

Community Hubs to Support Energy Transition

Issue Brief 22-02 by **Wesley Look, Mark Haggerty, and Daniel Mazzone** — February 2022

1. Introduction

The increasing competitiveness of clean energy and growing efforts to reduce greenhouse gas emissions are reshaping the US energy economy. For energy communities—cities, towns, and regions with deep ties to fossil fuel production and electricity generation—this transition may pose significant costs for workers, businesses, and local governments. Federal investments through things such as workforce development and infrastructure expansion can mitigate such costs and provide new opportunities for prosperity.

A critical component of making such investments successful is tailoring them to the specific needs and unique circumstances of each community (Davis and Dumont 2021). Such tailoring can improve outcomes for workforce development programs (Harper-Anderson 2008; Pynes 2004) and possibly the cost-effectiveness of federal economic development efforts (Markusen and Glasmeier 2008).

Such tailoring requires mechanisms for coordination between local leaders and the federal government. Local leaders, often working through community-based organizations (CBOs), tend to have the most nuanced understanding of the needs and opportunities in their communities and the local relationships and trust needed to get projects done. However, especially in low-income and isolated rural communities, they often lack resources to fully engage with the variety of

federal programs that could benefit from their expertise (Pipa and Geismar 2020; Ajilore and Willingham 2020; Haggerty et al. 2018). It is therefore reasonable to consider that a federal energy transition policy would not only invest in workforce, infrastructure, and economic development but also local capacity required to effectively implement such policies.¹

This brief provides an overview of one option for building and supporting capacity in energy-dependent communities: creating a network of community “hubs” (Aspen Institute 2019; BlueGreen Alliance 2021) supported by a federally chartered development corporation. This concept leverages recent policy roadmaps produced by stakeholders from energy regions in transition emphasizing the importance of customization and investing in local leadership (Just Transition Fund 2020; BlueGreen Alliance 2021). Community hubs and the federal development corporation described here also share institutional design features with recommendations from the National Academies of Sciences (2021) related to just transition and a congressional proposal to reform the fiscal relationships between natural resources and rural economies (Forest Management for Rural Stability Act 2019; Iglehart 2018; Haggerty 2018).

The Biden Administration’s Build Back Better (BBB) framework recognizes the need for local capacity building in rural America. For example, BBB proposed a \$1 billion investment in a Rural Partnership Program

¹ Capacity is generally defined here as “increasing the ability of people and institutions to do what is required of them” (Murray and Dunn 1995).

(RPP),² which is intended to build the capacity of local organizations. Flexible, multiyear grants could be used to support collaborative planning, staffing, and implementation of locally led economic development efforts. Collaborations may include rural and Tribal governments, nonprofits, philanthropic organizations, community colleges, and other CBOs.

These proposals and efforts reflect an embrace of place-based and people-centered models for economic development (Shambaugh and Nunn 2018; Topolsky 2021, Muro et al. 2021) and of government's role in shaping markets and driving innovation (Mazzucato 2021). In the following sections, we provide detail on what we mean by a “community hub” and outline the key structural components of how a supported network of hubs might work—including the potential challenges.

2. Energy Community Hubs

For the purposes of this discussion, energy community hubs (ECHs) are place-based organizations (public or private) working to facilitate economic and community development in cities, towns, and regions transitioning from existing fossil fuel extraction, processing, or industrial consumption (e.g., coal-fired power plants). ECHs often provide the sort of local leadership and capacity mentioned above.

The Community Strategies Group at the Aspen Institute (2019) defines community hubs as “intermediaries” between local and federal entities and between various regional stakeholders. This intermediary function moves in two directions by (1) facilitating access to federal programs for local community members and (2) providing the grounded insight on local priorities to federal policymakers and administrators.

Many ECHs also provide direct services, such as low-interest financing (commonly offered by community development financial institutions) or workforce training and career services—sometimes offering multiple services to meet the needs of their region. In summary, community hubs are the “Swiss Army knives” of local

economic development (Topolsky 2021) and may often wear multiple hats at once.

The authors of the Aspen Institute paper argue that to be most effective in supporting economic development, such hubs would not only meet the immediate needs of their community but also seek to play a transformative role—addressing the “root causes” of poor social and economic outcomes and strengthening “the essential components that form a better foundation for lasting prosperity” (Aspen Institute 2019). This logic may be particularly relevant for energy communities undergoing systemic changes to the economy and way of life.

Many, but not all, energy communities are isolated, rural, and small, where transitions are often most challenging (Haggerty et al. 2018). Therefore, much of the discussion around ECHs in this paper focuses on rural places.

2.1. Institutional forms

Many types of local and regional institutions and entities can serve as an ECH, including governmental or nongovernmental organizations. A rationale exists for any new federal policy focused on building local capacity to identify and work with existing, trusted organizations, rather than establishing new ones. We do not recommend any single type of institution, recognizing that the most important feature of any ECH is that it is trusted by the community and has a track record of operating effectively, fairly, and transparently. A variety of institutional forms have these features, and the specific form that provides the greatest benefit may vary by community.

For example, the Secure Rural Schools and Community Development Act establishes collaborative Resource Advisory Councils (RACs) to recommend how to spend restoration and economic development dollars related to federal public lands. In some regions, RACs function well and have the trust of agency staff, county governments, and CBOs (Kusel 2006). However, some RACs struggle to appoint members, lack standing in the community,

2 For more information on the Biden Administration's Build Back Better framework (the American Jobs Plan) and the Rural Partnership Program, see <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>.

and have returned funds to the US Treasury unspent (CRS 2020). The experience of RACs demonstrate that no single institutional form will succeed across a heterogeneous political, economic, and cultural rural landscape.

Examples of government entities that have some features of an ECH include local and regional governments and some locally based federal programs, such as the Economic Development Districts (EDD) of the Economic Development Administration (EDA) and the network of 2,400 American Job Centers (AJCs) administered by the Department of Labor's Employment and Training Administration (ETA).³ Government entities may be constrained by their mandate and by politics, however, which may limit their ability to facilitate diverse and effective collaborations. Therefore, governmental entities may not be as flexible as smaller organizations, such as community-based nonprofits.

Local governments provide a variety of services, including the facilitation of economic development (Istrate 2014). One model that relies primarily on local and regional government is the network of Local Development Districts (LDDs) that are central to the work of the Appalachian Regional Commission (ARC). The ARC LDDs are multicounty planning and economic development organizations composed primarily of local elected officials and their appointees, as well as representatives from business, academia, and other stakeholders. In many cases, LDDs are existing regional councils, regional planning commissions, or other forms of regional government. LDDs aim to identify community priorities for ARC programs, facilitate local economic development planning, and further build local leadership. They are supported as a network by the ARC and the Development District Association of Appalachia.⁴

The EDA's EDDs are regional entities that must work collaboratively with local governments and other stakeholders to conduct and implement Comprehensive Economic Development Strategies.⁵ AJCs, similarly, are overseen by state and local Workforce Development

Boards consisting of stakeholders from business, government, and civil society. These centers, which could be considered as hubs (with a narrow scope around workforce training), provide a range of services to both workers and employers, including assistance with searching for jobs, unemployment insurance claims, referrals, and recruitment. AJCs collaborate with each other and provide access to services within the ETA and other federal agencies.

Given the constraints on the aforementioned government entities, yet another approach for supporting local capacity would be to directly fund CBOs—such as nonprofit organizations (NPOs) and nongovernmental organizations (NGOs)—conducting community development work. Some researchers have argued that the most transformative local capacity may come from such NGOs (Aspen Institute 2019). In Indian Country, Tribal Colleges and Native NGOs can be important hubs. For example, Plenty Doors Community Development Corporation, an indigenous NGO, and Little Big Horn College are leading a community-based initiative to bring researchers, public health and community development experts, and local leaders together to address the risks that the energy transition poses to the vulnerable populations on the Crow Reservation in Montana. The College and Plenty Doors provide essential training, networking, fundraising, and convening capacity to communities and people already facing persistent poverty, crumbling infrastructure, and systemic racism even before the loss of coal employment and revenue. Other examples of CBOs may include community development financial institutions, community foundations, chambers of commerce, or other types of trusted NGOs.

The potential of CBOs to provide transformative local capacity is high but not certain. Many economic development success stories often reveal the efforts of a single individual or a small group working in a specific context rather than a transferrable institutional framework that guarantees similar success elsewhere (Flora 1998). The intent of establishing a system for

3 For more information on American Job Centers, see <https://www.dol.gov/general/topic/training/onestop>.

4 For more information on the ARC LDDs, see: <https://www.arc.gov/local-development-districts/> and <https://www.appalachiandevelopment.org/about/>.

5 For more information on the EDDs, see: <https://eda.gov/edd/>.

supporting ECHs is not to select a single institutional form but to identify and support existing, effective, and trusted entities in each energy community. Doing so likely requires an intermediary at the national level, a role that could be fulfilled by a nationally chartered organization, described in the next section.

3. A Federally Chartered Organization to Coordinate and Deliver Capacity Assistance

One avenue for supporting ECHs at the federal level would be a congressionally chartered organization (CCO)—a corporation created by Congress through a federal charter enacted in statute to network and deliver resources to ECHs nationwide. For example, a recent National Academies of Sciences panel (2021) recommended forming a federally chartered corporation to serve energy communities in transition. The committee considered a CCO as an ideal institution that has the long-term view to sustain locally led strategies over multiple years and the autonomy to package and coordinate among the many rural development programs siloed within multiple federal agencies.

In another case, bipartisan legislation introduced in the US Senate (Forest Management for Rural Stability Act 2019) proposed a CCO to manage a federal endowment that would replace annual revenue sharing payments to timber-dependent communities. The endowment would save and reinvest resource revenue to create a permanent financial asset. The proposal is unique in that the CCO would act as a fiduciary to the beneficiary timber counties and manage the endowment and distribute the proceeds to support local schools and infrastructure.

One example of an existing CCO that serves a function similar to what we discuss here regarding ECHs is NeighborWorks America, created in 1978 to support a network of nearly 250 NGOs working to increase access to affordable housing.⁶ NeighborWorks provides direct

federal grant funding to its members each year and helps them maximize the impact of those funds through training and technical assistance. NeighborWorks and its members can also raise private funds for both organizational costs and the capital investments needed to build affordable housing (NeighborWorks America 2020).

3.1. Considerations for Building a CCO and Network of Energy Community Hubs

For the remainder of this brief, we focus on the creation of a national CCO to support the development of a network of ECHs. A CCO for energy communities could provide several services. Perhaps most importantly, it could be the vehicle for Congress to appropriate flexible capacity-building funds to be delivered to ECHs. It could also provide a networking function to enable sharing best practices and other resources among ECHs and federal funding agencies. To build and sustain ECH capacity and expertise, a CCO—such as NeighborWorks—could provide trainings, technical assistance, and monitoring and assessment of transition programs.⁷ Finally, a CCO might also serve as a concierge between the ECHs and federal agencies offering funds and other resources.

Below we discuss some key issues for policymakers to consider if they were to design a CCO for energy communities. We do not intend for this to be a policy proposal, but rather a summary of issues policymakers may want to consider.

3.1.1. Stipulating the scope and governance structure of a CCO for energy communities

In creating a CCO, a first step is clearly defining its purpose, structure, and powers. This includes forming a board of directors, which would develop comprehensive strategies for the CCO and determine the structure of the ECH network. Therefore, it is critical to appoint board members that possess the proper incentives and

6 For more information on NeighborWorks America, see https://www.neighborworks.org/Documents/AboutUs_Docs/AboutUs_IntroductionToNeighborWorksAmerica.aspx.

7 Assessment and evaluation could be conducted internally or contracted to independent entities.

expertise to best serve energy communities in transition. Issues related to the makeup of the board are discussed later in this brief.

It is also important to determine if, or when, the CCO will sunset. A 2011 report from CRS raised concerns about the perpetual lifetime of many CCOs—including that CCOs can operate past the point of being effective or efficient (Kosar 2011a). Given that a transition to a net-zero energy system is likely to occur over many years and the important role of community hubs in facilitating economic and community development, a relatively long duration is indicated. One proposal to create an endowment to stabilize federal timber revenue sharing payments contemplates making it permanent (Forest Management for Rural Stability Act 2019). State trust lands are established with a unique fiduciary mandate that requires managers to permanently protect the value of the original land and resource endowment. Proceeds from the sale of trust lands or nonrenewable resources are deposited into a permanent fund that is invested to generate revenue for current and future beneficiaries (Souder and Fairfax 1996; Haggerty et al. 2021). These proposals and mandates are consistent with the theory and practice of managing natural resource revenue to build wealth and prosperity in peripheral resource regions (Gunton 2003). When considering funding for ECHs, multiple sources, funding models, and timelines should be considered.

The size of the ECH network must also be determined—by either the CCO board or Congress. It is beyond the scope of this paper to identify an optimal network size, but we offer a few thoughts for policymakers to consider.

Designing the CCO to support only a few communities will mean not all communities receive the support they need and therefore that the CCO is unable to address the national challenge of energy transition. On the other hand, assuming relatively fixed funding levels, supporting too many hubs runs the risk of spreading resources thin, leading to an inefficient and ineffective program. NeighborWorks America caps its network at 250 members, partly informed by the above factors.

As the NeighborWorks example suggests, a key component of determining the optimal size of the

network would be the size of the CCO budget (determined by annual appropriations and other funding resources, as described below). However, perhaps the size of the budget itself ought to be determined by first identifying the optimal scale of the network, based on assessing the need and the most effective geographic scope for a single ECH to cover (on average). For example, some have argued that the county level is an appropriate scale of engagement (Freshwater 2021). If this were indeed ideal, and it were determined that each county should be served by a single ECH, then the best network size would be the number of counties identified as energy transition counties. This raises another question for the CCO or Congress to resolve: to ensure capacity assistance is targeted appropriately, what criteria should be used to identify energy transition communities (those communities eligible for CCO support)?

Answering the question of need and eligibility will require considering community characteristics (e.g., relative isolation, industry specialization, workforce education attainment, local government dependence on energy revenue), all of which together indicate the level of risk a community faces in energy transition. The Biden Administration’s Interagency Working Group on Coal and Power Plant Communities, for example, used employment as a metric of dependence on the coal industry that could be used to identify and prioritize funding. However, labor market impacts alone may not provide an adequate reflection of risk—for example, the fiscal solvency of local government and legacy costs of remediating abandoned mine lands (and associated environmental pollution) may both be key determinants of risk and need. Recent work (Raimi 2021) has begun to assemble multiple criteria (and data) for identifying vulnerable energy communities, but more is needed—including a stakeholder engagement process—to establish a comprehensive set of criteria. Eligibility metrics must be carefully selected and assessed with robust stakeholder input.

In addition to these considerations regarding CCO network size, a strategy must be established for cases where a community has no existing entity that could serve adequately as a community hub. Policymakers will need to decide whether the CCO should support creating new ECHs or extend the reach of other existing

ECHs. And, if the CCO is engaged in creating new ECHs, policymakers will need to specify a process by which this is conducted.

3.1.2. Federal resources for operating costs, training, and technical assistance

The central role of the CCO would be to distribute federal capacity-building resources to its network of ECHs. These resources are likely to fall under four categories: block grant capacity funding; competitive grant funding to support implementation, individual projects, and innovations; ECH employee training; and technical assistance, monitoring, and assessment. These dollars may come from new congressional appropriations, private sources, or revenue sharing from states.

Block grants delivered by the CCO via formula can be important because capacity-constrained CBOs often have difficulty accessing competitive funding. However, determining need in a block grant allocation formula is difficult and requires attention to writing formulas so that they best identify the communities with lowest capacity and greatest need for assistance. Lessons may be learned from existing and proposed federal funding formulas. For example, the US Treasury is currently tasked with developing a formula to distribute payments to resource-dependent counties that host US Forest Service and certain Bureau of Land Management lands (Templeton 2021). The same criteria Treasury proposes to measure the characteristics of these public land counties could inform a CCO formula for allocating block grants among energy transition communities. Formulas also ought to be adaptive and structured in parallel with an ongoing assessment of outcomes.

Competitive grants could build upon block grants by supporting additional ECH capacity-building efforts, such as hiring additional staff, purchasing software or office space, and funding specialized staff training (beyond the general training programs considered later).

Competitive grants could also fund individual economic development projects, such as detailed regional planning, capital investments in infrastructure, or funds to support workforce training. That said, a broad array of existing federal programs support this latter category—including agencies such as the EDA and USDA Rural Development. One question that policymakers may want to consider is whether it makes sense for a CCO to provide additional funds for these similar investments (to bolster existing federal programs). If the CCO were to do so, it would raise the question of whether it would only fund ECHs, and if so, whether the ECHs would then become sub-grantors to implementing entities (such as construction companies for infrastructure projects or community colleges for workforce training).

Training and technical assistance is also needed to provide ECH employees with the opportunity to develop their skills in all aspects of their work, including organizational management and leadership, community organizing, and fundraising. NeighborWorks America offers professional development workshops and partners with the Harvard Kennedy School in its Achieving Excellence program to provide leadership training to executives of NeighborWorks members.

Additionally, to learn from the experimentation that occurs at the ECHs and build a base of knowledge about what works, it would likely be valuable to invest in evaluation. Self-evaluation and third-party evaluation are both important,⁸ and it is helpful to include systems of evaluation in programs from the start. Evaluation of the individual activities at the ECH level, as well as the overall activity of the CCO—and its ability to facilitate meaningful capacity development—would be beneficial. However, given that many CBOs in energy transition communities do not have the resources to manage complex grants and simply need basic funds to cover organizational operating costs without being faced with onerous reporting requirements, the CCO will need to strike a balance between flexibility and ease of implementation on one hand and the need to ensure outcomes are rigorously assessed on the other hand.

8 For example, the US Economic Development Administration developed a performance measurement and program evaluation jointly with a third-party contractor. EDA collects data and measures performance, and it is subject to evaluation by the Office of Management and Budget and Government Accountability Office in addition to funding committees in Congress. See <https://www.eda.gov/performance/>.

The ultimate purpose of assessment and evaluation must be building a base of knowledge about what works to successfully transition communities away from dependence on fossil fuels.

3.1.3. Interface with other federal policies to assist energy transition communities

ECHs can act as the bridge between several sets of stakeholders and funders that must coordinate to achieve results. This includes the vast array of federal grant and other programs designed to assist energy communities in transition. Navigating this array of programs can be a complex task for any organization and often goes beyond the capacity of many ECHs. A CCO could provide valuable support by acting as a federal agency concierge for ECHs. For example, the American Rescue Plan includes \$300 million for economic development from the EDA for coal communities in transition (EDA 2021). A CCO could help ECHs (and the communities they serve) apply for funds from programs such as this, while perhaps also identifying complimentary resources from other federal programs to maximize impact.

A development corporation can be designed to facilitate many aspects of rural development beyond those experienced by communities facing energy transition. If a CCO is established to deliver assistance to energy communities, it may be ideal to design it in a way that allows for expanding services to a wider set of distressed communities. For example, the Brookings Institution recommends a US rural development corporation, modeled after the Millennium Challenge Corporation, as a new institution to enable and support holistic, community-led and -owned economic development efforts across rural America (Pipa and

Geismar 2020). Rural communities across the US face a similar set of challenges associated with limited capacity to navigate complex regulations, complete demanding grant and loan applications, raise matching funds, and deliver quality services across vast regions. A CCO can be an important institution where flexible funding, local ownership of strategies, a long-term view, and coordination among multiple federal agencies and states is necessary.

3.1.4. Determining the use of federal dollars

Many have recognized the importance of flexibility in the use of federal capacity building funds (Aspen Institute 2019; NeighborWorks America 2020; Just Transition Fund 2020) understanding that every rural community has a unique set of assets and challenges. ECHs and communities require flexibility to negotiate and deploy resources where they are most appropriate and effective. For funding to be flexible, the CCO will likely need authority and autonomy to determine how such funds are used.

Flexibility and certainty of funding can be achieved by ensuring the CCO has access to multiple funding streams, including 1) mandatory appropriations (not subject to the politics of annual appropriation debates) that sustain the CCO and support long-term compacts and capacity support;⁹ 2) dedicated disbursements from an endowment that would provide block-grant-style, flexible funds to local governments;¹⁰ and 3) annual appropriations passed through to ECHs as competitive grants. It also could be useful for the CCO to have some authority to coordinate and package grants, loans, and financing available from the many existing federal rural development programs (as mentioned above), as well as the authority and fiduciary trust to accept and

9 For example, the National Academies panel mentioned here recommends a “no year” appropriation to a transition corporation to avoid the uncertainty and politics associated with the annual appropriation process (National Academies of Sciences 2021).

10 State land trust funds, such as New Mexico’s Land Grant Permanent Fund, are examples of endowments built from fossil fuel revenue that provide stable and predictable public revenue. See <https://headwaterseconomics.org/tax-policy/new-mexico-state-land/>. The US Endowment for Forestry and Communities is a federally chartered nonprofit organization that manages a permanent fund endowed with federal softwood lumber trade settlement funds. Distributions fund the organization’s mission of advancing systemic, transformative, and sustainable change for the health and vitality of the nation’s working forests and forest-reliant communities. See <https://www.usendowment.org/>.

pass-through private capital, philanthropic grants, and charitable donations.¹¹

4. Potential Challenges and Drawbacks of Supporting a Network of Energy Community Hubs

The goal of building a network of supported ECHs is to increase the capacity of energy communities to achieve transformational development outcomes. Despite many merits to this approach, there are also reasons to question its effectiveness.

One challenge with the CCO model described in this paper lies in the fact that an important aspect of capacity building involves connecting transition-affected communities with federal funding, essentially establishing vertical contracts between CBOs and federal agencies. Forming such contracts is nontrivial and introduces a range of principal-agent concerns arising from misaligned incentives and priorities (between the agencies delivering assistance and the communities where assistance is needed).

Federal agencies may be incentivized to deliver funding in line with the political priorities of an administration and the way federal agencies are evaluated.¹² On the other hand, ECH incentives may align with community leaders and existing power dynamics, maintaining the status quo rather than advancing forward-looking transition strategies or the priorities of funding agencies. It is inherently costly and difficult for the federal agency to observe the behavior of the ECH, so the agency may be less inclined to provide funding if the perceived incentives of the ECH are not in line with theirs. An ECH may be less likely to access funds without information about federal agencies. These information asymmetries may lead to a lack of mutually beneficial investments.

To be fair, these information asymmetries and principal-agent problems exist in any context where the federal government is aiming to engage with local organizations and issues. Indeed, the merits of a CCO are in large part due to its unique ability to overcome such challenges. Furthermore, a CCO with a carefully constructed board of directors can help mitigate some of these asymmetries and inefficiencies. A board with both local and federal expertise can help identify the needs of both communities and federal agencies. The NeighborWorks board (determined by statute), for example, consists of members from the Department of Housing and Urban Development, the Federal Deposit Insurance Corporation, the Federal Reserve, and other federal agencies—but not representatives from the communities it serves. Additionally, it could be difficult for a relatively small number of board members to fully represent a vast set of communities. The CCO's incentives may also differ from the ECHs—the CCO may seek to provide training, assistance, and funding where it will have substantial impact to lock in appropriations, whereas the ECHs may be focused on a long-term strategy that allows for failed experiments to learn what works. These principal-agent issues should be considered in the creation of a CCO.

Lastly, in the past, the quasi-public nature of CCOs has generated public confusion about their privileges and powers (Kosar 2011b). CCOs are typically not managed or overseen by the federal entities that created them, potentially introducing another principal-agent problem. Due in part to these issues, in 1989, the House Judiciary Committee placed a moratorium on granting new charters. However, CCOs continue to be created by Congress, so the moratorium does not appear to be binding or actively enforced (Kosar 2013).

5. Conclusion

Rural decline is often described as an inevitable process associated with economic restructuring in traditional sectors and the concentration of capital and jobs in

11 The National Forest Foundation is a federally chartered nonprofit that receives an annual appropriation from Congress and grants and donations from philanthropies and private donors.

12 For example, analysts have documented how the US Forest Service fails to realign budgets away from its timber program to the conservation and recreation programs that local communities desire in part because how Congress evaluates the agency's accomplishments for budget allocations. See <https://headwaterseconomics.org/economic-development/tongass/>.

cities with innovation economies (Porter 2018; Hibbard and Lurie 2013). The energy transition exacerbates these challenges because of the outsized importance of fossil fuel jobs and revenues in some rural US states and localities. But decline in such communities, even as energy transition occurs, is not inevitable. New embrace of place-based and people-centered economic development offers a model for locally led and nationally supported energy transition and community development. In affected energy-producing regions, a network of ECHs supported by a CCO is one model to consider for building and sustaining capacity to enable locally led economic development strategies to succeed. A CCO could play a central role in facilitating collaboration between CBOs and the federal government, though important design questions remain.

The ECHs and CCO described here draw inspiration from existing models, such as NeighborWorks America, and align with related recommendations to reform natural resource revenue sharing programs and create a national transition corporation to mitigate the economic and social implications of decarbonizing the US energy system. We intend for our ideas to contribute to important policy discussions centered around building equitable, just, and resilient economies in energy communities.

6. References

Ajilore, O., and C. Willingham. 2020. The Path to Rural Resilience in America. Center for American Progress. <https://www.americanprogress.org/issues/economy/reports/2020/09/21/490411/path-rural-resilience-america/>.

Aspen Institute. 2019. Rural Development Hubs: Strengthening America's Rural Innovation Infrastructure. Aspen Institute. <https://www.aspeninstitute.org/publications/rural-development-hubs/>

BlueGreen Alliance. 2021. BlueGreen Alliance National Energy Transition Policy Framework. <https://www.bluegreenalliance.org/resources/bluegreen-alliance-national-energy-transition-policy-framework0/>.

CRS (Congressional Research Service). 2020.

The Secure Rural Schools and Community Self-Determination Act: Background and Issues. (R41303). CRS. <https://crsreports.congress.gov/product/pdf/R/R41303>.

Davis, D.P., and A. Dumont. 2021. The “TRIC” to Fostering Shared Economic Prosperity in Rural America. In “Investing in Rural Prosperity,” Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/open-vault/2021/october/fostering-shared-economic-prosperity-rural-america>.

Flora, J.L. 1998. Social Capital and Communities of Place 1. *Rural Sociology* 63(4): 481–506. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1549-0831.1998.tb00689.x>.

S. 1643 – 116th Congress (2019-2020): Forest Management for Rural Stability Act, S. 1643, 116th Congress. <https://www.congress.gov/bill/116th-congress/senate-bill/1643>.

Freshwater, D. 2021. The Elusive Promise of US Rural Policy. In “Investing in Rural Prosperity,” Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/community-development/investing-rural/chapters/chapter02.pdf>.

Gunton, T. 2003. Natural Resources and Regional Development: An Assessment of Dependency and Comparative Advantage Paradigms. *Economic Geography* 79(1), 67–94. <https://doi.org/10.1111/j.1944-8287.2003.tb00202.x>.

Haggerty, J. H., Haggerty, M. N., Roemer, K., and Rose, J. 2018. Planning for the Local Impacts of Coal Facility Closure: Emerging Strategies in the US West. *Resources Policy* 57: 69–80. <https://ideas.repec.org/a/eee/jrpoli/v57y2018icp69-80.html>.

Haggerty, M. N. 2018. Rethinking the Fiscal Relationship Between Public Lands and Public Land Counties: County Payments 4.0. *Humboldt Journal of Social Relations* 40: 116–136. <https://digitalcommons.humboldt.edu/cgi/viewcontent.cgi?article=1073&context=hjsr>.

Haggerty, M.N., K.B. Walsh, and K. Pohl. 2021. Diversifying revenue from New Mexico's State

- trust lands. Headwaters Economics. <https://headwaterseconomics.org/wp-content/uploads/HE-NM-SLO-Revenue-Diversification-Report-2021.pdf>.
- Harper-Anderson, E. 2008. Measuring the Connection Between Workforce Development and Economic Development: Examining the Role of Sectors for Local Outcomes. *Economic Development Quarterly* 119–35.
- Hibbard, M., and Lurie, S. 2013. The New Natural Resource Economy: Environment and Economy in Transitional Rural Communities. *Society & Natural Resources* 26(7): 827–844. <https://www.tandfonline.com/doi/abs/10.1080/08941920.2012.720358>.
- Iglehart, A. 2018. Sens. Crapo, Wyden unveil bill to create SRS endowment fund, provide certainty for forest counties. National Association of Counties. <https://www.naco.org/blog/sens-crapo-wyden-unveil-bill-create-srs-endowment-fund-provide-certainty-forest-counties>.
- Istrate, E. 2014. *Strong Economies, Resilient Counties: The Role of Counties in Economic Development*. Washington, DC: National Association of Counties. <https://www.naco.org/featured/strong-economies-resilient-counties>.
- Just Transition Fund. 2020. National Economic Transition Platform. <https://www.nationaleconomictransition.org/>.
- Kosar, K. R. 2011a. Congressional or Federal Charters: Overview and Enduring Issues (RS22230). CRS. <https://sgp.fas.org/crs/misc/RS22230.pdf>.
- Kosar, K. R. 2011b. The Quasi Government: Hybrid Organizations with Both Government and Private Sector Legal Characteristics. CRS. <https://sgp.fas.org/crs/misc/RL30533.pdf>.
- Kosar, K. R. 2013. Congressionally Chartered Nonprofit Organizations (“Title 36 Corporations”): What They Are and How Congress Treats Them (RL30340). CRS. <https://sgp.fas.org/crs/misc/RS22230.pdf>.
- Kusel, J., Bagby, K., Baker, M., Borchers, J., Brumm, T., & Christian-Smith, J. 2006. Assessment of the Secure Rural Schools and Community Self-Determination Act Public Law 106-393. Taylorsville, CA: Sierra Institute for Community and Environment. <https://sierrainstitute.us/new/wp-content/uploads/2018/11/asses.-rural-school.pdf>
- Markusen, A., and Glasmeier, A. 2008. Overhauling and Revitalizing Federal Economic Development Programs. *Economic Development Quarterly* 83–91. <https://journals.sagepub.com/doi/10.1177/0891242408314281>.
- Mazzucato, M. 2021. *Mission Economy: A moonshot Guide to Changing Capitalism*. UK: Penguin.
- Muro, M., Maxim, R., Pipa, A.F., You, Y., and Dougherty, C. 2021. The House’s Build Back Better Act is a Milestone for Place-Based Solutions. The Brookings Institution. <https://www.brookings.edu/blog/the-avenue/2021/11/23/the-houses-build-back-better-act-is-a-milestone-for-place-based-solutions/>
- Murray, M., Dunn, L. 1995. Capacity building for rural development in the United States. *Journal of Rural Studies* 89-97. [https://doi.org/10.1016/0743-0167\(94\)00056-F](https://doi.org/10.1016/0743-0167(94)00056-F).
- National Academies of Sciences. 2021. Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions. <https://www.nationalacademies.org/our-work/accelerating-decarbonization-in-the-united-states-technology-policy-and-societal-dimensions>.
- NeighborWorks America. 2020. NeighborWorks America: An Introduction. NeighborWorks America. https://www.neighborworks.org/Documents/AboutUs_Docs/AboutUs_IntroductionToNeighborWorksAmerica.aspx.
- Pynes, J. 2004. The Implementation of Workforce and Succession Planning in the Public Sector. *Public Personnel Management* 389–404. <https://journals.sagepub.com/doi/10.1177/009102600403300404>.
- Pipa, T., and N. Geismar. 2020. Reimagining Rural Policy: Organizing Federal Assistance to Maximize Rural Prosperity. Brookings Institution. <https://www.brookings.edu/research/reimagining-rural-policy-organizing-federal-assistance-to-maximize-rural-prosperity/>.
- Porter, E. March 18, 2018. The Hard Truths of Trying

to “Save” the Rural Economy. New York Times. <https://www.nytimes.com/2019/03/18/opinion/rural-america-economic-decline.html>.

Raimi, D. 2021. Mapping County-Level Exposure and Vulnerability to the US Energy Transition. RFF Working Paper. Washington, DC: Resources for the Future. https://media.rff.org/documents/WP_21-36.pdf

Shambaugh, J., and R. Nunn (eds). 2018. Place-Based Policies for Shared Economic Growth. Hamilton Project. <https://www.brookings.edu/multi-chapter-report/place-based-policies-for-shared-economic-growth/>.

Souder, J.A., and Fairfax, S.K. 1996. State Trust Lands: History, Management, and Sustainable Use. Lawrence, KS: University Press of Kansas.

Templeton, A. 2021. Wyden gets modified county payments program into COVID-19 relief bill Oregon Public Broadcasting. <https://www.opb.org/article/2021/03/08/wyden-gets-modified-county-payments-program-into-covid-19-relief-bill/>

Topolsky, J. 2021. Turning Points: Doing Rural Development Differently. In “Investing in Rural Prosperity,” Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis. https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/files/pdfs/community-development/investing-rural/10_topolsky.pdf.

US EDA. 2021. Coal Communities Commitment. <https://eda.gov/arpa/coal-communities/>

Resources for the Future (RFF) is an independent, nonprofit research institution in Washington, DC. Its mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement. The views expressed here are those of the individual authors and may differ from those of other RFF experts, its officers, or its directors.

Environmental Defense Fund (EDF) is one of the world’s leading environmental nonprofit organizations.

EDF’s mission is to preserve the natural systems on which all life depends. Guided by science and economics, EDF finds practical and lasting solutions to the most serious environmental problems.

Wesley Look is a senior research associate at RFF. Previously, Look served as Advisor on Energy and Environment to the US Senate Finance Committee and ranking member Senator Ron Wyden (D-OR). Look advised Senator Wyden on a range of clean energy and climate policies, including the senator’s energy policy portfolio on the Senate Energy Committee. From 2007 to 2010, Look advised US cities on climate and energy policy as Program Officer with the International Council for Local Environmental Initiatives (ICLEI).

Mark Haggerty is a senior fellow on the Energy and Environment team at American Progress. With a reputation as a nonpartisan expert committed to practical solutions, Haggerty is engaged in efforts to develop a comprehensive national policy that aligns climate, energy, and public lands conservation goals with rural communities’ economic success. Haggerty previously worked for more than a decade at Headwaters Economics, where he oversaw a robust research portfolio focused on rural economic development, natural resource management, and fiscal policy.

Daniel Mazzone is a PhD candidate in the Agricultural and Resource Economics Department at UC Davis. Mazzone is an energy and environmental economist with research tailored to understanding impacts of various US climate policies. He holds a master’s degree in economics from San Diego State University and previously worked for the UC Davis Institute of Transportation Studies, where he studied policies targeted at reducing transportation sector carbon emissions.

The authors would like to thank Rebecca Shelton, Brandon Dennison, Tom Cormons, Jeremy Richardson, Tony Pipa, Heidi Binko, Julia Haggerty, Chelsea Barnes, Rachael Young, Max Shipman, Katie Harris, Karsyn Kendrick, Jake Higdon, and Daniel Raimi.