

Our electricity system will be crucial to decarbonization efforts, both because much of our current energy comes from electricity, and because decarbonizing sectors like transportation will require significant electrification. And electricity is the sector where we have had the most success in decarbonization so far in the United States.

But there is still more to do. And in an increasingly polarized country, direct policy efforts to decarbonize our electricity system may become difficult to enact, both at the federal and at the state level.

However, there are a range of other policy tools in the electricity sector that might help advance decarbonization, policy tools that might be less politically polarizing. For the past thirty years, policymakers in the United States (and globally) have been debating and often enacting policies to “restructure” the electricity system. Restructuring involves dismantling the monopoly that traditional electricity utilities had on the generation and sale of electricity, and introducing greater competition to both sectors. Restructuring in the United States reached a peak in the late 1990s and early 2000s, and has been pushed both at the federal level by the Federal Energy Regulatory Commission (FERC) and at the state level by state public utility commissions (PUCs). It’s possible that restructuring could be an additional tool to advance decarbonization goals, if restructuring policies encourage investments in renewable electricity.

Restructuring generally addresses one of two parts of the electricity industry: generation and retail. Retail restructuring focuses on giving end-user consumers choices as to whom they purchase electricity from. Generation restructuring focuses on creating competition in the generation of electricity. While there has been significant prior research on whether and how retail restructuring might affect environmental and climate goals, generation restructuring has not been studied in depth in the United States. Moreover, if the goal is to drive decarbonization of the electricity system, that requires investments in renewable energy infrastructure - and generation restructuring is much more likely to drive those investments.

In [a new article](#), I worked with an interdisciplinary team to understand whether and how generation restructuring at the state level might advance renewable energy production and investments. We compiled data on different ways that states might restructure their generation regulatory systems, and how those had changed over time from state to state. We then examined whether restructuring policies at the state level were associated with greater renewable energy capacity or production.

We did find that one form of restructuring policy made a big difference - reducing

regulatory barriers to siting new electricity generation facilities was correlated with significant increases in renewable energy production and capacity in states that made those changes. Removing these barriers to siting could make a big difference to helping to advance renewable energy, but without potentially polarizing framings around advancing climate goals. Indeed, removing barriers to siting can be framed as efforts to reduce government intervention in the economy, potentially expanding the range of political support for the policy.

Siting restrictions have also been a high-profile topic in energy law because of arguments that local and state control over siting decisions - whether for renewable energy production or transmission lines needed to advance renewable energy - are preventing major investments in renewable energy. NIMBYs in local communities, [so the argument goes](#), are blocking crucial transitions to renewable energy. Our analysis provides support for the concern that siting restrictions on new energy infrastructure are interfering with renewable energy investments - and it also provides support for greater state intervention to reduce those obstacles.