

There is more than one way to accelerate decarbonization

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While West Virginia's Senator Joe Manchin is doing his best to block climate policy and save his state's dying fossil fuel industry, there is no reason to believe that the proposed "Clean Electricity Program" policy design is the only way to accelerate decarbonization. The problem for many utilities is the capital cost of the infrastructure for decarbonization.

The infrastructure and Build Back Better bills still include funding for that. More funding could be provided to subsidize the modernization of electric utilities. Some utilities see no need to decarbonize or are governed by climate deniers, and if they do not want to take advantage of renewable energy subsidies, we can get our initial greenhouse gas reductions from states eager to decarbonize. My view is not shared by most climate policy advocates who consider the Clean Electricity Program essential. [New York Times](#) reporter Coral Davenport refers to the clean electricity section of the bill as "the most powerful part of President Biden's climate agenda." She observes that:

"The \$150 billion clean electricity program was the muscle behind Mr. Biden's ambitious climate agenda. It would reward utilities that switched from burning fossil fuels to [renewable energy sources](#) and penalize those that do not. Experts have said that the policy over the next decade would drastically reduce the greenhouse gases that are heating the planet and that it would be the strongest climate change policy ever enacted by the United States."

I think the experts that Coral Davenport is relying on are not entirely correct. The \$60 billion in the infrastructure bill for grid modernization is at least as important as the clean electricity program. While I favor the clean electricity program's rewards for utilities that decarbonize, I am not particularly enamored of the penalty assessed on those who do not. All that would do is raise the price of energy since utilities will pass the costs of penalties along to consumers, and a tax on energy is one of the most regressive forms of taxation imaginable. Moreover, it would be another arena for symbolic red state—blue state battles that climate policy should work hard to steer clear of. The mindset represented by the bill is that the states need to be dragged into the world of renewable energy. Some, like West Virginia, will resist decarbonization, but many like New York State and California are doing everything they can to move away from fossil fuels. This is a moment when some states are

moving aggressively to decarbonize, and others are moving in the opposite direction. According to the National Council of State Legislators:

"Renewable energy policies help drive the nation's \$64 billion market for wind, solar and other renewable energy sources. These policies can play an integral role in state efforts to diversify their energy mix, promote economic development and reduce emissions. Roughly half of the growth in U.S. renewable energy generation since the beginning of the 2000s can be attributed to state renewable energy requirements... Iowa was the first state to establish an RPS [Renewable Portfolio Standards]; since then, more than half of states have established renewable energy targets. Thirty states, Washington, D.C., and two territories have active renewable or clean energy requirements, while an additional three states and one territory have set voluntary renewable energy goals. RPS legislation has seen two opposing trends in recent years. On one hand, many states with RPS targets are expanding or renewing those goals. Since 2018, 15 states, two territories, and Washington, D.C., have passed legislation to increase or expand their renewable or clean energy targets. On the other hand, seven states and one territory have allowed their RPS targets to expire; an additional four states have RPS targets that expire in 2021."

Electric utilities are private monopolies regulated by state governments. Punishing states that are uncertain or opposed to decarbonization is a losing political strategy and bad environmental policy. It's bad policy because it will not work. The penalty will not force utilities to reduce their use of fossil fuels. These penalties are brought to you by the same economists and policy analysts who are convinced that only a carbon tax will lead to decarbonization. In fact, some in Congress and the Biden administration have rolled out that exercise in political futility as a substitute due to the demise of the Clean Electricity Program. My view is that we should use subsidies and other policy tools to lower the price

of renewables below the price of fossil fuels. Energy costs are already too high for many families and a policy that raises the price of energy is bad politics. A policy that lowers the cost of energy is good politics. The Biden administration should focus attention and resources on the states eager to decarbonize. Enable them to build more resilient and lower-cost renewable energy systems. A modern energy system will attract business and residents. States that continue to rely on old, vulnerable energy systems and polluting fuels will lose a competitive advantage to states with modern systems. Include carbon capture and storage in the mix, and maybe even Senator Manchin will find his way to support a program that modernizes our energy system while, in states that are interested, decarbonizes the system as well. I recognize that fossil fuel companies will continue to fight subsidies for renewables, but reliable, lower-cost energy is bound to attract more political support than higher-cost energy.

The idea that price penalties will speed decarbonization is an economic theory untested by political reality. Assuming the policy was enacted, how many states and their utility regulators would sue the federal government to prevent enforcement of the penalty? The answer is every state penalized. And how long will the courts take to decide the constitutionality of the penalty? The answer is longer than the people who designed this policy think. If this is someone's idea of a policy that will accelerate decarbonization, they ought to examine America's actual political system, not a theoretical or imagined policy process.

America's electric utilities are not known to be nimble change agents or aggressive risk-takers. They are slow to invest, slow to change and heavily regulated by state governments. Getting them to change the way they generate and transmit power will not be easy or quick. It can and must be done, but the complexity of the task is significantly understated by advocates who consider the Clean Electricity Program the central and most important element of America's climate policy.

I was glad to read in Davenport's report that the administration was looking for alternative methods of reducing greenhouse gasses. There are options. As important as the grid is, solar cell and battery technologies could develop to the point that many homeowners will reduce their dependence on the grid and at some point, even cut the cord and disconnect from the grid. It happened with landline telephones and [cable television](#); Who is to say it won't happen with energy? Government research and development policy could focus resources on solar and battery technology, and tax policy could stimulate private investment in scaling up these technologies once they demonstrate promise. A national green bank could provide resources to state and local governments, NGOs and businesses requiring capital to advance renewable energy. Energy efficiency in appliances, vehicles, homes, and factories could also reduce greenhouse gasses while renewable energy technologies improve. On the utility side of the equation, the early phase of decarbonization should ignore reluctant states and focus on those eager to modernize their energy systems. While it would be better to do this nationally, the perfect should not be allowed to become the enemy of the good.

Sadly, we've seen this movie before. When Obamacare was begun, many states refused to accept the federal subsidies available to expand Medicaid. The result has been that some states have a higher proportion of poor people receiving health insurance than others. We should expect a similar, uneven start-up for decarbonization. The many projections about the impact of the Clean Electricity Program make assumptions about utility and individual behavior that may not be accurate. A close read of a particularly thorough projection by Megan Mahajan and Robbie Orvis of the Energy Innovation Policy and Technology LLC is clear about the difficulty of modeling the [energy](#) future. Their work is particularly rigorous and very useful but cannot possibly assess all factors. The political variables I highlight in this piece and the probable counter-reaction to the penalty clause of the Clean Electricity program is

impossible to model and omitted from their analysis. They do note, however that their projections are heavily based on the implementation of the penalty clause. Mahajan and Orvis conclude their projection by stating that:

"EPS modeling suggests the Infrastructure Bills could cut emissions by at least 1,500 MMT in 2030, which when combined with potential state and regulatory action could set the U.S. up to achieve its NDC of a 50-52 percent emissions reduction. Additional provisions not included in our modeling would further increase emissions reductions. An enforceable CEPP that includes the penalty is the most critical component to achieving these emission reduction levels by 2030."
(Emphasis added)

It's clear that what they term a "critical component" of American [climate policy](#) is unlikely to survive the final Build Back Better bill. But it's OK. There is no policy magic bullet that will accelerate the transition to a renewable resource-based economy. It will be a long, painful slog through the muck. We should be prepared for a generation-long transition. The strategy should be to work on multiple fronts with a wide variety of [policy](#) instruments. What works in California might not work in West Virginia and we need to develop a flexible and pragmatic approach to decarbonization. There is more than one way to accelerate decarbonization, and we need to use every tool our toolbox can hold.

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