Accelerating Decarbonization in the United States

Technology, Policy, and Societal Dimensions

SUPPORTING STATE AND LOCAL CLIMATE **LEADERSHIP**

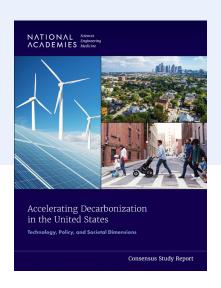
Addressing climate change is essential and possible, and it offers a host of benefits—from better public health to improved economic opportunity. To avoid the worst consequences of climate change and reach the nation's interim goal of 50 percent emissions reduction by 2030 and the ultimate goal of net zero by 2050, it is critical to pursue all opportunities for decarbonization.

The National Academies of Sciences, Engineering, and Medicine have released a comprehensive report with sector-by-sector recommendations to guide policymakers on decarbonizing the U.S. economy over the next decade and beyond. The report addresses the technical and societal elements of this necessary energy transition while providing actionable steps toward achieving deep decarbonization. Learn more and download the report at https://nationalacademies.org/decarbonization-report.

State and local governments play a particularly significant role to make sure the nation reaches its decarbonization goals. Deep decarbonization offers states and local communities a wide range of environmental and economic opportunities.

NEW OPPORTUNITIES AND INVESTMENTS

Through recent legislation like the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA), plus



Executive Orders and the Justice 40 Initiative, the federal government plans to release hundreds of billions of dollars in public investments toward clean energy projects over the next decade. Much of this funding will be funneled through state and local governments, as well as community-based organizations and businesses across the country.

However, current federal policy will get the nation only part of the way to its goal of net-zero emissions by midcentury, and state and local governments should be further supported in their decarbonization efforts.

Decision-makers at the state and regional level will play a critical role in creating a clean energy future.

A growing number of states and cities are taking steps to ensure affordability, accessibility, and equity in energy sector investments, as well as targeting investments

in communities whose health is most affected by air pollution. State and local governments and sovereign tribal nations have an unprecedented opportunity to make the most of new investments by meeting the challenge required to usher in a new clean energy economy.

While not all subnational governments have the resources to carry out new programs, this report's recommendations outline opportunities for states and local governments to build on existing policies in line with locally relevant priorities and needs. To effectively decarbonize the nation, federal policymakers must deploy locally relevant, flexible funding and capacity building in partnership with state and local governments to foster intergovernmental coordination.

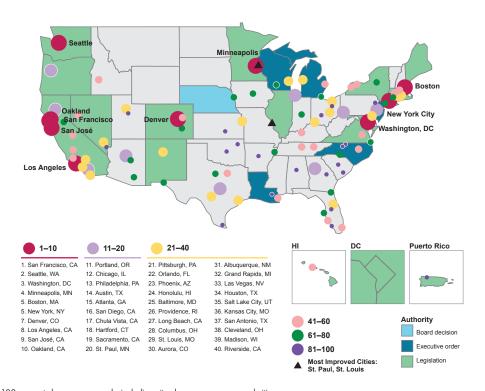


FIGURE 1 Map of states with 100 percent clean energy goals, including city clean energy scorecard cities. NOTES: The circles represent the scores for 100 U.S. cities on their efforts to advance clean energy goals. Bubble size is representative of city population. SOURCE: Committee generated with data from City Scorecard Rankings, courtesy of Samarripas et al., 2021, American Council for an Energy-Efficient Economy and Map of 100% Clean Energy States courtesy of Clean Energy States Alliance (2023) © 2023 Mapbox © OpenStreetMap.

KEY RECOMMENDATIONS

By balancing societal, environmental, and economic considerations, the nation can expect an energy transition that bene its everyone. For a full list of findings and recommendations, download the report at https://nationalacademies.org/decarbonization-report.

NECESSARY ACTIONS	ANTICIPATED RESULTS
To empower state and local governments, federal agencies like the U.S. Department of Energy and the U.S. Department of Transportation should flexibly and rapidly fund capacity building at the local level.	Visibility into decarbonization funding opportunities
To support states and localities with fewer resources, federal funders should structure competitive grants through a two-stage approach, starting with non-competitive planning and capacity-building grants, followed by competitive opportunities.	Access to federal and state funds reserved for under- resourced state, county, and local governments to implement decarbonization activities
To facilitate accessibility to federal funds, the White House Council on Environmental Quality should establish an ongoing process to evaluate and integrate feedback into federal grant applications and program management.	Opportunity to work with governments at all levels for more effective decarbonization
To ensure state and local governments can access new funds, governors, mayors, and county officials should assign or create entities to track decarbonization and economic development opportunities and deadlines .	More high-quality jobs for residents
To empower state and local governments to make the most of IRA and IIJA funding, Congress should expand and sustain existing flexible funding to subnational governments.	

COMMITTEE ON ACCELERATING DECARBONIZATION IN THE UNITED STATES: TECHNOLOGY, POLICY, AND SOCIETAL DIMENSIONS

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FOR MORE INFORMATION

This Consensus Study Report Highlights was prepared by the National Academies' Board on Energy and Environmental Systems based on the report Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions (2023). The study was sponsored by the Alfred P. Sloan Foundation, Breakthrough Energy, Heising-Simons Foundation, Incite Labs, Quadrivium Foundation, and U.S. Energy Foundation, with support from the National Academy of Sciences President's Fund. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project.

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