2 RACING TO THE TOP, THE BOTTOM, OR THE MIDDLE OF THE PACK?

The Evolving State Government Role in Environmental Protection

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CHAPTER OBJECTIVES

- Discuss the historic and evolving role of state governments in the formation and implementation of American environmental policy.
- Identify factors contributing to major expansion in state environmental policy engagement in recent decades.
- Explain model cases and examples of state environmental policy innovation and leadership.
- Discuss enduring political limitations on many state environmental policies and the growing partisan divides over these issues, particularly those linked to climate change.
- Describe challenges to effective collaboration between state and federal governments on environmental issues.

The problem which all federalized nations have to solve is how to secure an efficient central government and preserve national unity, while allowing free scope for the diversities, and free play to the . . . members of the federation. It is . . . to keep the centrifugal and centripetal forces in equilibrium, so that neither the planet States shall fly off into space, nor the sun of the Central government draw them into its consuming fires.

Lord James Bryce, The American Commonwealth, 1888

Before the 1970s, the conventional wisdom on federalism viewed "the planet States" as sufficiently lethargic to require a powerful "Central government" in many areas of environmental policy. States were widely derided as mired in corruption, hostile to innovation, and unable to take a serious role in environmental policy out of fear of alienating key economic constituencies. If anything, they were seen as "racing to the bottom" among their neighbors, attempting to impose as few regulatory burdens as possible.

In more recent times, the tables have turned—so much so that current conventional wisdom often berates an overheated federal government that squelches state creativity and capability to tailor environmental policies to local realities. The decentralization mantra of recent decades has endorsed an extended transfer of environmental policy resources and regulatory authority from Washington, DC, to states and localities.

Governors-turned-presidents, such as Ronald Reagan, Bill Clinton, and George W. Bush, extolled the wisdom of such a strategy, at least in their rhetoric. Many heads of the U.S. Environmental Protection Agency (EPA) assumed federal office following extended state government experience, including Lisa Jackson and Gina McCarthy in the Obama administration, Scott Pruitt under Donald Trump, and Michael Regan under Joe Biden. They frequently endorsed the idea of shifting some authority back to statehouses, while differing markedly on just what that meant in practice. Pruitt repeatedly invoked the phrase "cooperative federalism" during his years leading the agency in making the case for dramatically reducing federal oversight of states, whereas Regan employed identical phrasing but proposed expanded federal environmental leadership in full collaboration with state partners. Despite their differences, all recent EPA heads acknowledged the considerable contributions many states have made to environmental protection.

What accounts for this sea change in our understanding of the role of states in environmental policy? How have states evolved in recent decades, and what types of functions do they assume most comfortably and effectively? Despite state resurgence, are there areas in which states fall short? How did states respond to efforts by the Trump administration to reduce federal engagement and shift many environmental protection responsibilities to them, and how have they further adjusted during the Biden era? Looking ahead, should regulatory authority devolve to the states, or are there better ways to sort out federal and state responsibilities?

This chapter addresses these questions, examining evidence of state performance in environmental policy. It provides both an overview of state evolution and a set of brief case studies that explore state strengths and limitations. These state-specific accounts are interwoven with assessments of the federal government's role, for good or ill, in the development of state environmental policy. Indeed, as political scientist John Kincaid noted in a sophisticated analysis of power shifting between federal and state governments since the founding of the Republic, federal environmental policy powers have expanded markedly since 1970 and yet the American system remains quite balanced between federal and state authority.[1] In order to be truly effective, U.S. environmental policy often needs to reflect constructive engagement across state and federal levels rather than exclusive reliance upon one of them.

STATES AS THE "NEW HEROES" OF AMERICAN FEDERALISM

Policy analysts are generally most adept at analyzing institutional foibles and policy failures. Indeed, much environmental policy scholarship follows this pattern, with criticism particularly voluminous and potent when directed toward federal efforts in this area. By

contrast, states often receive considerably more favorable treatment. Many influential books and reports on state government and federalism portray states as dynamic and effective, with environmental policy often depicted as a prime example of this general pattern. Some analysts routinely characterize states as the "new heroes" of American federalism, having long since eclipsed a doddering federal government. According to this line of argument, states are consistently at the cutting edge of policy innovation, eager to find creative solutions to environmental problems, and "racing to the top" seeking national preeminence. When states fall short, an overzealous federal partner is often blamed.

Such assertions have considerable empirical support. Most state governments have undergone fundamental changes since the first Earth Day in 1970. Many have drafted new constitutions and gained access to unprecedented revenues through expanded taxing powers. These state powers have been further refined and expanded through highly active constitutional amendment processes.[2] In turn, many state bureaucracies have grown and become more professionalized, as have staff serving governors and legislatures. Expanded policy engagement was further stimulated by increasingly competitive two-party systems in many regions between 1980 and 2010, intensifying pressure on elected officials to deliver desired services. Heightened use of direct democracy provisions, such as the initiative and referendum, and increasing activism by state courts and coalitions of elected state attorneys general create alternative policy adoption paths. In recent decades, public opinion data have consistently found that citizens have a considerably higher degree of trust and confidence in public services and regulations dispensed from their state capitals than those generated from Washington.[3] These factors have converged to expand state capacity and commitment to environmental protection.

This transformed state role is evident in virtually every area of environmental policy. States directly regulate approximately 20 percent of the total U.S. economy, including many areas in which environmental concerns come into play.[4] States operate more than 90 percent of all federal environmental programs that can be delegated to them. Collectively, they approach that high level of engagement in the issuance of all environmental permits and the implementation of all environmental enforcement actions. Despite this expanded role, federal financial support to states in the form of grants to fund environmental protection efforts steadily declined in recent decades, although this began to change in the 2020s through new federal legislation designed to underwrite significant portions of state costs for water quality and climate protection.

Many areas of environmental policy remain clearly dominated by states, including most aspects of waste management, groundwater protection, land use management, transportation, energy production, and regulation of electricity generation and pricing. In many instances, state action represents "compensatory federalism," whereby Washington proves "hesitant, uncertain, distracted, and in disagreement about what to do," and states respond with a "step into the breach."[5] Even in policy areas with an established federal imprint, such as air and water quality, states often have considerable latitude to oversee implementation and move beyond federal standards if they so choose. In air quality alone, more than a dozen states routinely adopt policies

to either exceed federal standards or fill federal regulatory gaps, often setting models for national consideration. Political scientists Christopher McGrory Klyza and David Sousa confirm that "the greater flexibility of state government can yield policy innovation, opening the way to the next generation of environmental policy."[6]

That flexibility and commitment are further reflected in the institutional arrangements established by states to address environmental problems. Many states maintain comprehensive agencies that gather most environmental responsibilities under a single organizational umbrella. These agencies have sweeping, cross-programmatic responsibilities, and some take the lead on issues such as climate change. In turn, many states have continued to experiment with new organizational arrangements to meet evolving challenges, including the use of informal networks, special task forces, and interstate compacts to facilitate cooperation among various departments and agencies.[7]

This expanded state commitment to environmental policy may be accelerated, not only by the broader factors introduced above but also by features somewhat unique to this policy area. First, many scholars contend that broad public support for environmental protection provides considerable impetus for more decentralized policy development tailored to salient local concerns. Such "civic environmentalism" stimulates numerous state and local stakeholders to take creative collective action independent of federal intervention. As opposed to top-down controls, game-theoretic analyses of efforts to protect so-called common-pool resources, such as river basins and forests, side decisively with local or regional approaches to resource protection. Nobel laureate Elinor Ostrom, who in 2009 became the first political scientist to win the prize in economics, actively embraced "bottom-up" or "polyarchic" environmental governance, including possible climate change applications.[8]

Second, the proliferation of environmental policy professionals in state capitals has created a sizable base of talent and ideas for state-level policy innovation. Contrary to conventional depictions of agency officials as "captured" by industry, an alternative view finds considerable policy innovation or "entrepreneurship" in state policymaking circles. This pattern may be particularly evident in environmental policy because numerous areas of specialization place a premium on expert ideas and allow for considerable innovation within agencies.[9] Recent scholarly work on state environmental agency performance gives generally high marks to officials for professionalism, constructive problem-solving, and increasing emphasis on improving environmental outcomes, albeit with considerable state-to-state variation.[10] Networks of state professionals, working in similar capacities but across jurisdictional boundaries, have become increasingly influential in recent decades. These networks facilitate information exchange, foster the diffusion of innovation, and pool resources to pursue joint initiatives. Such multistate groups as the Environmental Council of the States, the National Association of Clean Air Agencies, and the National Association of State Energy Officials also band together to influence the design of subsequent federal policies, seeking either latitude for expanded state experimentation or federal emulation of state "best practices." Some

divides have emerged in these groups in recent years, particularly over the issue of climate change as many Republican-led states have reduced their involvement when this topic arose or blocked proposals emerging from Democratic-led states.

Third, environmental policy in many states can be created through direct democracy, unlike the federal level, involving initiatives, referendums, and the recall of elected officials. In every state except Delaware, state constitutional amendments must be approved by voters via referendum. Thirty-one states and Washington, DC, also have some form of direct democracy for approving legislation, representing well over half the U.S. population. Use of this policy tool has grown at an exponential rate to consider a wide array of state environmental policy options, including nuclear plant closure, disclosure of commercial product toxicity, and public land acquisition. In 2021, New York voters overwhelmingly approved an "environmental rights amendment" to their state constitution and a $4.2 billion bond to protect wetlands and promote flood resilience, while Maine voters decisively rejected proposed installation of a 145-mile high-voltage transmission line to bring hydropower from Canada to the Northeast. Green constitutional amendments similar to New York's were also under active consideration through ballot propositions in more than a dozen states in 2023.

THE CUTTING EDGE OF POLICY: CASES OF STATE INNOVATION

The convergence of these various political forces has unleashed substantial new environmental policy at the state level. Various researchers have attempted to analyze some of this activity through ranking schemes that measure which states are most active and innovative, often tracking how policy ideas then diffuse across states. Such studies consistently conclude that certain states tend to take the lead in most areas of policy innovation, followed by an often uneven pattern of innovation diffusion across state and regional boundaries.[11] For example, the American Council for an Energy-Efficient Economy produces annual rankings of states on the basis of their adoption rates for a range of policies that offer environmental protection through more efficient energy use, including building and appliance energy efficiency standards and transportation and electricity sector initiatives. Its 2022 report gave states lodged on both the Atlantic and Pacific coasts particularly high efficiency policy scores, led by California, Massachusetts, New York, and Vermont. In contrast, states with far lower scores were concentrated in the Great Plains and Southeast, with particularly poor showings in Wyoming, Kansas, South Carolina, and South Dakota. Some states registered large single-year score increases, led by Maine, Nebraska, North Dakota, and Virginia, all reflecting new policies adopted during 2021. In contrast, some states reversed gear and saw significant declines in their scores, reflecting policy retrenchment or reversals led by South Carolina, Ohio, Kentucky, and Arkansas.[12]

In some instances, diffusion of state environmental policy can be rapid, essentially sweeping the nation in a short period of time. In 2022, the fifty states plus Washington, DC, and Puerto Rico adopted 790 laws or executive orders designed to accelerate electric vehicle use and charging capacity. These policies included a wide range of financial incentives, market development, and regulatory provisions, including plans to phase out the sale of non-zero emission vehicles in several states. In this case, new federal funding incentives catalyzed much policy development, and all states submitted proposals to secure new federal National Electric Vehicle Infrastructure program funding.[13]

Similarly, states have dramatically increased the number and range of new policies to advance "climatological disaster resilience solutions." As climate change demonstrates increasing impacts across the United States, future climate considerations are being folded into expanded planning for weather-related disaster responses. In 2021 and 2022, forty-two states adopted 211 climate resilience bills, with the greatest volume of legislative output from California, Colorado, and Hawaii. These bills address such issues as local funding support, development of more resilient infrastructure in anticipation of severe weather shifts, equity and justice considerations in disaster response, and state government reorganization to better address this changing set of challenges.[14] One partisan divide evident in this emerging policy area is the extent to which states acknowledge climate change as a driving factor behind these weather-driven challenges that necessitate new policies. Democratic-led states such as Illinois and Rhode Island have been much more likely to be explicit in discussing climate change impacts, whereas many Republican states such as Florida and Mississippi generally refrain from using that term or discussing human impacts on weather.

In other instances, cross-state diffusion can be far slower, whereby a small set of states adopt specific policies, providing testing grounds for future diffusion to other states or even the federal government. Extended producer responsibility (EPR) laws place environmental stewardship responsibility on manufacturers of various products once they have been used, including recycling and reuse.[15] This approach is quite common in Europe but has been slow to gain American footing. However, major EPR laws were adopted in Oregon, Maine, and Colorado in the early 2020s, addressing plastics, paper, food service waste, and packaging. These were complemented by narrower laws adopted in other states, focused on pharmaceuticals, batteries, motor oil, paint, and mattresses, among other items.

Anticipating Environmental Challenges

One of the greatest challenges facing U.S. environmental policy is the need to shift from a pollution control mode that reacts after damage has occurred to one that anticipates emerging problems and attempts to prevent or minimize them. Some states have launched serious planning processes in recent decades, attempting to pursue preventative strategies in an increasingly systematic and effective way. These steps prove

especially important in instances where the federal government is slow to engage, if at all. All fifty states have adopted at least one pollution prevention program, and some have taken particularly bold approaches, cutting across conventional programmatic boundaries with various mandates and incentives to pursue prevention opportunities. Thirty-four states have adopted laws that move beyond federal standards in preventing risks from chemical exposure, such as banning specific chemicals thought to pose health risks or establishing comprehensive chemical management systems.[16] California has been particularly active in this area and heavily influenced the design of new federal chemical safety legislation adopted in 2016 (see Chapter 5).

One type of contaminant has emerged in recent years as a major state policy focal point: per- and polyfluoroalkyl (or PFAS) chemicals. Commonly known as "forever chemicals," these substances have been used widely in such products as food packaging, cosmetics, firefighting foam, carpets, and numerous others due to their prowess in resisting heat, water, and stains. However, they also pose a wide range of health threats, including various cancers, thyroid disease, and high cholesterol, with particularly significant concerns surrounding exposure through drinking water. More than 200 PFAS bills were introduced in state legislatures during 2022, with nearly fifty new laws adopted in eighteen states, including particularly bold ones in California, Connecticut, Michigan, New Hampshire, New Jersey, and Washington. Maine followed in 2023 with legislation banning PFAS use for all but essential purposes by 2030, while requiring firms manufacturing, importing, or selling products with PFAS chemicals to report them to a new statewide database. This state diffusion surge likely prompted expanded EPA regulatory review of forever chemicals in 2023, particularly after expanding research found greater PFAS contamination in many states than had been previously reported.

Colorado has taken a "race-to-the-top" approach to policy designed to anticipate and thereby minimize environmental risks from oil and gas production. This featured pioneering steps in requiring public disclosure of chemicals used in drilling operations, water quality sampling, rigorous air quality standards, and property owner protections.[17] It emerged through a deliberative process orchestrated by former Governor John Hickenlooper during the 2010s to engage diverse stakeholders to take proactive steps to mitigate risks.[18] Colorado subsequently adopted a suite of additional laws that went even further. These laws established unusually stringent regulatory standards that restricted the release of methane and other air contaminants from energy production and transmission, required continuous emissions monitoring with cutting-edge technology, and reformed bonding provisions to assure that energy production firms set aside sufficient funds for post-drilling site remediation. The state also accelerated transition to a less carbon-intensive future with sweeping new renewable energy and energy efficiency policies and gave localities unusual latitude to add their own oversight provisions on energy production. Another major energy-producing state, New Mexico, began moving in similar directions in the early 2020s,

developing performance-based regulatory standards and penalties that offered firms incentives for emission release reductions that could be verified while intensifying oversight of laggard firms.[19] Colorado's and New Mexico's experiences influenced the adoption of expanded federal methane policies in 2022 and 2023, and the states received World Bank recognition for their efforts.

Economic Incentives

Economists have long lamented the penchant for command-and-control rules and regulations in U.S. environmental policy. Most would prefer to see a more economically sensitive set of policies, such as taxes on emissions to capture social costs or "negative externalities" and the provision of monetary incentives for good environmental performance (see Chapter 10).[20] The politics of imposing such costs has proven contentious at all governmental levels, although a growing number of states have begun to pursue some form of this approach in recent years. In all, states have enacted hundreds of measures that can be characterized as "green taxes," including environmentally related "surcharges" and "fees" that avoid the explicit use of the label *tax* but are functional equivalents.[21] Revenues from such programs are often used to cover costs of popular programs such as recycling, land conservation, and energy efficiency. A growing number of states have begun to revisit their general tax policies with an eye toward environmental purposes, including major tax incentives in many states to purchase hybrid and electric vehicles or invest in renewable energy. Many states and localities have also developed taxes on solid waste, often involving a direct fee for garbage pickup while offering free collection of recyclables and compost. Such policy has diffused to other products, including scrap tires, used motor oil, pesticide containers, appliances with ozone-depleting substances, electronic waste including computers, and plastic bags.

States also have constitutional authority to tax all forms of energy, including transportation fuel and electricity. Increasing the price of energy in concert with its environmental damage would likely discourage consumption and related environmental damage, just as sustained tax increases have elevated the costs of smoking and driven down rates of tobacco use in recent decades. Many states have been highly reluctant to move beyond their traditional levels of taxation for fuels such as gasoline that are commonly used to maintain highways and bridges. But some states have worked over the past decade to place a price on the release of carbon emissions through an auctioning process linked to an emissions cap that declines over time. Building on pioneering American work to reduce sulfur dioxide emissions, twelve northeastern states participate in the Regional Greenhouse Gas Initiative (RGGI) that requires purchase, through quarterly public auctions, of allowances to emit carbon. This pricing mechanism also provides revenue whereby RGGI states can support energy efficiency programs, alternative-energy projects, and rebates for consumer electricity bills.

California operates its own version of this cap-and-trade system in collaboration with Canadian province Quebec. The most recent state additions to RGGI, Virginia

and Pennsylvania—with large populations and substantial historic use of fossil fuels for electricity—have remained active in the regional program despite political and legal questions surrounding membership, given competing views between executive and legislative branches of government. Washington adopted cap-and-invest legislation under its 2021 Climate Commitment Act that operates across industrial sectors and began auctioning allowances in 2023. Oregon is implementing similar policy via executive action, and New York began actively considering its own cap-and-invest program in 2023 that would extend beyond its current power sector focus via RGGI into other economic sectors.

Filling the Federal Void: Reducing Greenhouse Gases

As the RGGI case demonstrates, states have proven unexpectedly active players in the fight to reduce greenhouse gas emissions to curb climate change. During the decades when the federal government struggled to address this problem, numerous states attempted to fill some of the "policy gap" created by federal inaction.[22] This American "bottom-up" approach has also emerged in other federal or multilevel governmental systems, including Canada, Australia, and the European Union.[23] Many states are responsible for substantial amounts of greenhouse gas emissions, even by global standards. In response, many have adopted policies that promise to reduce their greenhouse gas releases, although they often pursue these policies for other environmental and economic reasons.

State-level climate policy adoption has tended to peak during periods where federal engagement is lowest, thereby seizing opportunities that were being ignored or reversed nationally. This was certainly evident during the Trump administration, reflected in formation of the twenty-five-state "All In" coalition that pledged to meet Paris Climate Agreement emission reduction commitments within their boundaries.[24] One common climate policy involves a clean electricity mandate designed to accelerate state transition away from fossil fuel sources. Thirty states and Washington, DC, have established "renewable portfolio standards (RPS)," beginning with Iowa in 1991 (see Chapter 8), whereas others have nonbinding programs. These policies generally follow a similar structure, although they vary greatly in terms of both the definition of eligible sources and the overall targets and timetables for increasing capacity. Eleven states have expanded these in recent years to specify plans to achieve net-zero carbon emissions from the power sector over coming decades, with four others having made similar commitments via executive orders. Congressional efforts to establish a federal version of an RPS failed in 2022, although extended federal renewable energy tax credits through the Inflation Reduction Act are intended to ease state paths to meeting their targets and encourage other states to adopt such policies.

Several states have also developed policy to reduce climate damage related to greenhouse gases other than carbon dioxide in recent years. As in the methane case noted earlier, decisive state action prompted federal government transition away from

hydrofluorocarbons (HFCs), coolant chemicals used in refrigerators and air conditioning systems. HFCs were developed decades ago as far less damaging to the ozone layer than prior chemicals that they supplanted. But HFCs have considerably greater short-term global warming potential per ton than carbon or methane. Climate-friendly chemical alternatives to HFCs are increasingly available, and there was considerable support among industry leaders for a 2016 phase-out treaty, the Kigali Amendment to the Montreal Protocol. Federal inertia prompted six states to adopt their own regulatory phase-down legislation, and nine others were actively considering bills during the 2019–2020 session. These state actions prodded Congress in late 2020 to pass, with bipartisan support, federal legislation modeled after state policy through the American Innovation and Manufacturing Act, leading to treaty ratification in 2022 (see Chapter 15).

California has long ranked among the world's most active governments in addressing climate change, developing cap-and-trade policies alongside ambitious renewable fuel and electricity standards and energy-efficiency provisions.[25] It has adopted numerous climate statutes in recent decades, including multiple bills specifying aggressive statewide emission reduction targets. California attempts to attain those goals through an all-out policy assault on virtually every sector that generates greenhouse gases, giving extraordinary authority to the formidable California Air Resources Board in designing actual policies and overseeing their implementation. California's flagship climate initiative has also entailed repeated use of a unique waiver it holds under federal air legislation. On more than 100 occasions since 1968, California has established more rigorous tailpipe emission standards for cars and trucks than the rest of the nation, whereby its waivers frequently lead other states to join it in a regulatory "bandwagon" that ultimately compels adoption of a national standard modeled after California's original policy. For decades, this waiver has resulted in substantial statewide and national emission reductions per vehicle and has been integrated with federal fuel economy standards in attempting to reduce climate impacts of new vehicles. This included an Obama era agreement designed to attain an average of 54.5 miles per gallon for new vehicles by 2025. This reform reflected a unique situation whereby Congress allows one state to innovate within its own boundaries and thereby leverage national-level change, although it would face unprecedented challenges to continued use of this power in the 2020s.[26] In late 2022, CARB introduced a new "scoping plan" intended to allow California to achieve economy-wide carbon neutrality by 2045, with an interim target of reducing greenhouse gas emissions by 48 percent from 1990 levels by 2030 while phasing down natural gas and oil production and use statewide. California proved particularly successful in recent years in expanding solar power use, producing more than one-third of America's total solar energy in 2022.

State climate policy development reflected many of the partisan divides evident in other policy areas in the 2010s and 2020s, unlike previous decades where greater bipartisan collaboration was evident. A study of climate policy in all states between 2015 and 2020 concluded that more than two-thirds of 385 climate bills adopted relied

almost exclusively on Democratic legislator support. However, they also concluded that remaining bills were adopted in states with Republican majorities and voting coalitions involving significant membership from both parties.[27] In particular, these steps tended to focus on issues such as increasing financial incentives for renewable energy development and using and expanding citizen and business choice in selecting renewable energy options. One prominent example of this pattern was Georgia, where a Republican-dominated state adopted multiple bills designed to expand solar energy production and use. Such cases indicated that bipartisanship was not impossible at the state level, although many Republican-led states adopted little if any new climate-relevant legislation during this period. Moreover, these states tended to eschew specific references to climate change in adopting legislation that might have some impact in reducing emissions, such as expanding renewable energy production. This reflected continuation of a long-standing "stealth" policy pattern in some states that downplays or dismisses consideration of climate change impacts.

STATE LIMITS

Such a diverse set of policy initiatives would seem to augur well for the states' involvement in environmental policy. Any such enthusiasm must be tempered, however, by a continuing concern over how evenly that innovative vigor extends over the entire nation. One enduring rationale for giving the federal government so much environmental policy authority is that states appear to face inherent limitations. Rather than a consistent, across-the-board pattern of dynamism, we see a more uneven pattern of performance than decentralization advocates might anticipate. Just as some states consistently strive for national leadership, others appear to seek the middle or bottom of the pack, seemingly doing as little as possible and rarely taking innovative steps. This imbalance becomes particularly evident when environmental problems are not confined to a specific state's boundaries. Many environmental issues are, by definition, transboundary, raising important questions of interstate and interregional equity in allocating responsibility for environmental protection. These doubts about state capacity and commitment raise important concerns for any effort to shift more responsibility for environmental protection from federal to state governments.

Uneven State Performance

Efforts to rank states according to their environmental regulatory rigor, institutional capacity, or general innovativeness repeatedly find similar subsets of states atop their lists, consistent with recent energy efficiency policy rankings noted earlier. By contrast, a significant number of states regularly fall far down that list, raising questions concerning their overall policy capacity and commitment. An earlier warning from political scientist William R. Lowry continues to ring true in the 2020s:

> Not all states are responding appropriately to policy needs within their borders. . . . If matching between need and response were always high and weak programs existed only where pollution was low, this would not be a problem. However, this is not the case.[28]

A 2018 study on state policy adoption across multiple policy areas confirmed wide environmental policy disparities among states, concluding that "the most conservative states on the environment simply do not pass the major environmental laws that the 'green' states do."[29] Many states experiencing the greatest population growth rank among those doing the least to address environmental concerns, most notably in the Southeast. These divides increasingly reflect deep partisan cleavages over environmental issues, with major state policy consequences.

Although many states have unveiled exciting new programs, nearly half have established some formal restrictions that preclude their environmental agencies from adopting any regulations or standards that are more stringent than those of the federal government in such areas as air and water quality.[30] There has also been a growing pattern of state legislative proposals designed to downsize or repeal existing state policies, most commonly introduced by Republican legislators.[31] Many of these address climate change and energy transition, often following standardized templates developed by the conservative American Legislative Exchange Council (ALEC) or its counterparts. One major theme in ALEC-supported bills has involved either freezing or reversing established renewable portfolio standards, culminating in major reversals in states such as Kansas and Ohio. Ohio built on this experience in passing 2022 legislation that formally designated natural gas as "green energy" under state law, part of its broader political campaign to prioritize expanded state production, use, and export of gas over renewables. This pattern was also evident among states that sought to prohibit local governments from banning natural gas use in new buildings, including new legislation adopted in Ohio, Utah, and Wyoming and under active consideration elsewhere.

Another emerging issue has featured a mixture of legislative proposals to discourage corporations operating in specific states from pursuing green investment strategies. As of 2023, seven states adopted laws or regulatory provisions to prohibit or discourage use of environmental and social factors in the investment of state government funds, including pension system holdings. Four states passed laws requiring state regulatory bodies to maintain lists of firms that engage in boycotts of fossil fuel investments, with the intent of restricting or prohibiting them from doing business with the state in the future.

A number of states with long histories of mining coal and relying upon it for most of their electricity took new steps in the 2020s to try to protect this activity, despite coal's significant economic and environmental costs and the growing availability of renewable alternatives. Coal legacy states such as West Virginia, Wyoming, Utah, Indiana, and Kentucky have begun adopting various regulatory and subsidy policies designed to sustain coal plant operations. These include state requirements that firms planning

to close coal-burning power plants must instead attempt to sell them for continued operation, in some instances backed by state financial assistance. Other states have actively embraced use of experimental carbon capture and sequestration technology to justify continue coal use, in some cases blending state funds with others provided by the federal government. Such technologies have been discussed for decades but remain largely untested and very costly in the United States and globally, raising numerous reservations concerning their viability, particularly if deployed on a broad scale across multiple sites and states.

Similar issues have arisen as states have struggled in recent years to formulate policies to reduce environmental risks linked to shale gas and oil development, with many racing in the opposite direction from Colorado. Many have proven particularly lenient with methane releases, even though these squander a nonrenewable energy source and pose significant air quality and climate concerns. Many states have long recognized either direct venting of methane or flaring into carbon dioxide as wasteful and dangerous practices, yet they offer generous exemptions or exceptions to established regulations. Venting and flaring triggered particular concern in the booming Bakken region (North Dakota and Montana) and Permian Basin (Texas and New Mexico) as methane releases soared amid rapid expansion of production. State officials routinely acknowledged this problem as well as their chronic failure to prepare for long-term remediation of hundreds of thousands of idle or "orphan" wells after production ends. However, they remained highly reluctant to impose methane regulations, bonding requirements, or taxes on prominent energy producing firms, fearful that these might shift operations to other states with softer standards in response or accelerate their pursuit of bankruptcy protection during economic downswings.[32] The widespread failure by most production states to address this issue over multiple decades prompted major new federal policy steps in 2022 legislation and 2023 regulation to begin to fill these gaps, building on exceptional state cases such as Colorado and New Mexico.

Comparable problems have emerged in state enforcement of air and water quality and waste management programs, including basic data collection and reporting. Despite efforts in some states to integrate and streamline permitting, many have extensive backlogs and lack reliable measures of facility compliance with various regulatory standards. Existing indicators confirm enormous variation among states. State governments—alongside their local counterparts—have played central roles in increasing solid waste recycling rates from a national average of 6.6 percent in 1970 to 16 percent in 1990 to 32 percent in 2020. At the same time, state recycling rates vary markedly, ranging from over 60 percent in states such as Maine, Oregon, and Connecticut and below 25 percent in states such as Alaska, Mississippi, and Alabama. The expansion of recycling coverage to numerous products and materials has been highly uneven, including major shortcomings in areas such as plastics.

There was also growing indication in some states during the previous decade that environmental policy faced major challenges in cases where state leaders

assumed that government could be managed similarly to business and industry. Michigan use of state-appointed emergency financial managers to oversee fiscally challenged municipalities backfired with tragic consequences in the case of Flint, a declining city that had once been an auto manufacturing hub.[33] The search for fiscal balance led to a 2015 decision to shift the source of Flint's water supply to save money and resulted in significant lead exposure for a city of nearly 100,000 residents. A set of state environmental and public health agencies ignored early warning signs and failed to respond to the emerging crisis, as did regional EPA authorities based in Chicago. This resulted in substantial lead contamination for Flint residents and necessitated massive efforts to provide alternative water supplies and begin to replace damaged water infrastructure. Research on water quality trends indicates that Flint is not alone among American localities in this regard, raising questions over state and local stewardship of drinking water quality, at the very point new federal funds for upgraded water infrastructure are beginning to be distributed to these same governments to mitigate these problems.[34] Indeed, major new cases have emerged in the 2020s with strong parallels to Flint, including cities such as Jackson, Mississippi, and Benton Harbor, Michigan, as well as a number of remote, rural communities, all reflecting some combination of state and local government failure.[35]

Republican-led states in the Biden era continue a recent trend of using litigation to attempt to block efforts by the president of the opposite political party to address climate change. This pattern accelerated in the Obama and Trump eras, with allied state attorneys general forming coalitions to thwart a wide range of policy steps taken by the standing president. In the Biden era, this included a legal challenge led by West Virginia Attorney General Patrick Morrissey over federal authority to apply the Clean Air Act to greenhouse gas emissions from power plants, resulting in the landmark 2022 Supreme Court decision in *West Virginia v. EPA*, discussed in Chapters 6 and 7. Morrissey parlayed the notoriety from this litigation and other high-profile legal challenges of federal environmental policy in advancing his 2024 gubernatorial bid. In transportation, Ohio Attorney General David Yost assembled a coalition of Republican-state allies in attempting to overturn the half-century vehicle emission waiver granted to California by Congress, deriding it as an excessive delegation of federal regulatory authority to an individual state. Additional steps of this sort, guided by clusters of Republican attorneys general, appeared destined to expand as the Biden presidency continued, including denunciation of additional federal vehicle emission provisions that immediately followed their announcement in 2023. Ironically, a growing number of these cases brought by Republican attorneys general generally supportive of substantial delegation of federal authority to states sought greater federal control over state policy actions that they disliked. This pattern included expanding efforts in 2023 to seek federal court reversal of state policies banning natural gas use in new buildings.

Enduring Federal Dependency

Many states have proven reluctant or unable to tap into their own revenues to support environmental protection efforts, thereby developing a deep dependency on federal grant funding to cover core programs or launch new initiatives. There are enormous differences between states in terms of their tax base and both capacity and willingness to produce significant revenues, compounded by a focus in some to only pursue policy when most of the operational costs are covered through intergovernmental financial transfers. Indeed, considerable innovative state-level activity has been at least partially underwritten through federal grants, which can serve to stimulate additional state environmental spending.[36] Although a number of states have developed fee systems to cover much of their operational costs, many continue to rely heavily on federal grants to fund some core environmental protection activities. States have continued to receive other important types of federal support, including grants and technical assistance to complete air and water quality management, wetlands program development, drinking water infrastructure, brownfields reclamation, and more. On the whole, states have annually received between one-fifth and one-third of their total environmental and natural resource program funding from federal grants in recent years, although a few states have remained more heavily reliant on federal dollars. The overall level of federal support has declined in recent decades, and reduction accelerated during the Trump administration, but major new federal legislation adopted during the Biden administration offered the prospect of major funding expansion across many key areas of environmental policy.

State dependence on federal funding has grown in the majority of states given widespread reluctance to expand agency funding and staff, even during periods of relative fiscal well-being for many states. A 2019 Environmental Integrity Project report on state commitment to environmental programs found that "a majority of states have cut their pollution control spending and staffing over the last decade—often more drastically than EPA—even at times when overall state budgets have grown and environmental challenges have increased."[37] Some states pursued particularly far-reaching reductions, such as the Texas Commission on Environmental Quality, whereas others such as the Oklahoma Corporation Commission have struggled to recruit and retain top staff, given low salaries and modest benefits, and often lose promising staff to more lucrative offers from industry.[38] Some states have struggled with volatility in their environmental funding linked to larger budgetary fluctuation. Even climate-focused California had to cut its related spending by $6 billion (or 11 percent) in 2023 when faced with steep state budget deficits linked to rapid declines in income tax proceeds.

Furthermore, for all the opprobrium heaped on the federal government in environmental policy, it has provided states with at least three other forms of valuable assistance, some of which has contributed directly to the resurgence and innovation of state environmental policy. First, federal development of the Toxics Release Inventory,

modeled after programs initially attempted in Maryland and New Jersey, has emerged as an important component of many of the most promising state policy initiatives. It is one of many examples of federal capacity to collect essential environmental quality data useful for state policy development.

Second, many successful efforts to coordinate environmental protection on a multistate, regional basis have received substantial federal input and support. A series of initiatives in the Chesapeake Bay, the Great Lakes Basin, and New England have received considerable acclaim for tackling difficult issues and forging regional partnerships; federal collaboration—via grants, technical assistance, coordination, and efforts to unify regional standards—with states has proven useful in these cases. One model for engagement was the Great Lakes Restoration Initiative championed by the Obama and Biden administrations, with important successes in addressing the legacy of heavy toxics contamination.

Third, the EPA can constrain state innovation, but its oversight of state-level program implementation often looks more constructive when considering the role played by the agency's ten regional offices. Most state-level interaction with the EPA involves such regional offices, which employ approximately two-thirds of the total EPA workforce and regularly delegate enormous implementation authority to states. Relations between state and regional officials are generally more cordial and constructive than those between state and central EPA officials, and such relations may even be, in some instances, characterized by high levels of mutual involvement and trust.[39] Regional office involvement may include formal advocacy on behalf of states with central headquarters, direct collaboration on meshing state initiatives with federal requirements, and special grant support or technical assistance.

The Interstate Environmental Balance of Trade

States may be structurally ill equipped to handle many environmental concerns. In particular, they may be reluctant to invest significant energies to tackle problems that might literally migrate to another state or nation in the absence of intervention or require global strategies to be effective. The days of state agencies being captured securely in the hip pockets of major industries are probably long gone, reflecting fundamental changes in state government.[40] Nonetheless, state regulatory dynamism may be particularly likely to decline when cross-boundary contaminant transfer and impact exist.

The state imperative of economic development clearly contributes to this phenomenon. As states increasingly devise economic development strategies that resemble Asian and European industrial policies, a range of research has concluded they are far more deeply committed to strategies that promote investment or development than to those that involve social service provision or public health promotion.[41] A number of states routinely offer incentives of tens of thousands of dollars per new job to prospective developers and have intensified efforts to outbid neighboring states in

the struggling manufacturing sector. Energy-producing states often maintain generous tax preferences, provide infrastructure, and simplify permitting to support oil-, gas-, and coal-extraction firms. Environmental protection can be eminently compatible with economic development goals, promoting overall quality of life and general environmental attractiveness that entices private investment. In many states, tourism and recreation industries have played active roles in seeking strong environmental programs designed to maintain natural assets. In some instances, states may be keen to take actions that could produce internal environmental benefits as long as these actions do not disrupt their economic growth, including expanded state investment in clean energy production.

But much of what a state might undertake in environmental policy may largely benefit other states or regions, thereby reducing an individual state's incentive to take meaningful action. In fact, in many instances states continue to pursue a "We make it, you take it" strategy. As political scientist William Gormley notes, sometimes "states can readily export their problems to other states," resulting in potentially serious environmental "balance of trade" problems.[42] In such situations, states may be inclined to export environmental contaminants to other jurisdictions while enjoying any economic benefits to be derived from the activity that generated the contamination. One careful study of state air quality enforcement found no evidence of reduced regulatory effort along state borders but a measurable decline in effort along state borders with Mexican states or Canadian provinces.[43]

Such "externality migration across states" may take many forms and prove particularly prevalent in environmental policy when long-distance migration of pollutants is most likely.[44] Air quality policy has long fit this pattern. Midwestern states, for example, have historically depended on burning massive quantities of coal to meet electricity demands. Prevailing winds invariably transfer pollutants from this activity to other regions, particularly New England, leading to serious concern about various contamination threats. Nationally, many states fail to meet federal air quality standards due to "interstate 'downwind' pollution." Despite some advances linked largely to federal air policy, air pollution remains responsible for estimated premature deaths of more than 100,000 people per year.[45] A 2020 study concluded that between 41 percent and 53 percent of premature mortality due to air pollution exposure resulted from a state's emissions that occurred outside its boundaries. It found that electricity sector emissions were particularly prominent but that releases from other forms of commercial and residential activity had also grown in significance over recent decades. Fine particulate matter and ozone emerged as particularly large public health concerns in this research, whereas sulfur dioxide emissions tightly controlled under federal law have declined as a threat.[46] Cross-border transfers have also contributed to the growing problem of airborne toxics that ultimately pollute water or land in other regions, including chronic Lake Superior water quality problems linked to air contaminants generated outside the Great Lakes.

Interstate conflicts, often becoming protracted battles in the federal courts, have endured in recent decades as states allege they are recipients of such unwanted "imports." This has included prolonged political and legal combat over EPA's Cross-State Air Pollution Rule, the agency's "good neighbor" provision intended to restrict cross-border exports of nitrogen oxides and sulfur dioxide emissions from twenty-eight midwestern and southern states into the Northeast. No region of the nation or environmental media appears immune from this kind of conflict. Growing water scarcity linked to increased demand for water and extended drought in many regions has exacerbated interstate conflict over water access, including fierce political battles among southwestern states dependent on water from the Colorado and Rio Grande Rivers and southeastern states reliant on water from Lake Lanier and six rivers crossing state borders. In 2023, long-simmering energy policy disputes between neighboring North Dakota and Minnesota resurfaced over cross-state electricity transfer. Completion of massive transmission lines increased the possibility that Minnesota would import growing amounts of electricity produced in North Dakota. However, it is increasingly interested only in power from wind and other renewable sources, given its clean energy standard. This has fostered a backlash in North Dakota and litigation contending that Minnesota seeks to violate its constitutional ability to export a legal product across state boundaries by only pursuing electricity provided by wind.

Perhaps nowhere is the problem of interstate transfer more evident than in the disposal of solid, hazardous, and nuclear wastes. States have generally retained enormous latitude to devise their own waste management and facility siting systems, working either independently or in concert with neighbors. Many states, including a number of those usually deemed among the most innovative and committed environmentally, continue to generate substantial quantities of waste and have struggled to establish comprehensive recycling, treatment, storage, and disposal capacity. Instead, out-of-state (and -region) export has been an increasingly common pattern, with a system that often resembles a shell game in which waste is ultimately deposited in the least resistant state or facility at any given moment.

No area of waste management, however, is as contentious as nuclear waste disposal. In the case of so-called high-level wastes, intensely contaminated materials from nuclear power plants that require between 10,000 and 100,000 years of isolation, the federal government and the vast majority of states have supported a four-decade effort to transfer these wastes to a geological repository in Nevada. Ferocious resistance by Nevada officials and concerns among states who would host transfer shipments have continued to scuttle this approach, leaving each of the fifty-seven commercial nuclear power plants with ninety-five reactors located in twenty-nine states a de facto storage site. In the case of "low-level" wastes, greater in volume but posing a less severe health threat, states have received considerable latitude from Washington for decades to develop a strategy for creating a series of regional sites, including access to funds to develop facilities. But subsequent siting efforts have been riddled with conflict, and

no long-term plans have emerged.[47] Two interim waste storage facilities have been proposed by waste management firms, one on each side of the Texas–New Mexico border, both thousands of miles away from the bulk of generated waste. This has triggered intense political opposition from both states and their respective Republican and Democratic governors, who contend that any temporary storage facility if approved would likely become permanent. A common complaint among western states is the fact that most nuclear waste is generated east of the Mississippi River, while most siting efforts have focused on areas west of that river. Political interest in extending the operational life of nuclear power plants and even possible deployment of small modular reactors as non-fossil fuel energy sources continued to collide with this enduring waste siting standoff in both the Trump and Biden administrations.

NEXT STEPS IN ENVIRONMENTAL FEDERALISM

Federalism scholars and some political officials have explored models for the constructive sharing of authority in the American federal system, many of which attempt to build on the respective strengths of varied governmental levels and create a more functional intergovernmental partnership.[48] But it has generally proven difficult to translate these ideas into actual policy, particularly in the area of environmental policy. Perhaps the most ambitious efforts in recent decades to reallocate intergovernmental functions in environmental protection occurred in the 1990s during the Clinton administration, under the National Environmental Performance Partnership System (NEPPS). This effort was linked to Clinton's broader attempts to "reinvent government," which were directed by Vice President Al Gore and widely heralded by proponents as a way to provide states substantially greater administrative flexibility over many federal environmental programs if they could demonstrate innovation and evidence of improved environmental outcomes.[49] NEPPS also offered funding incentives through special grants designed to allow participating states to concentrate resources on innovative projects that promised environmental performance improvements. Despite some experimentation and innovation, the NEPPS system was never fully implemented and ultimately languished. More than forty states initially participated, but many struggled to develop innovative approaches, and some feared the prospect of systematic federal government reviews of their efforts that would be released to the public.

The Obama administration also pursued new environmental policy initiatives that attempted to build on the experience of innovative states, including its signature Clean Power Plan that proposed a national cap on electricity sector carbon emissions while offering states considerable latitude in achieving assigned emission reduction targets. It also attempted to partner with California through its vehicle emissions waiver in creating a more ambitious emissions control plan for the transportation sector and modeled initial regulatory steps on regulation of methane from oil and gas production on early

Colorado innovation. Similar efforts were evident in several areas of proposed regulatory reforms under the Clean Water Act, including efforts to expand administrative authority to states in cases where they demonstrated performance excellence.

One common theme across the Clinton, Bush, and Obama presidencies was very limited congressional capacity to either adopt new environmental legislation or revise existing statutes (see Chapter 5) in a period where state policy innovation was expanding but hardly universal. This generated incentives for respective presidents to take unilateral executive actions to achieve their environmental policy goals, whether through executive orders, regulatory revision processes, or other mechanisms as discussed in Chapter 4. It also created an opening for states to either embrace or attempt to resist those initiatives. Opposition led by coalitions of elected attorneys general of the party opposite the president often proved particularly vigorous.

This pattern would also emerge during the presidency of Donald Trump, with states deeply divided over his environmental initiatives. Trump never introduced environmental legislative proposals, but rather pursued a "search and destroy" executive strategy through regulatory reversals, reinterpretations, or implementation delays that were systematically designed to undermine numerous Obama regulatory efforts on climate change and air and water pollution, each posing significant consequence for states.[50]

Some Trump efforts would serve to *empower* states that had opposed Obama policies and preferred to do far less in these areas. An Affordable Clean Energy rule replaced the Clean Power Plan, eliminating any consequential federal pressure on states to transition their electricity generation sectors away from reliance on coal or natural gas. This shift would be generally welcomed by states with the least aggressive climate policies and greatest production and use of fossil fuels but aggressively opposed by those states that had already made significant climate policy commitments and planned to do more. Similar patterns emerged for air and water pollution, empowering those states most opposed to new federal environmental policies.

Other Trump initiatives would formally attempt to *constrain* states, particularly ones led by Democrats, from pursuing environmental policy innovation. This included a frontal assault on California's efforts to adopt major new climate policy initiatives, in many cases securing allies from other states and even Canadian provinces. This included an unprecedented federal repeal of a waiver to California approved six years earlier, alongside Trump administration efforts to write California out of a decision process leading to far more modest vehicle emission standards through 2026. In turn, the Trump Justice Department sued California for allegedly encroaching on federal treaty-making powers by establishing a carbon cap-and-trade partnership with Quebec, a Canadian province. Moreover, Trump and his environmental officials berated California through public rhetoric, denouncing the state for its alleged policy failures and enduring environmental problems, while also threatening to terminate federal grants to the state. This took traditional intergovernmental conflict to a new

and visceral level, raising fundamental questions over how far one or more states could advance in environmental protection amid such federal executive hostility.

The Joseph Biden presidency would have significant consequences for environmental federalism, including a series of efforts to "reverse the reversals" of the Trump era and restore many regulatory provisions advanced by Obama on climate, air pollution, and water quality, albeit with enormous uncertainties about what a new generation of federal courts would allow (see Chapter 6). Even more significant, however, was a series of new legislation adopted in 2021 and 2022 that used dramatic expansion in federal funding for environmental protection as a primary policy tool (see Chapter 5). Proposals to distribute most of this bounty through massive grants allocated to state governments were ultimately rejected, and much of the funding entails direct federal financial support to citizens and businesses investing in various clean energy initiatives. Nonetheless, significant amounts of funding were deposited into various state grant programs, many requiring states to prepare detailed applications to secure a share of funding.

Billions of dollars have been allocated over a period of a decade or more for such programs as national electric vehicle infrastructure, home energy efficiency, orphan well cleanup and restoration, and drinking water infrastructure, among others. In turn, new grants were established to allow EPA to assist state, local, and tribal efforts to address climate change mitigation, including a $5 billion allocation for climate pollution reduction grants. Most of this funding was designed to directly support federal program implementation rather than fund permanent expansion of federal or state agency capacity, raising some questions about the capacity of states to absorb massive new revenues and spend them effectively over time. However, the Environmental Council of the States quickly established a new committee with bipartisan participation and shared leadership from Connecticut and Wyoming environmental agency heads to work collaboratively with the Biden administration in implementing these programs. Biden's National Climate Advisor Gina McCarthy, EPA head under Obama, noted that "no one wants to turn their backs" on the substantial new funding that states could receive. "I think we are on pretty safe ground moving forward."[51]

This new environmental funding surge also raised the possibility of an intriguing federal twist: Would the bulk of the new federal environmental funding be ultimately invested in states led by officials who had vigorously opposed the legislation? Texas alone anticipated receiving approximately $94 billion dollars from the federal government for clean energy transition before 2030, far greater than California or any other state. This reflected its major expansion of clean energy production and statewide transmission capacity in previous decades and a political climate unusually receptive to any form of new energy investment and siting. Indeed, Texas has increasingly developed a reputation as being an American state hub of energy production that is both "grubby and green." In 2021, it produced 43 percent of the nation's oil and 24 percent of the nation's natural gas. But it also produced more than one-quarter of the nation's wind energy and led all other

states in new solar deployment. Texas wind and solar production surpassed natural gas use in its own electricity production in 2023, and these sources were expected to expand their lead throughout the decade. This reflects not only the state's excellent wind and sunshine capacity but also vast open territory for siting, a supportive state and local regulatory climate for permitting and zoning, relatively low labor costs, an extensive system of established royalty payments for owners of land where energy is produced, and a history of combining federal incentives with its own. These factors have converged in Texas, only accelerated by massive new federal incentives. As one rancher who benefits financially from multiple forms of energy produced on his land noted, "We struck wind."[52] At the same time, it should be noted that Texas continues to actively support continued oil and gas production, including plans for major expansion of liquified natural gas exports, while it also expands renewable capacity. In 2023, the state considered major legislation that would bolster support for expanded state use of natural gas as a primary electricity source while dialing back prior policies supportive of developing renewables.

Much like Texas, most of the growth in wind and solar production in recent decades has occurred in so-called "red states" that also produce fossil fuels, many of which are led by Republican officials who frequently do not expressly address climate change but support energy development for economic development reasons. Many of these states remain leading oil and gas producing jurisdictions and intend to continue doing so despite climate concerns. Seven of the top ten states in terms of wind and solar production as a percentage of their total electricity output in 2021 were red states, generally concentrated in the central part of the nation. This includes Iowa at 69 percent, Kansas and North Dakota at 62 percent, and Oklahoma at 48 percent. Among so-called "blue states," New Mexico registered the highest renewables production score at 37 percent. In 2022, nine of the ten Congressional districts with the largest renewable energy projects in active development had Republican representatives who opposed new federal support but made no plans to block federally backed green energy investments in their districts.[53]

Such states also appeared to be dominating the early stages of interstate competition to lure and site new investments focused on electric vehicles, stimulated by a range of new federal incentives to encourage their purchase and develop charging infrastructure. Southeastern states led by Republicans have dominated corporate investment announcements for new electric vehicle production and assembly as well as related battery development.[54] This regularly reflected major state incentive packages to supplement federal incentives, such as $3.3 billion dollars of sweeteners offered by the state of Georgia to recruit major electric vehicle projects involving Rivian and Hyundai. Other red states such as Alabama, Indiana, Kansas, Kentucky, Ohio, South Carolina, Tennessee, and even coal-centered West Virginia all won major interstate battles to lure new clean vehicle or battery development in 2022 and 2023. Some new investment was also approved for blue, Democratic-led states, most notably involving Ford and General Motors in home-state Michigan. However, a number of blue states with considerable histories of manufacturing and strong climate policy records were largely shut out during initial rounds of major investment announcements.

This raised numerous questions about whether this pattern would continue and, if so, how states might adopt new policies to enable them to take full advantage of new federal legislation incentivizing clean energy investment. Two large blue states, New York and Illinois, have approved new legislation to limit local government capacity to resist proposals to site wind and solar installation. These laws will apply state preemption power over local land use in ways quite similar to steps many red states took in previous decades to thwart local opposition to oil and gas production. In Illinois, a dozen counties had adopted local zoning ordinances to block renewable energy development, a pattern increasingly evident among local governments around the nation for multiple political reasons. In 2023, the state reversed 2019 legislation that gave localities considerable authority over whether or not to approve renewable energy projects and instead concentrate more power in state hands. It is too soon to know whether such policies will accelerate renewable energy development in Illinois and New York or will diffuse to other states. Nonetheless, a growing challenge for any far-reaching expansion of clean energy production and distribution will entail securing local political support to take advantage of new federal subsidies at the heart of the nation's new approach to climate change.[55]

Ironically, gaining political support for siting renewable technologies and needed transmission capacity may be politically easier in states with open vistas, a history of fossil fuel energy production, and policies amenable to new development. In contrast, states such as California, New York, and Illinois that may be most likely politically to adopt bold renewable energy standards and related climate policies have thus far faced far greater political opposition to actually hosting these facilities within their boundaries and may struggle to attain their overall targets. This raises questions of whether they will force this development upon reluctant in-state localities, find other methods to build consensus, or expand imports of such energy from other states where siting is easier if transmission capacity is available. It also prompts the broader issue of the conditions under which disparate states might find common cause moving forward, particularly in instances where multistate or regional coordination on siting and other factors make considerable environmental and economic sense but have been slow to take shape in recent decades. Much as Lord Bryce pondered centuries ago, it is possible, at least in theory, to envision a political system in which multiple levels of government work toward the common good on such issues as environmental protection.

SUGGESTED WEBSITES

Environmental Council of the States (www.ecos.org) The Environmental Council of the States represents the lead environmental protection agencies of all fifty states. The site contains access to state environmental data and periodic "Green Reports" on major issues, although state partisan divides in recent years have slowed the production of these.

Georgetown Climate Center (www.georgetownclimate.org) The Georgetown Climate Center provides extensive databases and reports on different dimensions of state climate and energy policy. This includes a State Energy Analysis Tool that provides highly detailed information on state energy sources and usage and focuses increasingly on state responses to recent federal climate legislation.

National Conference of State Legislatures (www.ncsl.org) The National Conference of State Legislatures conducts extensive research on a wide range of environmental, energy, and natural resource issues for its primary constituency of state legislators, as well as for the general citizenry. The organization offers an extensive set of publications, including specialized reports and monthly review of state policy developments.

National Governors Association (www.nga.org) The National Governors Association maintains an active research program concerning state environmental protection, natural resources, and energy concerns. It has placed special emphasis on maintaining a database on state "best practices," which it uses to promote diffusion of promising innovations and to demonstrate state government capacity in federal policy deliberations.

State Energy & Environmental Impact Center, New York University School of Law (www.law.nyu/centers/state-impact.edu) The State Energy & Environmental Impact Center keeps close tabs on the actions of state attorneys general and state governments in environmental policy. This includes databases on multistate litigation and other strategies in instances where states choose to challenge federal environmental policy decisions.