach, N.C.; and Orange County, Fla.) [https://perma.cc/JQ3S-GA6G].

^{155.} See Alec LeSher, Green Roofing, SUSTAINABLE DEV. CODE, https://sustainablecity code.org/brief/green-roofing/ (providing specific examples from Chicago, Ill.; Denver, Colo.; and New York, N.Y.) [https://perma.cc/EU49-K5G7].

^{156.} See, e.g., Our Approach, ICLEI, https://iclei.org/en/our_approach.html ("ICLEI—Local Governments for Sustainability is a global network of more than 1,750 local and regional governments committed to sustainable urban development.") [https://perma.cc/L8F2-BUZ3]; see also id. (describing five different policy pathways: the low-emission development pathway, the nature-based development pathway, the circular development pathway, the resilient development pathway, and the equitable and people-centered development pathway).

is the Environmental Law Institute's Legal Pathways to Deep Decarbonization in the United States, 157 which is derivative of the work of the larger Deep Decarbonization Pathways Project. 158

The Deep Decarbonization Pathways Project brings together research teams from sixteen nations responsible for three-quarters of global greenhouse gas emissions.¹⁵⁹ The goal set by the project mirrored the consensus in the international community—limit warming to two degrees Celsius or less.¹⁶⁰ The project recognized that achieving that goal required transitioning all facets of energy use and production away from carbon intensive processes, in other words "deep decarbonization."¹⁶¹ The research teams thus had the objective of "developing potential high-level roadmaps, or 'pathways,' for deep decarbonization in their respective countries."¹⁶²

After the release of the reports from the Deep Decarbonization Project, the Environmental Law Institute agreed to publish a large volume authored by a team of legal professionals and academics translating the scientific and technical findings into legal recom-

^{157.} Legal Pathways to Deep Decarbonization in the United States, supra note 131.

^{158.} See DEEP DECARBONIZATION PATHWAYS PROJECT, http://deepdecarbonization.org [https://perma.cc/WQK5-AA55].

^{159.} About DDPP, DEEP DECARBONIZATION PATHWAYS PROJECT, supra note 130.

^{160.} Id.; See Paris Agreement to the United Nations Framework Convention on Climate Change, supra note 8, at art. II ("Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"); United Nations Framework Convention on Climate Change, Report of the Conference of the Parties on its Fifteenth Session, Held in Copenhagen from 7 to 19 December 2009, at 5, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010) ("To achieve the ultimate objective of the Convention to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius, on the basis of equity and in the context of sustainable development, enhance our long-term cooperative action to combat climate change."); G8 Leaders Declaration, Responsible Leadership for a Sustainable Future, ¶ 65 (July 9, 2009), https://www.unglobalcompact.org/docs/about_the_gc/govern ment_support/G8_Declaration_08_07_09_final.pdf ("We recognise the broad scientific view that the increase in global average temperature above pre-industrial levels ought not to exceed 2°C.") [https://perma.cc/9D6C-9MDL]; Press Release, The White House, Declaration of the Leaders the Major Economies Forum on Energy and Climate (July 9, 2009), https:// obamawhitehouse.archives.gov/the-press-office/declaration-leaders-major-economies-forum -energy-and-climate [https://perma.cc/3Z42-DYRQ].

^{161.} See DEEP DECARBONIZATION PATHWAYS PROJECT, supra note 158.

^{162.} ENERGY & ENVIL. ECON., LAWRENCE BERKELEY NAT'L LAB. & PAC. NW. NAT'L LAB., US 2050 REPORT: PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES 1 (2014).

mendations. The resultant book, Legal Pathways to Deep Decarbonization in the United States, lays out over 1000 legal options for all levels of government, and even nongovernmental actors, in the United States. 163 Perhaps recognizing that such a voluminous book would not make an effective advocacy tool, the Environmental Law Institute also created a summary and key recommendations document. 164 Both the complete book and the summary and key recommendations contain an index of recommendations by actor, enabling users to find in one place all of the recommendations that apply to particular actors (e.g., state legislatures, local governments), regardless of the chapter in which those recommendations originated. The idea was to make the recommendations more accessible to users of all levels of sophistication and prior knowledge of the issue. The recommendations do not take the form of model ordinances like the above-described tools. Instead, they prescribe in more general terms what various government entities should do, including at the state¹⁶⁵ and local¹⁶⁶ levels. For example, the authors recommend that "[s]tate legislatures should include combined heat and power in their state renewable portfolio standard or energy efficiency resource standards,"167 and "[l]ocal governments should use life-cycle climate performance accounting in their energy efficiency programs and regulations."168

The promotion of these materials has so far been limited to the community of environmental law scholars and practitioners. Undoubtedly, some of them will advise subnational governments and a few will even serve in an elected office. Nonetheless, the practical reach of the project itself in terms of implementation of recommendations by governments seems poised to be limited. Other factors support this view. The organization involved, the Environmental Law Institute, prominently declares itself a "non-partisan research and education center," which hardly sounds like an entity preparing to do battle with ALEC. Furthermore, as described above,

 $^{163. \ \} See$ generally Legal Pathways to Deep Decarbonization in the United States, supra note 131.

^{164.} See id.

^{165.} Id. at 118-33.

^{166.} Id. at 133-38.

^{167.} Id. at 132.

^{168.} Id. at 138.

^{169.} About the Environmental Law Institute, ENVTL. L. INST., https://www.eli.org/about-environmental-law-institute [https://perma.cc/RD8R-JBQK].

the "deep decarbonization" recommendations published are not the resource-saving, prepackaged tools of the other types of initiatives discussed earlier.

Michael Gerrard, one of the editors of Legal Pathways to Deep Decarbonization in the United States, also happens to lead the Sabin Center, discussed supra. The other editor, John Dernbach, directs the Environmental Law and Sustainability Center at Widener University Commonwealth Law School. Together, with the help of students and lawyers across the country, they plan to take up the challenge of translating the pathways into concrete legal prescriptions for United States jurisdictions. In other words, if successful, this new endeavor will convert the policy pathway into a policy menu, available online. Some have begun to take notice of this Herculean task and its importance, with one journalist touting it as a potential "ALEC for Climate Change."

As the previous Part laid out in detail,¹⁷⁴ while wide dissemination of model law provisions certainly contributes to ALEC's success, the power of the organization surpasses that of a simple policy menu.¹⁷⁵ Thus, even if Gerrard and Dernbach's noble effort succeeds, the imbalance of power in subnational model-law promotion will likely persist.

^{170.} Environmental Law and Sustainability Center, WIDENER U. COMMONWEALTH L. SCH., https://commonwealthlaw.widener.edu/academics/parallax-page-3-signature-programs/environmental-law-and-sustainability-center-2/ [https://perma.cc/LW8H-4JUB].

^{171.} As of January 2020, there were more than twenty major law firms signed up to contribute to the project on a pro bono basis with Rick Horsch, a retired partner at White & Case leading this effort. Interview with John Dernbach, Dir., Envtl. Law & Sustainability Ctr. (Jan. 6, 2020) (notes on file with author).

^{172.} See Model Laws for Deep Decarbonization in the United States, SABIN CTR. FOR CLIMATE CHANGE L., https://lpdd.org [https://perma.cc/M5RW-5QJP].

^{173.} Jeremy Deaton, These Lawyers Are Creating an ALEC for Climate Change, NEXUS MEDIA (Apr. 1, 2019), https://nexusmedianews.com/these-lawyers-are-creating-an-alec-for-climate-change-67cbd081e828 ("Michael Gerrard... and John Dernbach... are organizing lawyers across the United States to write laws based on the ideas laid out in the book—laws that can then be distributed, ALEC style, to local, state and federal lawmakers.") [https://perma.cc/B58D-GVPY]. Dernbach and Gerrard do not necessarily view the project in direct opposition to ALEC. Interview with John Dernbach, supra note 171.

^{174.} See supra Part III.

^{175.} For their part, Gerrard and Dernbach seem to acknowledge this. They envision a "later phase of this project" that will involve "reach[ing] out to state legislatures, city councils and other bodies to let them know about these documents and help customize them for their particular jurisdiction." Michael Gerrard & John Dernbach, How Lawyers Can Help Save The Planet, LAW360 (May 21, 2019, 4:21 PM), https://johndernbach.com/wp-content/uploads/2019/07/How-Lawyers-Can-Help-Save-The-Planet_Michael-Gerrard-and-John-

V. FEDERALISM IMPLICATIONS OF MODEL LAWMAKING

The flurry of subnational activity on important domestic and global issues, such as climate change, could be seen as the embodiment of a federalist ideal. On the other hand, the interplay of the decidedly unelected, nongovernmental forces shaping state and local law arguably undermines the balance of power in our democratic republic. Thoroughly scrutinized, neither of these general assessments perfectly captures the nuance of the subnational climate change lawmaking movement.

A. Experimental Design

Justice Brandeis famously branded states (and by implication other jurisdictional units of subnational governance) within a federalist system as "laboratories of democracy." The now-familiar trope essentially posits that when governments enact different legal approaches to a common problem, the relative efficacy of those laws is tested in a real-world experiment. The recent work of Jessica Bulman-Pozen, a prominent constitutional scholar, analyzes how the laboratory model fits the recent increase in state law-making on subjects where the federal government's approach (action or inaction) invoked controversy. The Climate change certainly fits within that paradigm. The current status of diverse approaches to climate change across various subnational jurisdictions within the United States may prove a worthwhile experiment.

Research scientists have for many years looked to the writings of Sir Ronald A. Fisher in the early twentieth century as the foundation of modern experimental design. In his 1926 essay *The Arrangement of Field Experiments*, ¹⁸⁰ Fisher focused on what have

Dernbach.pdf [https://perma.cc/3Y9L-WJTC].

^{176.} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

^{177.} Gregory v. Ashcroft, 501 U.S. 452, 458 (1991) ("This federalist structure of joint sovereigns...allows for more innovation and experimentation in government...").

^{178.} See generally Jessica Bulman-Pozen, $Partisan\ Federalism$, 127 HARV. L. REV. 1077, 1081 (2014).

^{179.} See id. at 1079-80, 1092 ("In recent years, states have . . . adopted their own versions of failed federal legislation regarding greenhouse gas emissions and the funding of Planned Parenthood, administered federal immigration law in a decidedly uncooperative manner, and more.").

^{180.} R.A. Fisher, The Arrangement of Field Experiments, 33 J. MINISTRY AGRIC. 503

come to be regarded as the three fundamental principles of experimental design: replication, randomization, and local control. ¹⁸¹ In an idealized federalist system, one would expect states functioning as policy laboratories to model these principles. The reality of the interrelated governance activities of our fifty states does not always fit that fabled conception. The lens of experimental design thus presents one tool for scrutinization of climate federalism. Does continuing to foster fractured, subnational climate policy embody, or betray, a proper "laboratories of democracy" approach to federalist government? Let us examine the legal and political environment described above on the dimension of each of the foundational experimental design principles.

Before testing the subnational climate change policy landscape against the aforementioned principles, one must first determine what hypothesis the laboratory states have set out to test. Is it simply that state/local policy x will contribute to the abatement of climate change? If so, how would one measure that contribution? By reduction in greenhouse gas emissions or by effect on the rise of global average temperature? A more comprehensive hypothesis might suggest that policy x would reduce greenhouse emissions with no negative effect on state economic output. Or the hypothesis could focus instead on improvement of air quality and the related human health consequences. All of these possibilities state important goals of climate policy. For the purposes of the analysis herein, let us focus on the two parameters most frequently debated by advocates on both sides—greenhouse gas emissions and economic activity. On those parameters, a policy advocate would hypothesize that their state's policy would reduce emissions and improve the economy within that state. Resultingly, the null hypothesis would be no significant effect on emissions or the economy.

After framing the hypothesis, especially in this case, a long list of variables that may affect the result emerge, including the subject variable (here, existence of a particular policy). The principle

^{(1926);} see also T.P. Speed, Introduction to Fisher (1926) The Arrangement of Field Experiments, in 2 Breakthroughs in Statistics 71 (Samuel Kotz & Norman L. Johnson eds., 1992).

^{181.} Fisher, *supra* note 180, at 505–07, 509; *see* Speed, *supra* note 180, at 72 ("Replication, randomization, and local control are all linked together in Fisher's discussion of the dual tasks of reducing the error in comparisons of interest and in obtaining a valid estimate of that error.").

of randomization does not demand that an experiment control for all of these untested variables by using completely uniform test subjects. Instead, the goal is a random distribution of the untested variables, thereby minimizing any skewing effect they would have on the results of the experiment. With respect to states, randomization demands a mix of dominant emissions sources and economic drivers. Thus, a well-designed climate policy experiment would have a variety of states enacting aggressive policies, a variety enacting some lesser approach, and a variety doing nothing at all to combat climate change. "Variety" here would include scales like rural-urban, coastal-inland, agrarian-industrial, fossil fuel production-consumption, and so forth.

Science demands that any laboratory experiment be capable of replication by another researcher at a later point in time. In a traditional laboratory setting this requires detailed documentation of methods, conditions, irregularities, and results. In a field experiment, the researcher recognizes that the conditions can never be precisely the same each performance. Thus, when experimenting in the real world, the function of repetition changes slightly from proof to error minimization. Replicating a field study over a number of time periods will yield results that can be compared and ultimately synthesized to produce more accurate average or trend. 183 A policy experiment more closely resembles a field study, as one cannot seriously expect the conditions to be completely repeatable year to year, or even day to day. As such, to truly test subnational climate policies they would have to endure for multiple periods of evaluation, likely years. Fortunately, many of the policies discussed herein envision regulating behavior for many years into the

^{182.} See RONALD A. FISHER, THE DESIGN OF EXPERIMENTS 18–19 (1966) ("[I]t would be impossible to present an exhaustive list of such possible differences appropriate to any one kind of experiment, because the uncontrolled causes which may influence the result are always strictly innumerable. . . . Too frequently it is assumed that such refinements [eliminating differences] constitute improvements to the experiment. . . . [I]t is only necessary to recognize that, whatever degree of care and experimental skill is expended in equalizing the conditions, other than the one under test, which are liable to affect the result, this equalization must always be to a greater or less extent incomplete, and in many important practical cases will certainly be grossly defective. We are concerned, therefore, that this inequality, whether it be great or small, shall not impugn the exactitude of the frequency distribution, on the basis of which the result of the experiment is to be appraised.").

^{183.} See Fisher, supra note 180, at 506.

future, ¹⁸⁴ thus facilitating the compilation, and comparison, of annual results. Assuming some appropriately varied set of subnational actors continues to resist climate policy implementation altogether (see discussion of local control below), the experiment will appropriately replicate for a sufficient number of years (test periods), thereby exemplifying sound experimental design.

An experimental "control" implies that a subject, or group of subjects, not undergo any manipulation by the researcher. The researcher compares the results for this control against the results for the subjects that they have manipulated, proving or disproving the hypothesis tested. In the climate policy context, states and municipalities that take no action whatsoever fill the role of local controls. If the results show no statistically significant difference in greenhouse gas emissions between states with climate change policies and those without, the experiment will have revealed something vitally important to the field of environmental governance. Likewise, if the results show significant differences in economic growth and/or greenhouse gas emissions reductions, the policy experiment will serve the purpose envisioned by Hamilton, Madison, and Justice Brandeis. That important facet of federalism can only achieve its full potential in a policy space that includes "no action" controls.

Conceptually, the varied landscape of climate change law fits the federalist ideal quite well. However, the research explored in the previous two Parts demonstrates quite convincingly that the variation in laws, regulations, and policies across jurisdictions did not arise organically through the democratic process. Instead, ALEC and similar efforts draft and promote a significant subset of the laws enacted, particularly those that do very little to combat climate change. The question we must confront is whether ALEC is "simply utilizing the rules that are in place to compete in the Madisonian marketplace of ideas better than others, or is it a corruptive force distorting the representational linkage between the governing and the governed?" ¹⁸⁵

^{184.} See, e.g., Climate Leadership and Community Protection Act, 2019 N.Y. Laws 106, § 2 (codified at N.Y. ENVTL. CONSERV. LAW § 75-0107(1)(b)) (setting greenhouse reduction targets for 2050); ME. STAT. tit. 38, § 576-A (same).

^{185.} Cooper et al., supra note 81, at 381.

Political scientists and legal scholars have generated a good deal of research and analysis pertinent to that important question. Some point to ALEC's exceptional record of success, direct control over content of legislation, and ties to corporate interests whilst retaining a nonprofit designation as unique factors that distort the link between elected representatives and those they purport to represent. There can be little dispute that reliance on model legislation privileges interests backed by the financial and human resources necessary to draft and promote the bills. Thus, the interests of individual citizens (rather than corporations) and economically disadvantaged populations go underrepresented in the ultimate legislation coming out of the states.

Bulman-Pozen, on the other hand, views ALEC as a facilitator of collaboration between partisans on the state and federal levels. ¹⁸⁸ In this model, states now function as "sites of partisan opposition," allowing the out-of-federal-power political party to express policy preferences and develop new ideas through subnational law-making. ¹⁸⁹ Bulman-Pozen and Heather Gerken ultimately contend that such "partisan federalism" improves the function of the United States political system. ¹⁹⁰ Under that conception, the policy experimentation serves political parties more directly than the government; the relevant laboratory results concern not substantive efficacy but popularity with various electorates. Better-defined

^{186.} See, e.g., id. at 392-93.

^{187.} Kroeger, supra note 68, at 3-4.

^{188.} Bulman-Pozen, supra note 178, at 1091-92.

^{189.} See id. at 1082–1108, 1122–35; see also NUGENT, supra note 69, at 85–88 (arguing that the proliferation of model legislation "safeguards federalism" by allowing subsets of the public to push back against the party in power at the federal level).

^{190.} See Bulman-Pozen, supra note 178, at 1124-25 ("States as Laboratories of Partisan Politics. . . . The main axis of conflict is interpartisan: working through both the states and the federal government, Democrats and Republicans fight over ... global warming Perhaps more important than offering platforms for outright intrapartisan conflict, the states offer platforms for a greater variety of party positions to take root."); Heather K. Gerken, Federalism as the New Nationalism: An Overview, 123 YALE L.J. 1889, 1890, 1893 (2014) (observing that scholars in the "nationalist school of federalism" view "[s]tate power ... [as] a means to achieving a well-functioning national democracy"); see also Bulman-Pozen, supra note 178, at 1128 ("[T]heir experiments are often adopted by other states along partisan lines, as organizations like the Republican and Democratic Governors Associations and the American Legislative Exchange Council cross-pollinate. As multiple states flesh out one party's position, composite subnational action comes to define the national."). But see David Schleicher, Federalism and State Democracy, 95 TEX. L. REV. 763, 814 (2017) (arguing that partisan federalism may lead to "less experimentation, as parties choose not to experiment with their safe assets in state governments. . . . [and] to experiments that do not translate to the national level").

and organized parties then, theoretically, indirectly improve the functioning of government at all levels.

The increasing nationalization and polarization of American politics threatens a federalist system that depends on state and local elections. 191 As David Schleicher has pointed out, when subnational elections devolve from true expressions of residents' policy preferences for their community to mere expressions of residents' national political affiliations, the benefits of federalism dissipate. 192 "[T]he underlying reasons for caring about federalism better fit between policies and preferences, laboratories of democracy, interstate diversity and sorting, protection of political or cultural identities—only make sense in the context of functioning state democracies."193 State and local lawmaking, especially when viewed as experimentation, serves the federalist system best when it reflects the influence, expertise, and perspective of constituent groups. In this way, subnational lawmaking has historically been where minority interests have the best opportunity to dictate policymaking or test niche ideas. 194 Coordinated partisan national efforts to draft and promote model laws can detract from that important function and consequently dilute the laboratory results.

If, as Justice Black wrote, "our federalism" depends upon "a continuance of the belief that the National Government will fare best

^{191.} As Bulman-Pozen points out, state politicians often now must address decidedly national issues and face national criticism. Voters participate in these partisan debates at the state and local level, even if the issues at their center have little bearing on the governance of the jurisdiction. Bulman-Pozen, supra note 178, at 1079, 1128 ("Republican state officials challenged decisions by Democratic federal officials. Democratic state officials challenged decisions by Republican federal officials. And individuals from Alaska to Florida, Maine to Hawaii, saw the states as fora for national partisan fights. . . . Even as they undertake discrete actions, state actors are motivated by partisan commitments that transcend state borders.").

^{192.} Fred H. Miller, The Future of Uniform State Legislation in the Private Law Area, 79 MINN. L. REV. 861, 873–74 (1995) (describing how a process that allows interest group representatives to participate in drafting legislation makes it more difficult to ultimately enact provisions that accurately reflect the public interest); see Schleicher, supra note 190, at 768–69; see also E.E. Palmer, Federalism and Uniformity of Laws: The Canadian Experience, 30 L. & CONTEMP. PROBS. 250, 258 (1965) (arguing that a system of government relying on a variety of interconnected jurisdictions does not necessarily produce a variety of law across those jurisdictions).

^{193.} Schleicher, *supra* note 190, at 768–69.

^{194.} See Heather K. Gerken, The Supreme Court 2009 Term-Foreword: Federalism All the Way Down, 124 HARV. L. REV. 4, 47 (2010) (discussing how local institutions provide the space for constitutionally valued groups—minorities and dissenters—to directly influence lawmaking).

if the States and their institutions are left free to perform their separate functions in their separate ways,"195 the work of ALEC and similar organizations to literally write the laws of those separate states marks a departure from fundamental principles. In the climate change context that departure has likely stifled policy experimentation in moderate and conservative states. Put another way. ALEC's models enshrine inaction into law and thereby create a disproportionate number of "control" states. As the organizations that promote model laws become more polarized and continue to nationalize every issue, the variety of approaches to a common problem shrinks. The climate policy experiment, while randomized, lacks randomization that accurately reflects the variety of public preferences. A suite of climate change laws, code provisions, and regulations may vet emerge from the experiment that confirms the hypothesis of mitigation and economic growth. However, the distortion caused by ALEC makes that result less likely, and further makes it impossible to claim that the results demonstrate the optimal subnational climate policy. The emerging policy maps, menus, and pathways publicizing subnational climate change laws that actively try to address the problem (rather than ignore it) may counteract that distortion and improve the experiment, but it is too soon to say for certain.

B. Policy Diffusion and Federalism

The study of what political scientists call "policy diffusion"¹⁹⁶ can inform the assessment of the health of federalism on the whole or in a specific subject area. Policy diffusion describes the process by which one government's policymaking decision influences the decisions of other governments; it envisions decisions of sovereigns as interdependent rather than independent.¹⁹⁷ It functions as the "democracy" half of the "laboratories of democracy." If the states taking varied approaches to a common problem constitutes a series of

^{195.} Younger v. Harris, 401 U.S. 37, 44 (1971).

^{196.} See Erin R. Graham, Charles R. Shipan & Craig Volden, The Diffusion of Policy Diffusion Research in Political Science, 43 BRIT. J. POL. SCI. 673, 673 (2013) ("Between 1958 and 2008 political science journals published nearly 800 articles about the politics of public policies spreading from one government to another, a phenomenon commonly referred to as 'policy diffusion").

^{197.} See id. at 675 (citing Jack L. Walker, The Diffusion of Innovations Among the American States, 63 AM. POL. Sci. Rev. 880 (1969)).

laboratory experiments, the selection and promulgation of policies based on the results (i.e. diffusion of policy) constitutes democracy at work. Diffusion can be horizontal between jurisdictions of equal power (i.e., state to state) or vertical from the bottom up between jurisdictions subsumed by one another (i.e., from town to county to state to national). Importantly, nongovernmental actors contribute to the process in both forms. Importantly for unelected organizations has led some observers to classify the how and why of promulgating policies via diffusion as undemocratic, pointing to the outsized influence of particular types of interest groups in speeding up (or halting) the spread of preferred (or disfavored) policies. In addition to the projected climate impacts and economic factors in a jurisdiction, the advocacy of interest groups promoting certain climate regimes acts as a pivotal driver of whether or not policies spread. In addition to the projected driver of whether or not policies spread.

In a properly functioning federal republic, one would expect to see member states emulate legal regimes of neighbors based on the success of those regimes. This process should happen organically through direct observation but also communication between subnational governments. In the United States, institutions like the National Governors Association long facilitated communication between executive governments of the states.²⁰² The National Conference of State Legislators served a similar function.²⁰³ Those institutions not only promoted policy diffusion but also protected the shared interest of all states in their respective independence.²⁰⁴ Increasing polarization, as described above, has led to a transfer of influence from these nonpartisan, quasi-governmental institutions to nakedly partisan, third-party advocacy organizations.²⁰⁵ While

^{198.} See id. at 687.

^{199.} See id.

^{200.} Collingwood et al., supra note 66, at 737.

^{201.} See Rabe, supra note 16, at 3-4.

^{202.} See Schleicher, supra note 190, at 808 n.223.

^{203.} See id.

^{204.} See Miriam Seifter, States as Interest Groups in the Administrative Process, 100 VA. L. REV. 953, 984–85 (2014).

^{205.} See, e.g., Schleicher, supra note 190, at 808 n.223 ("Partisan groups of state legislators like the American Legislative Exchange Council and the State Innovation Exchange are in many ways more important today than the National Conference of State Legislators."); Zeke J. Miller, Governors in D.C.: Beset by Lobbyists, Riven by Partisanship, TIME (Feb. 23, 2015), https://time.com/3717941/nationalgovernors-association ("[T]he National Governors Association ... has lost influence, driven by concerns about a slow-moving organization and growing polarization among the governors, who increasingly favor party-

the former could ostensibly be trusted to produce a well-functioning democratic republic, the latter directly threaten it. Again, the concern emerges that the array of legal regimes across subnational jurisdictions will reflect something other than the range of true policy preferences of voters across those jurisdictions.

Initially, political scientists focused on the policy diffusion process understudied the influence of interest groups and the unique levers of diffusion they manipulate. 206 Recently, scholars have begun to fill that gap, advancing a theory of "sustained organizational influence" or "SOI."207 The theory of SOI suggests that "susorganizations—like ALEC—are unique and highly efficacious[,]...provid[ing] legislators with a number of important benefits above and beyond typical interest groups, which is why such organizations are so successful."208 As tools of policy diffusion, the ability to draft model legislation, the network to disseminate it, and the financing to promote it mix a potent cocktail. Unsurprisingly then, interest groups like ALEC have a documented influence on policy diffusion.²⁰⁹ Sustained organizations like ALEC can effectively shape how law and policy diffuses (or not) among various jurisdictions. These organizations, many of them nonprofit corporations, control lawmaking with no electoral accountability to the citizens subject to the law.210

specific Governor gatherings.") [https://perma.cc/GDJ8-FLR9].

^{206.} See Collingwood et al., supra note 66, at 736; Graham et al., supra note 196, at 689 ("Even when one focuses solely on the spread of public policies, however, diffusion studies tend to ignore a wide range of relevant questions, including how ideas find their way onto the agenda, how agenda items become laws, whether laws are just ideas until an implementer turns them into actual policies, and so on.").

^{207.} Collingwood et al., *supra* note 66, at 739 ("[M]ost scholars examine diffusion from a spatial/geographic perspective, where diffusion is evident when states next to one another adopt a similar policy or when states over time adopt similar policies as other states. Recently, though, Garrett and Jansa argue that interest group policy diffusion also occurs through organized networks, and that text-based methods can show how policy ideas (e.g., model legislation) diffuse through the network." (citation omitted)).

^{208.} *Id.* at 737; see also id. at 740 ("Sustained organizations (and ALEC) diverge from a typical advocacy coalition in that the organization is by definition well financed (advocacy coalitions are not always well resourced), multi-issue, and produces perks for legislators.").

^{209.} See id. at 736 (listing examples of organizations that "develop and shop standardized bills," including the National Rifle Association's Institute for Legislative Action and ALEC); see also Joanne Barkan, Plutocrats at Work: How Big Philanthropy Undermines Democracy, 80 Soc. Res. 635, 646–47 (2013) (tracking the spread of so-called "parent trigger" legislation, which, having been promoted by ALEC, was proposed in at least twenty-five states as of March 2013).

^{210.} Accord Barkan, supra note 209, at 636-37 (making the same point in the context of well-funded philanthropic foundations more broadly).

In general, some related phenomena, all of which are susceptible to the influence of outside groups, have been shown to affect the transfer of legal text across jurisdictions. Three such phenomena are learning competition, and coercion. 211 Subnational governments learn through networks—a space in which ALEC has taken an increasingly prominent role, displacing nonpartisan associations. Competition refers to the popular trope of "race to the bottom" (or top) dynamics. 212 Coercive pressure to adopt particular legal regimes comes from higher levels of government (i.e., national politics) and/or from economically powerful sister jurisdictions (i.e. neighboring towns and states). 213 Laws that address climate change through the regulation of greenhouse gas emissions can awaken powerful forces on all three dimensions. As laid out in Part III. ALEC has attempted to align its members against any regulation of emitters, disseminating materials throughout its network of government officials that question the efficacy of potential regulation and even the existence of climate change. Contributing to the race to the bottom narrative. ALEC also fans the flames of concern that industry will flee jurisdictions that act on climate. And although the subnational lawmaking discussed herein grew out of higher-level governmental gridlock, national partisan politics weigh heavily on lawmakers at all levels.

Beyond the generally observed diffusion dynamics, specific studies of policies designed to protect the natural environment and human health have identified key factors affecting diffusion. When compared to other areas of state and local lawmaking, laws and regulations that address environmental harms tend to be relatively complex. One statistical analysis examined how the complexity of and the media coverage around policies affect their spread from one jurisdiction to another. In that analysis, which coded environmental law as complex, the results confirmed that policies with relatively less complexity and relatively more media coverage were significantly more likely to spread rapidly. The challenges to widespread adoption of novel environmental laws

^{211.} Andrew Jordan & Dave Huitema, Innovations in Climate Policy: The Politics of Invention, Diffusion, and Evaluation, 23 ENVTL. Pol. 715, 723–24 (2014).

^{212.} Id.

^{213.} See id.

^{214.} See Sean Nicholson-Crotty, The Politics of Diffusion: Public Policy in the American States, 71 J. Pol. 192, 197–200 (2009).

^{215.} See id. at 198-99.

may explain why so-called "policy entrepreneurs" in the space need specialized expertise and deep coalitions consisting of elected officials and industry representatives. 216

At least one prominent study has looked at the spread of a relatively popular state climate change law—the renewable portfolio standard.²¹⁷ The study empirically examined energy policies adopted by states from 1996–2009. The results provide insight into the particularities of how a subnational climate change law behaves after introduction into the ecosystem of overlapping jurisdictions. A top-level finding confirmed that state lawmakers are significantly more likely to adopt renewable portfolio standards in the first instance if geographically proximate states have already done so.²¹⁹ Interestingly, the study also found that when deciding the substantive content of the standards (i.e., the percentage of renewable energy to require) lawmakers are more likely to emulate ideological, rather than geographical, peers.²²⁰ Once enacted, amending the standards depends much more on the internal political environment of the enacting state.221 These findings underscore the importance of model climate change legislation efforts, because they suggest a cascading regional effect on the initial decision to address the issue at all,222 coupled with a heavy partisan influence on the content of the enacted legislation. The drafters

^{216.} See Michael Mintrom & Phillipa Norman, Policy Entrepreneurship and Policy Change, 37 POLY STUD. J. 649, 658 (2009).

^{217.} See Sanya Carley, Sean Nicholson-Crotty & Chris J. Miller, Adoption, Reinvention and Amendment of Renewable Portfolio Standards in the American States, 37 J. Pub. Pol'Y 431, 433 (2017).

^{218.} Id.

^{219.} See id. at 448–50 ("[T]he results reveal, as hypothesi[z]ed, that geographical peer influence is a significant predictor of a state adopting an RPS policy when its peer already has one. . . . [T]he behaviour of geographical peers has an important influence on adoption decisions, with states becoming 4.6 times as likely to adopt the policy if all of their neighbours have done so.").

^{220.} See id. at 450–51 ("We see a statistically significant estimate for the ideological proximity variable, which is also directional, suggesting that state i adopts a more stringent policy than state j as the former becomes increasingly more liberal than the latter. The geographical peer's variable, measuring whether state i and state j share a border, is not statistically significant, suggesting that a state's decision about the stringency of its RPS policy is not informed by the stringency of its neighbours' policies, all else equal.").

^{221.} See id. at 452 ("In the amendment model, results confirm our expectation that internal characteristics are particularly important in the decision to amend one's own policy.... The key result is that, in both models, the measures of geographical and ideological peer influence are statistically indistinguishable from 0.").

^{222.} See Kroeger, supra note 68, at 4 (describing how providing model bills can change the legislative agenda).

and promoters of model legislation can thus exercise outsized influence by targeting jurisdictions that serve as regional leaders and by conforming the content of their legislation to political ideology. ALEC's approach, and record thus far, on the issue reflect such an analysis.

Federalism depends on the interaction of overlapping, parallel jurisdictions. In environmental law, that overlap exists horizontally (e.g., state to state, town to town) and vertically (e.g., state to nation, town to county). A properly functioning system produces regulatory innovation, followed by vertical and horizontal diffusion. The interaction in the system also naturally counteracts the "regulatory commons problem" of inaction. Subnational climate change law thus has the potential to serve two important federalism functions: (1) spread effective legal solutions to a common problem, and (2) push back on the temptation not to act. Model legislation efforts, particularly those (like ALEC's) committed to inaction on climate, threaten to disturb the equilibrium of our federalist ecosystem.

Climate change presents a particularly vexing challenge for law-makers with limited resources. State legislatures, town councils, zoning boards, and other subnational government entities may indeed need the work of nongovernmental organizations to put forward coherent proposals. As the above research suggests, one could expect the natural diffusion of climate change law (an extraordinarily complex area in the already-complicated field of environmental law) to occur at a glacial pace, if at all. On this reasoning, the emergence of model legislative efforts does nothing more than grease the wheels of a stuck machine, providing substantive content to the policy conversation in an area in which many lawmakers find themselves ill-equipped. That explanation collapses if the most prolific model legislation lacks any real substance and instead dismisses the problem as unsolvable or, worse, fake.

^{223.} See Buzbee, supra note 12, at 120–21; Engel & Saleska, supra note 12, at 189.

^{224.} Buzbee, supra note 12, at 126; see Jessica Bulman-Pozen & Heather K. Gerken, Uncooperative Federalism, 118 YALE L.J. 1256, 1258-59 (2009) (arguing that states push back on federal policy by passing laws regulating (often more stringently) the same activities and "dissent[ing] from federal law.").

Alexander Hamilton, in the foundational defense of federalism, emphasized the role of state legislators as the arm of citizens' discontent with their national government.²²⁵ Subnational governments by design push back against the centralized federal government when they act in areas of concurrent jurisdiction.²²⁶ The push and pull theoretically enlivens our society and improves substantive policy outcomes. Legal scholars have in recent years begun to consider the implications of our increasingly polarized society on that idealized dynamic.²²⁷

The vertical exchanges between subnational governments and the national government now take two forms. When the exchange happens between governments controlled by the same party, partisan allegiance helps cooperation trump any festering policy disagreement.²²⁸ When the exchange happens between governments controlled by the opposite parties, it devolves into a proxy for national partisan conflict, rather than a separate substantive debate.²²⁹ Bulman-Pozen champions this opportunity for state governments to "furnish a critical platform for the party out of power to fight the party in power at the national level."²³⁰ As detailed at the outset, the latter description characterizes the wave of state legislative action on climate change following the election of George W. Bush.²³¹ That wave of activity did little to advance the

^{225.} See THE FEDERALIST No. 26 (Alexander Hamilton); see also Gregory v. Ashcroft, 501 U.S. 452, 458 (1991) ("Perhaps the principal benefit of the federalist system is a check on abuses of government power."); Akhil Reed Amar, Of Sovereignty and Federalism, 96 YALE L.J. 1425, 1500–01 (1987).

^{226.} See Bulman-Pozen, supra note 178, at 1096 ("I outline three main ways that states and their federal allies contest national policy: they argue that the federal government is exceeding its authority and encroaching on state autonomy; they enact their own legislation to prod the federal government into action or to set a different course; and they administer federal programs in ways that interfere with federal goals.").

^{227.} See, e.g., JOHN H. ALDRICH, WHY PARTIES: A SECOND LOOK 3–8 (2011); ERIN RYAN, FEDERALISM AND THE TUG OF WAR WITHIN 1–2 (2011); Bulman-Pozen, supra note 178, at 1080–82; Roderick M. Hills, Jr., Against Preemption: How Federalism Can Improve the National Legislative Process, 82 N.Y.U. L. REV. 1, 2–4 (2007); Larry D. Kramer, Putting the Politics Back into the Political Safeguards of Federalism, 100 COLUM. L. REV. 215, 218–19 (2000); Robert A. Schapiro, Polyphonic Federalism: State Constitutions in the Federal Courts, 87 CALIF. L. REV. 1409, 1411–17 (1999).

^{228.} See Bulman-Pozen, supra note 178, at 1089 ("[P]arty politics undergirds cooperation between state and federal officials of the same party.").

^{229.} See id.

^{230.} Id.

^{231.} See supra Part I.

cause of climate change at the national level. The infusion of political and financial strength from interest group law-promotion efforts likely heightens the partisan conflict in these exchanges at the expense of substantive debate. It makes vertical exchange of ideas even less likely. While federalism intends to spur spirited debate, at its best it should on balance produce more cooperation than competition between sovereigns.²³² It is difficult to see how nationally coordinated partisan efforts to promote uniform laws help achieve that desired end.

CONCLUSION

Even without a prominent, coordinated effort of model-law provision, state and local lawmakers passed proactive climate policies and provisions.²³³ And those policies have begun to spread. In one real-world example of policy diffusion, sixteen states moved to adopt California's motor vehicle emissions standards for greenhouse gases.²³⁴ Importantly, however, no literature ties that outcome to a coordinated effort to promote model legislation or advance climate change law among the states. That successful replication of legal provisions came about relatively organically. However, as this work points out, that organic diffusion, a core component of the federalist idea, has likely been artificially delayed due to a demonstrably effective political organization promoting inaction on climate.

Imagine if an effective ALEC counterweight emerged. While history suggests that one progressive organization attempting to fill that role will likely fail, the combined force of the resources described in Part IV might provide sufficient counterbalance.²³⁵ That counterbalance is not only necessary for the health of the environment, but also the health of our democratic republic, particularly

^{232.} See Rudolf H. Heimanson, Federalism and the Uniform Law Movement, 6 N.Y.L.F. 161, 162 (1960).

^{233.} See supra Introduction, Part I.

^{234.} See JONATHAN L. RAMSEUR, CONG. RESEARCH SERV., RL33812, CLIMATE CHANGE: ACTION BY STATES TO ADDRESS GREENHOUSE GAS EMISSIONS 12 (2008) (listing the states adopting California's motor vehicle emissions standards as Arizona, Colorado, Connecticut, Florida, Maine, Maryland, Massachusetts, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, and Washington).

^{235.} Some media observers at least view that possibility as credible. See, e.g., Deaton, supra note 173.

when the federal government remains hopelessly paralyzed on the issue of climate change.²³⁶ Our system of government functions best when the laboratories of democracy (states, cities, counties) produce unbiased results. Recognizing that the skew created by ALEC and its brethren cannot be eliminated,²³⁷ the next best option is to balance it out.

^{236.} As Carol Rose has suggested, the best way to counteract undemocratic action (or inaction) among the states is for the federal government to step in. See Carol M. Rose, The Ancient Constitution vs. The Federalist Empire: Anti-Federalism from the Attack on "Monarchism" to Modern Localism, 84 Nw. U. L. Rev. 74, 99–101 (1989) (noting that federal law has been the most effective means for overcoming "stubborn local particularism"). Unfortunately, the window of time for mitigation of climate change is rapidly closing, and the federal government is moving in the deregulatory direction. See supra Part I.

^{237.} But see Barkan, supra note 209, at 650 (suggesting some reforms to depower well-funded nonprofit organizations that have an outsized influence on governance, like ALEC).