



FEDERAL-STATE PARTNERSHIPS: TACKLING CLIMATE THROUGH INFRASTRUCTURE

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Summary

From January–July 2021, The Nicholas Institute for Environmental Policy Solutions (NI) and the Center for the New Energy Economy (CNEE) conducted a series of conversations with state leaders and have identified several specific policy priority areas relevant to infrastructure proposals. These policy areas and approaches have been repeatedly highlighted by state leaders contacted by NI and CNEE. This report highlights either emerging areas for states or cross-cutting needs that were consistently cited by states as important. This is not a list of state priorities for programmatic funding—such as how much funding should go to specific public investments—but areas that states seek to prioritize in partnership with the federal government.

These areas consisted of:

- Climate Resilient Infrastructure Investments
- Building a Federal Navigator Service
- Just Transitions for Coal Communities
- Climate Capitalization
- Environmental Justice Community Investment

An overview of the information provided on each topic area is provided below. For further information, please contact NI (nicholasinstitute@duke.edu) or CNEE (Suzanne.Tegen@colostate.edu).

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Citation

Profeta, T., and S. Tegen. Federal-State Partnerships: Tackling Climate through Infrastructure.” NI PB 21-02. Durham, NC: Duke University.

Climate Resilient Infrastructure Investments

Climate-resilient infrastructure is needed at a major scale. NI and CNEE identified the following priorities based on discussions with states:

- Build EV infrastructure, charging stations (public and personal), electrified mass transit/passenger rail
- Increase state weatherization funding
- Implement grid modernization
- Invest in broadband and rural electrification
- Deliver climate resilience funding (coastal restoration, wildfire resiliency, flooding adaptation, water resource/drought management, land use incentives, etc.)
- Develop green infrastructure banks

Further conversation raised concerns regarding the implementation of many of these initiatives, including the eventual substantial loss of highway revenue from decreased gas consumption, the parallel need to increase funding outside of green infrastructure—thus allowing states to divert more internal funding to their climate efforts—and a need for further guidelines around the equitable allocation of investments in line with the Biden Administration’s environmental justice goals.

Building a Federal Navigator Service

As many state and local energy programs have discovered, a service devoted to navigating requirements associated with federal funding can persuade interested parties from thinking about an idea to acting upon it. This is largely because the process of determining needs and finding someone to answer questions can be a time-consuming process.

The same logic applies in the instance where large federal programs have requirements and restrictions that are unusual for states and tribes, when those programs are being developed simultaneously at both the federal and the state level, and when there is an interest in deploying the programs and the federal investment quickly and efficiently.

1. STREAMLINING INFORMATION WHILE STRENGTHENING FEDERAL AND STATE PARTNERSHIPS

A navigator service managed by the federal government would serve as a funnel for information for those developing and managing programs at the state level. This would ideally include individuals that would be available to state energy offices and tribes to answer questions about funding, restrictions, monitoring, and reporting requirements as well as addressing unique challenges faced by states. The individuals would focus on specific regions of the country so they would be able to connect regional efforts that may be able to increase programmatic efficiency and impact.

2. FACILITATING STATE COMMUNICATION WITH FEDERAL AGENCIES

The service’s second role would be to connect state energy offices with the specific individuals in agencies across the federal government who could assist states with questions and ideas they may have for federal and state coordination. The federal government is a large bureaucracy and state energy offices and tribes would benefit greatly from a mechanism to assist them in navigating it in such a way that they can easily identify and contact a person who can address their specific questions or issues.

3. SHARING OF BEST PRACTICES AND PRE-APPROVED “PROGRAM IN A BOX” OFFERINGS FOR STATES

A final role of the navigator service would be to assist states that do not have programmatic offerings to quickly develop and deploy effective programs that can be pre-approved for use and supported by federal funding. We call this a “Program in a Box” approach that pulls from state best practices across the country while combining those efforts with the opportunities and requirements (tracking, reporting, contracting, etc.) of federal funding. This will save a great deal of time in the deployment of programs while sharing best practices and fast-tracking impacts and efficiency of the federal investment.

Just Transitions for Coal Communities

The global energy sector is in transition: coal plants are closing earlier than originally anticipated and are being replaced by cleaner, less expensive energy sources. Policymakers can help to ensure that the coal workers who have powered our nation with reliable energy for decades are not left behind in this transition.

Most of the coal that has fueled our economy is concentrated in only a few states.¹ The burden on coal workers is unevenly distributed and will not be well funded if solely left to the states. Coal-reliant communities are significantly impacted by the energy transition and will need specifically catered assistance.

Because current federal strategy is limited, there are multiple opportunities for the federal government to support states and for government entities to work collaboratively.²

Some federal programs have either been proposed or already exist that can aid in this transition but will have to be expanded, improved, and possibly revived to have a meaningful impact. Some examples are:

- [2021 RECLAIM Act](#)
- [Advanced Manufacturing Tax Credit](#) – Created by the American Recovery and Reinvestment Act (ARRA)
- Department of Labor’s [Trade Adjustment Assistance \(TAA\) program](#)
- Appalachian Regional Commission’s [Partnerships for Opportunity and Workforce Economic Revitalization \(POWER\) Initiative](#)
- The Economic Development Administration’s (EDA) [Assistance to Coal Communities \(ACC\) program](#)
- Office of Surface Mining and Reclamation Enforcement – [Abandoned Mine Land Economic Revitalization](#)

Further strategies for partnership between state and federal entities are listed below.

- (1) The federal government can coordinate with State Energy Offices and State Economic Development Offices to expand eligibility and increase flexibility. See Colorado’s [Just Transition strategy](#) and the Just Transition Fund’s [Blueprint](#).
- (2) Temporary wage and health care differentials and short-term replacement funds for loss of property taxes and other revenues.
- (3) Let communities lead their own transitions by providing organizational and technical support. In addition, governments should work to provide technical support for communities early and provide services and benefits before the closure of coal-fired power plants or local mines.
- (4) The CNEE [Energy Transition Academy](#) is one example of bringing leaders at different levels of government together to learn from each other and coal workers. Connect county commissioners and state energy offices in coal-reliant states.
- (5) Fund long-term efforts that promote community resilience and savings and attract private capital (e.g., Colstrip and other community funds or endowments).
- (6) Reclamation and remediation should be carried out by local labor. These jobs are not a permanent solution but can provide an important transition period for these impacted communities. Legislators and regulators can collaborate with workforce offices to ensure local jobs and benefits.
- (7) Utilize existing coal infrastructure, if possible. Buildings, transmission lines, substations, other infrastructure, land and water rights could be repurposed to benefit the electrical grid and future energy or other development.

1. Wyoming and West Virginia combined account for over half of the nation’s coal and more than a third of the nation’s coal miners, but *only 0.5% of the nation’s GDP*.

2. The National Academy of Sciences published [A Comprehensive Policy Approach to a Just Transition](#).

Climate Capitalization

As states grapple with the need for mitigation and adaptation to climate change, both novel and ongoing projects and programs that increase capitalization are of interest. Climate capitalization programs can allow for public funding to reduce risk for private investors, the development of centralized institutions to manage investment in a broad assortment of programs, and the provision of increased subsidization of investments in highly impacted and marginalized communities.³

There is a range of models for this at both the federal and state levels. State revolving funds have garnered wide bipartisan support and could benefit from an influx of capital to further support loans and fund additional projects across a wide array of clean energy needs. Thirty states have established loan programs for energy efficiency and renewable energy improvements⁴ while Drinking Water Revolving Loan Funds exist in all 50 states and Puerto Rico.⁵

State clean energy funds provide capital and financial tools designed to support projects that are typically avoided by private investors. These tools can take the form of providing loan loss reserves to mitigate investment risk, connecting public and private entities and overcoming information gaps, directly lending to underinvested clean energy projects, and bundling smaller projects into larger and more appealing portfolios.

Some states have already moved forward in creating these programs through a variety of mechanisms through both legislative means as well as partnerships between government agencies and various nonprofit entities. Some examples of these programs are:

- [Colorado Clean Energy Fund](#)
- [MD Clean Energy Capital Program](#) and [Climate Access Fund](#)
- [Michigan Saves](#)
- [NC Clean Energy Fund](#)
- [Florida Solar and Energy Loan Fund](#)
- [Rhode Island Infrastructure Bank](#)

A variety of guidance material on fund formation is available,⁶ and federal programs can provide initial capital for these programs. Some federal sources that can be used to provide initial investments include:

- Community Development Block Grants
- Weatherization grants
- DOE State Energy Programs
- Surface Transportation Block Grants
- BUILD Grants
- FEMA resiliency programs.

3. <https://nicholasinstitute.duke.edu/sites/default/files/publications/a-guide-to-green-bank-design-in-the-southeast-web.pdf>.

4. [Revolving Loan Funds](#) | Department of Energy.

5. [How the Drinking Water State Revolving Fund Works](#) | [Drinking Water State Revolving Fund \(DWSRF\)](#) | US EPA.

6. Nicholas Institute [report](#) provides further explanation and exploration of various formation strategies and the Coalition for Green Capital created a [resource library](#) that contains introductory and state-based materials.

Environmental Justice Community Investment

Of the many provisions included in President Biden’s EO 14008: Tackling the Climate Crisis at Home and Abroad, substantial attention has been given to the Justice40 Initiative. Justice40 outlines a goal of allocating 40% of climate investment “benefits” to “disadvantaged communities.” Though lauded as an important step in addressing environmental injustices exacerbated by climate change, the initiative has garnered substantial questions from policymakers across all levels of government concerning its implementation.

- How shall a community be classified as “disadvantaged”?
- What constitutes a “benefit”?
- What levels of flexibility will be incorporated for states that have already taken action to combat environmental injustice, or have specific needs in bolstering their climate resiliency?

In analyzing potential pathways of implementation, NI and CNEE examined various methods of addressing community classification and provided an overview of the strengths and deficiencies of several public-facing environmental justice mapping tools already utilized at the state and federal levels. NI and CNEE also listed an array of state-level actions that define “disadvantaged,” “overburdened,” and “environmental justice” communities more broadly and compared them to recent recommendations made by the White House Environmental Justice Advisory Council (WHEJAC), as well as other potential federal language.

NI and CNEE mapped the differences in community classifications using the definition of “overburdened communities” found between New Jersey’s S-232 and WHEJAC [recommendations](#) when applied to demographically diverse states. Key findings from this analysis include major differences in community classification based on:

- *National vs. state-relative thresholds:* Applying NJ’s definition across all states led to vast differences in population inclusion compared to the state-relative metrics.
- *Individual racial classification vs. aggregate:* Under WHEJAC recommended guidelines, the inclusion of communities with higher levels of community members than the state average for *any* minority group led to as many as 83% of all community block groups qualifying as an environmental justice community in a particular state. Measurement of minority community members in aggregate resulted in more consistent percentages of qualifying communities across states.
- *Inconsistencies in geographic scope:* Definitions provided by WHEJAC recommendations and other proposed federal legislation utilize community block groups, census block groups, and ambiguous “geographically distinct areas.” This can lead to inconsistency in community classification.

The goal of this report was not to provide definitive answers to these issues but to compare various methods of community classification, highlight differences with previous state action, and raise potential issues that can be presented by various definitions and geographic distributions of disadvantaged communities under Justice40. NI and CNEE raised further questions surrounding the allocation of benefits through job creation, cross-community infrastructure, and whether benefits—once directly defined—will be counted at the local, state, or national level.

GAPS IN STATE CAPACITY

In addition to the specific issue areas listed above, NI and CNEE identified a need for states to increase internal capacity to develop new strategies that address their climate priorities.

Key steps include:

- Procuring funding to increase staff across state agencies specifically devoted to cross-agency climate collaboration.
- Incorporating health officials into the development of environmental policies to clearly articulate the broad benefits of responsive and effective climate policies in the wake of the COVID-19 pandemic.
- Breaking down information silos across agencies through new data management and reporting practices.
- Devoting increased funding to economy-wide emissions modeling.

The NI recently conducted [emissions modeling for the North Carolina power sector](#) in an overview of potential carbon policies. States with limited experience in this space will likely have to invest resources and expertise beyond their borders to achieve their goals.

WHEJAC recommendations call for federal projects to be executed equitably and reflect the lived experience of communities that will be directly affected. To integrate these concerns, states will have to bolster their internal infrastructure for community engagement in policy creation and project design.

A variety of pre-existing federal programs can be used to fund state climate initiatives. However, programs with the flexibility to be used for staffing, technical improvements, and outreach infrastructure are limited. To develop this type of assistance, states can advocate for such resources from their federal partners.

Additionally, over the previous four years, federal agencies like the EPA, DOE, and DOI have seen significant turnover, downsizing, and a realignment of focus away from some of the policy priorities that many state leaders are anticipating. NI and CNEE identified that re-establishing ongoing and substantive conversations between federal and state policymakers is critical to investment implementation.

NAVIGATING FEDERAL INVESTMENT REQUIREMENTS

Unprecedented clean energy, emission reductions, and equity investments are vital to building a clean and equitable future, but to ensure their successful implementation, NI and CNEE identified a need at the federal level for:

- Increased clarity regarding updated building codes.
- Clearer definitions of “disadvantaged communities” and “benefits” in the context of investing in environmental justice communities.
- Navigable guidelines for rebate programs that are advanced at the federal level.

BEST PRACTICES IDENTIFIED

State experimentation is a benefit of a cooperative federalist system, and a key goal of these conversations was to facilitate the sharing of best practices across state lines. Using the 2019 American Council for an Energy-Efficient Economy (ACEEE) [State Energy Efficiency Scorecard](#), we provided examples of replicable state programs across areas of common priorities to state officials, including:

- Low-income energy efficiency
- Financial incentives

- R&D initiatives
- EV deployment
- Climate resiliency
- Local community pollution monitoring
- Private finance capitalization

CONCLUSION

Forming a more effective and efficient federal-state partnership requires increased efforts to share information between various levels of government, adopt best practices across state lines, highlight gaps in capacity, and build relationships between federal and state officials. This report is not exhaustive but does represent a summary of the conversations conducted. Further research, interviews, and increased sharing of institutional knowledge would help empower states to achieve their decarbonization and resiliency goals.