Resilient Communities and Affordable Energy: Charting Roles for Community Finance

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Authors: Eric Hangen (Center for Impact Finance at the UNH Carsey School of Public Policy), Adam Kent and Melanie Duenas (NRDC), and Jessica Luk-Li (Climate Impact Advisors)

University of New Hampshire Center for Impact Finance

NRDC

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This report is based on an analysis of interviews and stakeholder convenings conducted between May – October 2025. The perspectives shared by the participants represent their individual viewpoints. The information gathered is not comprehensive and, on occasion, interviewees responses conflict. Consequently, this analysis aims to present a range of insights.

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INTRODUCTION

A note to our readers:

This report focuses on how the "community finance sector" engages in "low-income climate finance" projects such as those that create clean, affordable energy and improve the resilience of housing and communities. We would like to take a moment to unpack some terms for the sake of clarity in this report.

The "community finance sector" – which we also refer to as "community lenders" – consists of Community Development Financial Institutions (CDFI) loan funds, banks and credit unions, Minority Depository Institutions, green banks, and state and local finance agencies. These lenders are mission-driven and are accountable to the communities they serve; they include a mix of private, non-profit, public, and quasi-public entities. To accomplish their work, they partner with many other community-based and mission-driven groups, as well as a variety of government agencies, funders, and investors.

The "low-income climate finance" space consists of the financing of measures that help low-income communities to save energy, cut utility costs, improve the resilience of housing and other community infrastructure to extreme weather, and reduce greenhouse gases. Often, these projects also create other benefits for communities such as preserving affordable housing, creating quality jobs, and/or supporting community facilities such as health clinics, churches, or schools. The specific benefits that any one project focuses on are a matter of the priorities set by community stakeholders and project sponsors.

Stakeholders use many different terms to describe this work – for example "clean energy finance," "climate finance," "green finance," "sustainable finance," and "resiliency lending." This diverse terminology is a reflection of the diverse ways that people in engaged in the work think about it, although it may also indicate a need for our field to be more consistent in how we message and define our work. For the purposes of this report, we use these terms interchangeably.

Introduction

Federal government cuts in support for low-income climate finance have raised doubts about whether there is still a role for community lenders – meaning community-based, mission-driven financial institutions such as Community Development Finance Institution (CDFI) loan funds, credit unions and banks, green banks, and Minority Depository Institutions – to play in this space. We argue that the current policy headwinds are temporary and that despite them, community lenders can indeed continue to support impactful projects that help low-income communities access clean, affordable energy and improve their resilience and health.

The need for this work is only growing. Driven by steep increases in energy demand, including from new data centers being built across the country, electricity costs are rising more than twice as fast as inflation[1], forcing households to choose between paying their utility bill and meeting basic needs like medicine and groceries. Costly disasters such as hurricanes[2] and wildfires[3] have caused homeowner insurance costs to increase 70 percent since 2021.[4] Community lenders are uniquely suited to respond to these interconnected crises. They already serve millions of households and businesses throughout America, and with almost every type of loan they already make, there is an opportunity to help people to save on energy costs and improve health and resilience by improving buildings, generating more affordable energy, and investing in clean transportation.

Nonetheless, there is a growing awareness in the community finance field that we will collectively need to engage in a paradigm shift if we are to tackle these issues in the absence of significant federal resources. This paper explores what that shift could look like.

The authors have collectively conducted over 85 interviews with community lenders, investors, clean energy project developers, and other expert stakeholders to search together for the pathways forward. We have further conducted four events – hosted respectively by Inclusiv, Opportunity Finance Network, NRDC, and Invest in Our Future – that collectively engaged over 200 people to discuss and explore key themes, in addition to participating in convenings held this fall by other organizations such as the Milken Institute, RMI, Climate United, and the World Resources Institute. To preserve confidentiality, we do not list the names of interviewees or event participants. We have supplemented this research with literature review and brief case studies.

We first lay out the current state of play – discussing not only the challenges to financing affordable energy and resilience projects, but also the longstanding, successful engagement of many community lenders in the space and the continued importance of their work. We then explore the operational pivots, business model shifts, capital pathways, and expanded partnerships that community lenders could make – and that many are already acting upon – to sustain their energy and resilience work. Throughout the paper, we include illustrative case studies to provide more detail about promising approaches in the field. In addition to community lenders, we hope that the many stakeholders with whom these lenders partner will also find value in this paper including project developers, community groups, funders, and policymakers.

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01 The Current State of Play for Affordable Energy and Community Resilience Finance

Chapter Introduction

In this chapter, we discuss the headwinds created by federal policy shifts – such as cuts to renewable energy tax credit programs and the freezing of the Greenhouse Gas Reduction Fund – as well as other barriers that community lenders will need to surmount in order to continue financing affordable energy and community resilience projects that benefit low-income and working class households. At the same time, even before the Biden Administration's passage of the Bipartisan Infrastructure Law and the Inflation Reduction Act, we note that community lenders have long been engaged in financing these types of projects, often in an integrated way with core lines of business around small business, community facilities, affordable housing, or consumer finance. These lenders are focused on delivering benefits such as energy affordability, health, and resilience to their borrowers.

Theme 1.1:

Federal policy shifts are creating headwinds for climate investment that extend to the philanthropic and investor sectors.

The loss of capital and operational funding is impacting project pipelines and threatening the organizational infrastructure that has been built up to address community resilience and affordable energy needs.

Federal policy reversal

Broadly, many interviewees cited the current administration as the biggest barrier to helping communities address their affordable energy needs and make their buildings and infrastructure more resilient. The federal government has made a wholesale about-face on climate policy, particularly when it comes to delivering the benefits of clean energy and resilience to low-income and working-class communities. While the most obvious impact on community lenders has been the freezing of the U.S. Environmental Protection Agency's (EPA's) Greenhouse Gas Reduction Fund (GGRF), many other policy reversals also impact the ability of projects to move forward, including: cuts and restrictions of renewable energy Investment Tax Credits (ITC); cancellations of other U.S. Department of Energy (DOE), EPA, and Department of Housing and Urban Development (HUD) grant programs; and imposition of new tariffs. In addition to implementing dramatic policy changes, the current administration has also placed pressure on people and organizations to dilute or remove fundamental language around climate.

Ripple effect on other funders and investors

Federal policy reversals are having a broad ripple effect as they cause funders and investors to reconsider the viability of projects and programs they were considering supporting. As one interviewee stated, "it's not just GGRF money going away, it's everything else that comes with the political headwinds." Federal actions – especially the threat of political attacks – have had a chilling effect, causing some philanthropies and private investors to pull back as well. One interviewee noted, "a lot of large institutions are not wanting to be targeted and so are backing out of projects." Another added, "Corporations that made these goals and commitments… are reevaluating and less willing to be out in front with opportunities."

Investor decisions to pull back or re-evaluate are being framed as a risk management strategy. An impact investor in the space stated, "it's all about managing

risk, and there are risk factors that have been heightened – reputational risk, political risks, changes to the underlying economics. For the investments we are making, we would be negligent not to assess those risks – everybody is doing that and is coming to different conclusions." Similarly, a major capital provider reported a "slow pace of investments this year, being very careful" in their deployment of capital. Another impact investor reported seeing significant risk emerging in their portfolio, with projects stalled and climate tech firms struggling. They report being asked by their investment committee to "be risk averse," adding, "so now my portfolio is deep in the red and it is limiting what I can do – it's taking away any kind of imagination I could have used before. Every time I pitch something my committee asks, 'Is this the right time to make energy investments?' I argue back that if we sit on our hands, nothing will happen."

Significant federal cutbacks and policy shifts across a huge range of other arenas (DEI, public broadcasting, health, research, universities) have further stretched the attention and resources of these partners. Community lenders themselves have been hit outside the climate space with the attempted elimination of the CDFI Fund and subsequent attempted termination of U.S. Department of Treasury staff administering the Fund. Interviewees in the philanthropic sector cited how these issues compete for attention and dollars, leaving them feeling stretched thin. A funder stated that some multi-issue funders are shrinking their climate portfolios to focus on other areas facing headwinds, such as democracy and reproductive justice. Some funders feel they cannot replace federal funding and are considering pivoting away from or shrinking the scale of their climate work.

This pullback from funders and investors includes decisions by some funders to shut down climate-related programming entirely. One interviewee related a funder calling a grantee to cancel a grant agreement they had just entered into. Another interviewee related going through months of diligence with a philanthropy, only to then learn that their program officer had been laid off and the foundation announced that it was exiting the community clean energy space. For nonprofits, the combination of the federal funding shift and pullback in philanthropy has left them deeply shaken. As one interviewee put it: "If you are a

Photo: "Solar panels" by Oregon DOT, CC BY 2.0

nonprofit left on the field by your own folks [i.e., the funders that used to support you], are you going to show up again? When it is very clear that one side [the administration] sees you as the enemy and your own side sees you as expendable?"

At least in the near term, these rapid changes have sowed chaos and confusion that is in and of itself a barrier to investment, according to some interviewees. A major investor cited the "confusion for investors" as the "worst thing" resulting from recent policy shifts. As one interviewee reported, "the uncertainty that exists now is what's killing projects." A lender reported "taking a pause" on climate work due to the 'regulatory uncertainty.'" Another lender asked, "if we are making a six-year loan for this work, will the demand drop out in year two because of the political environment?" Funders reported struggling to develop long-term strategy – as one funder put it, "our jobs at foundations are to look long-term and systemic but given the volatility now have to think more short- and mid-term."

Effects on project viability and pipeline

The loss of tax credits and subsidized capital has changed project economics, making it harder for many projects benefiting low-income households to pencil out and severely impacting project pipelines. As one interviewee who lost a federal grant stated, "you can't replace free dollars with money that has to earn interest." Projects benefiting low-income households by definition generate less revenue and therefore cannot easily take on higher cost capital or fill 30 percent of their capital stack with equity requiring double-digit returns. Another agreed, "a lot of projects that we had developed were reliant on concessionary capital and this is absent now." Another added, "having no ITC in the capital stack [for solar projects] is really difficult." Some of the projects impacted the most are those that sought to provide deep energy affordability to low-income customers. Other projects are also impacted such as projects that sought to electrify buildings in places with relatively high electricity costs and low natural gas costs.

The dearth of truly concessionary capital is making many projects that benefit low-income communities fall off the table that might otherwise have been able to go forward. One lender reported, "we're seeing a lot of projects that can't move forward – they need low-cost and flexible capital to move forward." Another lender we spoke with reported that their pipeline "just vanished;" another lender reported having lined up a pipeline worth over $50 million that is "all stalled now." A third lender reported that of a $25 million pipeline, "two-thirds of that is off the table now – mainly because it needed very concessionary capital to pencil."

Effects on community lenders and their partners in the "community climate finance ecosystem"

Community lenders, project developers, and technical assistance providers are all facing funding shortfalls as they lose both grant revenue and the opportunity to earn revenue through lending income or developer or technical assistance fees. They also face significant uncertainty about future funding. The greatest stresses appear among organizations who placed a heavy emphasis on climate outcomes in their work and for whom federal sources comprised the bulk of their funding.

In turn, these stresses are leading to staff layoffs and creating concerns about how to preserve organizational systems, skills, and capacities that had been built in anticipation of the Inflation Reduction Act (IRA) rollout. Multiple interviewees reported having to lay off staff that they had put into place to implement IRA programs and put their capacity-building efforts to engage in climate lending on hold. "We're really despondent about not having the grant capital to do the infrastructure build," reported one lender. Another lender reported having to make a "strategic pivot and scenario planning to safeguard operations." Other interviewees reported reducing their climate lending programs to a skeleton crew, or even putting them entirely "on ice," with the hope of reinvigorating this programming when resources become available again. Finally, a number of interviewees we spoke with are exploring the idea of mergers and integrations, with some in active conversations with potential partners. A funder who remains committed to the space reported that their short-term focus is on preserving what has been established, such as ensuring legal resources and liquidity for organizations with frozen funding.

“every time we think we’re going to do this work, the rug is yanked out from under us – which creates frustration, as teams had invested time and resources preparing for programs that didn’t materialize.”

Interviewees reported broad feelings of betrayal and frustration that they are working through. As one lender expressed, “every time we think we’re going to do this work, the rug is yanked out from under us – which creates frustration, as teams had invested time and resources preparing for programs that didn’t materialize.” Another added, “we spent a few years [jumping] through all the hoops – it’s very difficult now.”

Theme 1.2:

Many impact investors and philanthropies are staying the course to support clean energy and resilience work, but investment parameters do not always align with project financing needs.

A number of both philanthropies and impact investors we spoke with reiterated their continuing support for clean energy and resilience work. One funder we spoke with is increasing their spend out of their endowment to be able to try to respond to the need. Meanwhile, an impact investing advisor working mainly with individual investors reported seeing "no real slowdown from investors on climate issues," and even interest in "investing in funds that may be most impacted by the federal government's exit from the field." They report that out of over $1 billion of impact investments catalyzed, climate is a "top sustained area of client engagement."

However, in talking with both project developers and community lenders, we heard significant concerns around unmet needs for catalytic capital. Many lenders are looking for capital that mimics the low-cost, patient nature of GGRF funding as much as possible, including outright grants for both capital and operations. They are concluding that existing impact capital for the low-income clean energy space is "not a replacement for federal subsidy dollars." As one interviewee summarized, "philanthropic capital is feeling less philanthropic." Many interviewees feel that this truly concessionary capital is simply not available at the scale needed to make change – that there is "no real impact capital available on concessionary terms."

Even many impact investors themselves are aware of this dynamic. The impact investor reporting sustained interest in climate also reported that two-thirds of its investments are market-rate, and one-third are "impact-first" investments at concessionary rates. A different impact investor noted a dynamic that in pooled funds, the most conservative investor can drive group decisions around parameters.

Moreover, even when it comes to raising capital that provides a return to the investor, there are concerns about the alignment of investment parameters with project financing needs, as we review below. These types of alignment issues are not new – one interviewee described them as the "classic investor-product tensions in the field;" many resonate with past research on the community development product-investor interface.[5]

Rate and term

Generally, mission-driven lenders and developers are looking for, and struggling to find, low-rate, long-term money. For example, one lender reported wanting program-related investments (PRIs), "like 1 percent and 12-year money." Another lender stated they are looking for equity equivalent investments (EQ2s) at 10 years or longer and 2 percent interest or lower.

Different interviewees placed different levels of emphasis on issues of rate versus term. Typical foundation PRIs may only go for 3, 5, or 7 years, as well as many other forms of impact investment. Many interviewees feel that the maturity is too short to be able to use this capital.

Interviewees described several impact investment funds that are lending at rates between 6 and 8 percent, at the fund level. By contrast, the median cost of debt to CDFIs studied by the Aeris Fund has run at under 3 percent from 2006 onwards.[6]

Interviewees noted that loan pricing is driven by investors' understanding of the risks involved, and that practitioners and investors have very different perceptions of the risk. As one lender put it, "my sense is that the risk is lower than the perception – investment [in lenders like CDFIs] should be understood as a safe, fixed-income play where the capital provider would take a lower return." This comment suggests the need

Different interviewees placed different levels of emphasis on issues of rate versus term.

Term Emphasis

- "We really need long-term capital" (lender).
- "Term is a big issue for me. No one wants to do a 20-year loan even at market rate. I'd take 7.5 percent Interest for 20 years, but no one will give us that term. It's killing me not to get it." (developer)
- "We have a lot of short-term capital available to us, but 15-year commitments are hard to find" (lender)
- "We need 10+ year capital"

Rate Emphasis

- "We need cheap capital to do this innovative work – discounted dollars is what will lead our borrowers to do or not do the extra work [to incorporate clean energy]."
- "Market-rate debt is not attractive in our markets – some level of incentive is really necessary to scale the work that we want to do."
- "It seems like a rate between 2 percent and 5 percent is needed [for many projects]."
- "We've found that with a lower cost of capital of 3.5 – 4 percent, projects don't need to value-engineer out [climate] measures."
- "The cost of capital [for some leading impact investment funds in the space] is higher than what lenders already have access to."

to continue compiling data on the performance of climate lending investments – although some rigorous research has been done on some asset classes such as single-family energy improvement loans and indeed shows low loss rates.[7]

Credit enhancements

Particularly for regulated lenders such as banks and credit unions, lenders discussed a need for credit enhancement to be able to work with many borrowers, especially those who may lack liquidity or consistent net income. The need for credit enhancement also extends to some unregulated green banks and loan funds, especially those who may be lending to more leading-edge clean energy technologies. Multiple interviewees noted the need for guarantees and loan loss reserves (potentially pooled across community lenders) to expand the reach and depth of their investments. Some event participants also highlighted the usefulness of such credit enhancements and flagged them as a key funding need to be able to launch or expand a climate lending program.

Deal size

Interview results show that different lenders and investors have wide-ranging preferences for deal sizes, and struggle to do deals outside those "sweet spots." This variation can create challenges for project developers. A developer noted that for a particular bank they work with, deals under $5 million are not large enough to attract their interest. A different lender felt that projects in the $12-25 million were "impossible" to fund. For a third lender, deals of $500,000 to $700,000 were too big – saying, "we just do not have enough capital to do a significant number of them." At least for this investment parameter, robust matchmaking services or loan participation platforms might help to facilitate deals.

> **"my sense is that the risk is lower than the perception – investment [in lenders like CDFIs] should be understood as a safe, fixed-income play where the capital provider would take a lower return."**

Theme 1.3:

Beyond financial challenges, there are significant market-building challenges to grow affordable clean energy and resilience lending

Borrower readiness and market-building challenges

The Center for Impact Finance has previously published on the ecosystem needed to move clean energy projects forward in low-income communities – focusing particularly on the need for "helper" organizations that can listen to and understand the priorities of community-based stakeholders, build trust, and provide support to help projects move forward.[8] As one lender for that previous paper said, "I'm less worried about finding the money than finding the deals." It is important to underscore that they made that statement in Fall 2020, before the IRA passed and when solar tax credits were scheduled to phase out. While the interviewees we spoke with for this paper are mourning the loss of significant funding, they are also still worried about helping communities overcome the barriers to move projects forward.

Photo: Kirk/Adobe Stock

Many interviewees discussed market-building challenges specific to the green building or retrofit process for buildings:

- "Many small commercial borrowers lack access to technical expertise for project scoping and design."
- "Pre-development costs (e.g. energy audits, architectural work) are high and difficult to finance."
- "Borrowers are hesitant to take on debt for early-stage planning."
- "We don't have enough energy auditors in our state, especially for those that can audit small businesses."
- "The barrier is the communications barrier with the design, construction and contractor side. The building owners place so much value on what the contractors say."
- "Instead of hand-holding every contractor, I need something like a green general contractor that knows how to electrify a house."
- "Borrowers do not know how or where to get this information – e.g. how to measure energy savings."

Others discussed the need to drive interest in energy or resilience improvements by speaking to core interests of potential borrowers that are often not around "climate," and to overcoming trust issues:

- "Small business owners are primarily focused on immediate financial concerns rather than their carbon footprint."
- "None of our borrowers have ever expressed interest in this space – it would have to be driven by us."
- "A lot of the borrowers' experience is with predatory lenders and there's a high level of distrust."

The complexity of state policy and utility regulation were another market barrier discussed that vexes both lenders and developers:

- "Policy is too piecemeal by state."
- "Each state's unique development approval and utility interconnection processes add complexity."

Last, but not least, technical assistance and capacity-building support for community-based organizations seeking to promote resilience and clean energy projects was cited as a critical need. Multiple interviewees related stories of community-based groups who have done the work to identify priorities and organize community support around a project or program, but who do not have a development track record or expertise to get their idea ready for financing:

- One lender stated that "It is really important to allocate capacity building for smaller, grassroots project developers."

Four Types of Market Building Challenges

1. Buildings & Retrofits

2. Borrower Priority

3. Regulatory Landscape

4. Technical Assistance

- Another lender noted that a "magic" part of the GGRF was the substantial technical assistance (TA) funding it provided and worried that without it, small and rural projects could "get left behind again."
- There is a need for philanthropy to provide "early-stage capital for TA" and help "create the on-ramp to scale."

A particularly acute challenge is being felt by community-based environmental groups who, with funding from programs such as the U.S. EPA Community Change Grant, were beginning to implement clean energy and resilience projects. Many of these groups have traditionally focused more on advocacy work and therefore have greater technical assistance needs around project finance. Many of these projects are now left in limbo after the cancellation of federal grants and are likely not financeable without significant rescoping and restructuring.

Technical assistance providers themselves discussed the loss of TA funding, which is making it harder for them to work with community-based organizations to advance projects, and has resulted in organizations laying off talented staff. These groups form a critical part of the ecosystem to move projects forward in low-income communities – disinvestment in these groups will make it much harder for lenders to rebuild their pipelines when the policy pendulum swings again and federal dollars arrive back on the scene with renewed pressures for rapid deployment and impact.

Theme 1.4:

Other non-financial barriers persist for community lenders to embrace and grow affordable clean energy and resilience lending

Our conversations turned up a number of additional non-financial barriers to growing energy and resilience lending. Below we list barriers that were mentioned along with supporting or descriptive quotes from interviewees.

Technical capacity gaps and lack of familiarity with renewable energy and energy efficient technologies as well as unique aspects of underwriting

- CDFIs newer to clean energy lending can have "very little technical understanding" of the projects they are underwriting; similarly, some green banks do not have long track records of working in and financing projects that directly benefit low-income communities. (We do note that notwithstanding this trend there are both CDFIs with significant technical expertise, and green banks with significant expertise working in low-income communities.)
- A lender acknowledged its "limited technical expertise" and noted that "our knowledge about this is too basic."

Photo: Courtesy of RE-volv

- Another lender noted a need for training on "market dynamics, the risks of lending in this space, how do you get a lending team to get their arms around this from a credit perspective."
- A lender commented that "we have done some training [for our staff], but not enough."
- "We don't have the internal capacity to do this. We were really banking on the [GGRF technical assistance] grants to help us grow this work."
- "We want to understand what the green projects actually do for [the overall] project… how do I validate that these savings will be there?"

A misinformed but persistent perception that "climate lending" is a separate business from the types of lending community lenders already do

- Many lenders have only recently recognized (and some perhaps still have not recognized) that they have already made many "green" or climate loans.
- As one interviewee described, "three years ago we would have called it a capital improvement loan and not really tracked these as a climate loan."
- "A barrier is around the language being used. [If you ask] 'do you have green lending' a lender might say 'no," [but if you ask] 'have you financed LEED buildings' the answer is 'yes.'"
- "The jargon can be talking around us. We need to figure out how to bring the loan fund community into the 'enviro' climate groups."

Red tape associated especially with GGRF and other IRA grant programs

For all of the angst they felt over its loss, interviewees were also clear that the design of the Greenhouse Gas Reduction Fund, as well as other key IRA programs, was a major barrier to lender participation, particularly because of the compliance and reporting burdens the program imposed. Broadly, the concern was that these programs were burdened with so many administrative requirements tying to other policy priorities – including but not limited to issues such as procurement, wages, apprenticeships, consumer protections, financial compliance and reporting, and impact reporting – that they were almost impossible to implement. As one interviewee put it, "Programs should not become a Christmas tree for everybody's [pet issue]. Focus on the big stuff and let the little stuff ride so that people can move." Related comments from other interviewees included:

- "We were very concerned that GGRF reporting requirements would be costly and burdensome for us and for our developers [that we lend to]."
- "The compliance and reporting requirements are a very heavy lift. If we could do this work without taking GGRF dollars, we'd actually prefer that."
- "The way the [Clean Communities Investment Accelerator program of the GGRF] was designed, it just wouldn't work for us. The reporting, the compliance, the way that the capital structure was established… a lot of banks lost interest in this."
- "The program's requirements – Davis Bacon compliance, procurement requirements [such as Build America Buy America or BABA] – added significant costs."
- The requirements were "so daunting that we didn't want to try this."
- Shifting compliance requirements [from EPA during program rollout] "created confusion and discouraged participation and alienated a lot of CDFIs and our customers."
- According to one stakeholder we interviewed, EPA "over-indexed" in its efforts to tie a lending program (and, correspondingly, lenders) directly to GHG emissions reductions. Instead, EPA could have utilized existing frameworks used to promote positive environmental outcomes (such as ENERGY STAR, Enterprise Green Communities, Passive House, etc.) to ensure funds went to climate-friendly projects without forcing lenders to develop and incorporate new and novel climate measurement frameworks.

Theme 1.5:

Despite these challenges, community lenders have been and will continue to be involved in clean energy and resilience lending

Despite all the barriers discussed in the earlier themes of this chapter, we nevertheless heard that many community lenders are "here to stay" in the clean affordable energy and resilience lending space. Many of these lenders have established track records of clean energy lending that date back to before federal resources like GGRF were made available and are continuing to deploy funding. Some are launching new programs, capitalizing them with locally raised funds. Quotes from different lenders we interviewed included:

- "We still want to lend in this space."
- "We were always going to do this, with or without GGRF."
- "Even dating back to the early 2000s, [we had] a consistent focus on energy-efficient work, but without formal capital sources [dedicated to that loan purpose]."
- "We have started asking prospective borrowers what elements of their projects address changing climate needs."
- "We are in the process of incorporating climate goals into our lending strategy."
- "We created and recently launched a 'green growth fund.'"
- "Our climate work is very much central to our mission."
- One interviewee expressed feeling "optimistic" about the expiration of the tax credits and ongoing grant litigation, since it underscores the important role green banks and other community lenders can play in delivering climate solutions to communities.

Lenders are engaging with resilience and clean energy as a "horizontal" rather than as a business line in its own vertical silo

In many cases, the philosophy of lenders committed to the space is that climate, clean energy, and resilience is a "horizontal" that cuts across their existing business lines and loan products rather than a stand-alone, separate unit. They view it as mission-critical: an opportunity to lower long-term operating costs, reduce energy costs, and deliver healthier and more comfortable homes that can withstand growing extreme weather. In many cases, lenders are making "green" loans without

naming them as such, since their approach is to integrate energy and resilience opportunities into their existing lending work.

- "Many lenders are doing this work but don't call it [as such]."
- "We've done a lot of climate lending in the past, we just don't have something called 'green.' Thirty percent of our loans have a green element in their buildings."
- "We have a home maintenance program. People do [HVAC] systems upgrades, insulation… it's just not called 'green'."
- "We don't really need separate distinct products, but do need a better ability to identify what we are doing... and how to talk about it."
- "We look at the direct integration of energy [issues] into all other sectors [that we lend to]."
- "The green products we were looking at were related to what we're already doing at the bank."
- "Climate finance should be embedded in housing finance, not treated separately."

Photo: Courtesy of RE-volv

Lenders are focused on tangible benefits for borrowers

Lenders are focused on how energy and resilience lending can help address their borrowers' core concerns. Examples of connections that lenders made to borrower needs and priorities included:

- "We surveyed 1,000 of our members. Sixty percent expected to have to replace a major appliance in the next three to seven years. There is a lot of electric resistance heating across our footprint, so there is an opportunity to reduce bills by going to heat pumps."
- "We find that farmers are looking at solar and more modern equipment to both modernize and control costs. Utility costs are very, very high."
- "We've always wanted to frame this work as a component of the cost of housing… maintaining affordability, reducing the energy cost, etc."
- "We do see folks wanting energy efficiency, water efficiency… borrowers do not connect the dots between funding that kind of work and 'climate-related' work."
- "The consequences of climate change are more resonant with our members – floods, fires, rising insurance costs."
- "Even in politically conservative areas in the South – every one of those areas has been hit by natural disasters, they have been pricing in those risks and costs."
- "Our early education team has been a great leader in climate because of their understanding of the impacts of climate disasters on young children… we have to think about shady space, air quality, wildfires…."

Photo: Volodymyr Kyrylyuk/Adobe Stock

02 Strategic Opportunities and Paths Forward

Chapter Introduction

In this chapter, we review strategic opportunities for how community lenders could continue to support projects that enhance community resilience and clean, affordable energy. We detail eight key themes that emerged from our interviews and research. We provide an overview of the recommended pathways that community lenders and their partners should pursue, supporting quotes and facts from our research substantiating the opportunity, and when applicable any contrary viewpoints, caveats, and limitations to the opportunity that were also expressed. We also provide select, brief case studies to illustrate how the opportunity has recently or is currently being acted upon.

Theme 2.1:

Address immediate funding needs to preserve clean energy project pipelines

A pipeline of projects exists whose viability may depend on their ability to begin construction soon in order to achieve "safe harbor" status for federal renewable energy tax credits. There is an opportunity for community lenders to provide early-stage financing to this pipeline, in the form of "start construction" financing and tax credit bridge loans, which could also lead to additional lending opportunities as the projects progresses. We only provide a brief summary of this theme, as efforts are already underway to facilitate collaboration and make linkages between lenders, impact investors, and project developers to capitalize projects.

Case Study 1

Lawyers for Good Government

Lawyers for Good Government (L4GG) was an early leader in "demystifying the elective pay process" after the passing of the Inflation Reduction Act and developed the Clean Energy Tax Navigator tool to help entities predict whether their project could qualify for elective pay. In the wake of the One Big Beautiful Bill Act (OBBBA,) L4GG launched the Elective Pay Sprint Hub to help tax exempt entities navigate the time-sensitive and newly-complicated landscape of clean energy tax credits. L4GG and its partners have been providing legal and technical support, policy expertise, specialized assistance for projects in disadvantaged communities or at risk of cancellation, and connections to green financing opportunities so that eligible entities can design, fund, and implement their projects in a way that maximizes tax credits. L4GG's partners include the Milken Institute, World Resources Institute, Urban Sustainability Directors Network, NYU Tax Law Center, NRDC, US Climate Alliance, Justice Climate Fund, and many more.

Without a doubt, this effort is one of the most important near-term initiatives that funders and investors who care about affordable clean energy should support. Comments from interviewees and event participants related to this theme included:

- Several event participants highlighted working on safe harboring projects for ITC as the "strongest thing we can do" to sustain the field. Several major investors also reported that this strategy would be their primary focus for the next 6-12 months in order to preserve as much of the existing project pipeline as possible.
- "There's a national community solar developer that wants to borrow money to pay for meeting the safe harbor costs – it's a predevelopment cost. Solar developers need this… the industry needs a 50 percent guarantee program to support solar companies to get projects safe harbored."
- A developer noted they are "very preoccupied with looking for a solar safe harbor loan for a $50 million pipeline of projects."
- An interviewee discussed their efforts to set up a "capital gap" fund to "unlock stalled clean energy projects" with a "technical assistance and upfront cost offset tool to remove early-stage planning, feasibility and structuring barriers."
- Event participants and interviewees have also noted that the process of gathering data on existing developer pipelines, lender products, and investor parameters will not only highlight investable opportunities in the near term, but can also pilot market mechanisms to facilitate deals going forward and even shed light on possibilities for the standardization of financial products – themes that we tackle later in this report.

Photo: Alex Go/Adobe Stock

Case Study 2

Community Sustainability Partners Preserving the Federal ITC for Affordable Housing

Community Sustainability Partners (CSP), a non-profit organization with a team that has over 30 years of experience in energy finance, solar, and community development, has become a leader in bringing renewable energy to affordable housing. Backed by several major philanthropic funders, CSP initiated construction on a pipeline of $50 million in solar projects exclusively atop affordable housing properties nationwide. The goal is to preserve the Federal Solar Investment Tax Credit terms for projects in 2025, maximizing energy savings for affordable housing and low-income residents. The Inflation Reduction Act had extended the Federal Solar Investment Tax Credit to 2032, providing critical stability for the affordable housing industry to incorporate solar into new developments. However, this stability was disrupted when the One Big Beautiful Bill Act unexpectedly repealed the extension in 2026.

In response to the loss of this essential financing tool, CSP acted swiftly to obtain "Safe Harbor" status for its project pipeline. Safe Harbor, an IRS-sanctioned provision, allows projects that start construction in a given year to retain that year's tax credit benefits. To comply, CSP must meet the terms of "begin construction" by expending at least five percent (5 percent) of total project cost or $2.5 million. CSP worked with a group of non-profit affordable housing organizations and many others to successfully begin construction on the full pipeline and secure the full tax credit benefits available in 2025.

To fund their work, CSP received a generous donation from philanthropic partners that was used to secure a loan for equipment purchase and begin construction on their pipeline of projects. Through this investment, CSP obtained a $1.72 million Safe Harbor loan from Locus Bank, an innovative CDFI committed to affordable housing and climate efforts, enabling the purchase of 5 MW / 8,463 solar panels and meeting the terms for "begin construction" on the entire portfolio. CSP's preservation of federal incentives protected their $50 million pipeline on top of 5,500 units of affordable housing across the country.

Building a robust project pipeline and four-year runway required careful interpretation of IRS Safe Harbor rules, with legal guidance from Avisen Legal and accounting expertise from Novogradac & Company LLP. CSP implemented a thorough Safe Harbor action plan and developed a detailed tracking system to ensure proper process and collection of documentation with accordance to federal requirements.

CSP will be continually working on all the solar projects with its affordable housing partners through the end of 2029. CSP and its affordable housing partners are incredibly grateful to its philanthropic funders for their support in getting this effort off the ground.

Theme 2.2:

Prioritize market-building work with a focus on state and local action and partnerships

With federal support in question, many see state and local governments with strong climate policies as the most viable places to continue working. Community lenders could thus benefit from building stronger partnerships with state and local governments that are especially supportive of clean energy and resilience goals. One national lender reported it is working to prioritize "five to eight states that are friendly to work in." A number of interviewees spoke broadly about "blue states" being the most promising areas, given the deeper subsidies that are likely to be available in these areas.

That said, many interviewees suggested that a more place-based approach is critical regardless of the state and local policy environment. Building markets for energy and resilience projects requires strong collaboration among stakeholders within a particular place: state/local governments, utilities, regulators, lenders, developers, funders, and community groups. For community lenders, accessing low-cost capital is only half the battle. Providing resources toward the essential, non-financial market infrastructure is critical to making local clean energy projects feasible, efficient, and replicable. Interviews revealed that even with capital in hand, projects often fail to launch or scale due

Case Study 3

Building Performance Partnership

The Building Performance Partnership (BPP) provides the education, expertise, and peer community their national network of high-performance building hubs needs to accelerate local building decarbonization efforts. BPP is a joint project of Building Energy Exchange (BE-Ex) and the Institute for Market Transformation (IMT). Modeled after BE-Ex's Hub in New York City and IMT's Building Innovation Hub in Washington, DC, the partnership now extends support to partner hubs in Aspen, Boston, Chicago, Kansas City, St. Louis, and Philadelphia. With BPP's support, partner hubs provide tailored outreach in their marketplace, identify funding and financing pathways, and build a local community of practice to create jobs, lower energy costs, and improve health by enhancing the performance of existing buildings. Together, BPP Partner Hubs serve almost 3.7 billion square feet of commercial and residential buildings.

to technical capacity gaps and borrower readiness challenges at the local level. The key takeaway is that climate lending is a team sport.

Indeed, EPA's Solar For All program generated significant collaborative momentum across stakeholders that didn't traditionally work together. According to one Solar For All awardee, "community-based organizations, working class people who can benefit from the program, solar contractors, and funders – we had a lot of folks working together on this and we still have a lot of that momentum. While a lot of funding is missing and we need more, we at least have that softer infrastructure in place that we can build upon." More localized approaches are needed to break down silos between these groups.

Some interviewees also pointed out that there can be factors present that make even states without large subsidy programs attractive for some types of clean energy and resilience investment. An example would be replacing electric resistance heating with heat pumps, a project which could pencil in many areas without large subsidies. Another interviewee discussed how Utah has become the first state in the U.S. to pass legislation paving the way for so-called "balcony" or "plug-in" solar – small solar arrays that can be simply installed by a tenant or homeowner themselves to power home appliances, at a low cost per watt, and without requiring a contract with the local utility. Multiple states that have traditionally led the charge in clean energy innovation are now following Utah's pioneering example and are introducing state legislation to permit plug-in solar.[9]

Specific recommendations that emerged from conversations about how community lenders could pursue state and local action are discussed below, along with supporting comments from interviewees.

Photo: Courtesy of RE-volv

Build stronger state and regional lender coalitions that can promote knowledge-sharing and collaboration, build bridges to local partners, advocate for policy and regulatory changes, and tap local resources like community foundations and donor-advised funds

- "Climate will be at the state policy level, so we need to think about leveraging at the state and local levels."
- According to one solar nonprofit interviewee, "local building and permitting offices have a lot of untapped power and can really skyrocket soft costs."
- One community lender cited local building energy performance standards as being a major driver in their lending business model in the coming years. In addition, the lender cited other local policies like renewable portfolio standards, and community choice aggregation as other key policy drivers that generate demand for their products.
- "Engaging with state-level coalitions is likely a more effective route than national programs."
- An interviewee reported working with the CEOs of other lenders to establish a coalition, inspired by models in Michigan and Minnesota.
- "How do we help local lenders access these local supports? It's part of the partnership building model, call everyone in the community that you know to see what resources can make the lending more low-cost."

Support non-financial market infrastructure

- Technical capacity gaps: nationally produced trainings are highly praised, with the trainings from the University of New Hampshire's Center for Impact Finance most cited by interviewees. However, many community lenders expressed a need for localized training that reflects specific available resources, relevant local and state policies, and local utility costs.

Case Study 4

Michigan Climate Hub

Launched earlier in 2025, the Michigan Clean Investment Hub is a public-private partnership focused on accelerating clean energy financing across the state. The Hub was created by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Office of Climate and Energy, as a key part of the larger Michigan Climate Investment Accelerator initiative. Located in Detroit, the Hub acts as a central collaborative space to connect private investors, funders, and community lenders with Michigan-based clean energy projects.

- Targeted training should reflect the typical projects, capital stacks, weather realities, cost of energy, and available state or utility supports in that specific location.
- Local ecosystem coordination strengthens project success. For example, in order to finance a solar project on an affordable housing complex, the lender needs confidence in the project developer, utility connection process, local permitting office, available incentives from the state energy office and/or housing agency, and contractors' quality.
- Many cited the need to organize and fund coalitions and learning communities that bring together the main stakeholders, including lenders, utilities, energy offices, affordable housing organizations, contractors, technical assistance providers, clean energy project developers and co-developers, community-based organizations, and community leaders.
- Localized trainings can be a mechanism to strengthen these networks of relationships by bringing in relevant stakeholders throughout the training curriculum.
- Some lenders expressed lack of familiarity with clean energy technologies. This could be over-

come with in-person "show and tell" exhibits of such technologies at conferences targeting lenders. For example, most recently at Opportunity Finance Network's 2025 annual conference in Washington, DC, there was a "clean energy petting zoo" exhibit that showcased readily available, commercial technologies such as a heat pumps, induction stoves, and solar panels.

- Lenders also cited the need for borrower readiness support – an objective technical assistance resource that can help borrowers with project feasibility, design, and navigating incentives before they approach the lender for financing. This reduces risk for the lender and increases the quality of the pipeline.

Create an online resource library of clean energy lending resources that is curated for and localized to specific regions

A resource library might include information such as:

- Information about state energy regulatory environments, energy markets, and incentives. One interviewee suggested creating a "clearinghouse" where a lender or project sponsor could get help identifying the available incentives that would apply to any given project.
- Case studies of non-federal capital and subsidy examples.
- A directory of approved service providers such as technical assistance providers, contractors, installers. This addresses a significant barrier cited across all regions, regardless of maturity of the clean energy market.
- Information about workforce programs helping to address needs for workers in the clean energy and resilience fields.
- Strategic communications support/examples that describe the benefits of clean energy building upgrades, focused around affordability, economic savings, asset protection, and infrastructure resiliency.

Case Study 5

CIF-Inclusiv Trainings

Since 2019, Center for Impact Finance (CIF) and Inclusiv have been the nation's leaders in providing climate finance training to community lenders and mission-driven clean energy project developers. Historically, they have offered national-level courses in green and solar lending for community lenders but are moving to offer localized versions of these courses, together with local champions, which can provide detailed local market and regulatory information and connections to local partnership opportunities. For example, Inclusiv ran a localized training in home energy lending for savings and loan cooperatives in Puerto Rico that incorporated content specific to energy lending challenges and opportunities on the island.

Case Study 6

State Partnerships

New York Green Bank (NYGB) Community Decarbonization Fund (CDF)

NYGB's $250 million Community Decarbonization Fund (CDF) provides CDFIs and mission-driven lenders operating in New York low-cost (1.5 percent), balance sheet capital via a 12-year loan to deploy into projects benefiting low-income and disadvantaged communities. To date, NYGB has closed $158 million in CDF, supporting eight CDFIs (LIIF, TruFund, Enterprise, CPC, Carver Bank, Leviticus Fund, Community Development Long Island, and NFF). These transactions represent lifetime estimates of 144,208 MT CO2e avoided and over 2.7 million in MMBtu energy savings. Twenty-five projects supported by these funds are already underway, supporting construction of residential and mixed-use buildings, and multiple charter schools serving economically disadvantaged students.

Massachusetts Community Climate Bank (MCCB)

Launched in 2024, MCCB is the nation's first climate bank focused on decarbonizing affordable housing, addressing the 30 percent of statewide greenhouse gas emissions coming from buildings. MCCB activities will contribute to achieving net zero emissions by 2050 while also meeting the state's goals for production and preservation of affordable housing.

Strategically placed within MassHousing, the State's Housing Finance Agency, MCCB leverages existing infrastructure to support an initial focus on affordable multifamily rental housing and single-family homeownership. Its financing will help deliver decarbonization benefits to LMI residents and Environmental Justice communities disproportionately burdened by climate change, pollution, and poor health.

MCCB aggregates and deploys state, federal, private, and philanthropic funds to integrate decarbonization, energy efficiency, and clean energy technologies into new and existing buildings statewide. MCCB achieves this by developing financing solutions that complement existing financial supports, leverage additional resources, and close market gaps. Funds are invested to revolve and provide a return to grow and sustain MCCB's impact over time.

MCCB has strategic relationships with Massachusetts Clean Energy Center (MassCEC) and Massachusetts Development Finance Agency (MassDevelopment) to originate projects outside of the affordable buildings sector.

Theme 2.3:
Do more with less: increasing efficiency through collaboration

Many interviewees believe that the current crisis creates a powerful incentive for the field to work together more effectively. For many community lenders, operating costs can be a bigger driver of financial performance than is the cost of capital or loan losses, as previous research by the Center for Impact Finance has shown.[10] Below, we discuss opportunities for collaboration identified through our conversations. Many of these ideas are consonant with broader ideas now being discussed about how the CDFI industry as a whole may need to evolve away from high-overhead, labor-intensive models, reduce fragmentation, and embrace technology and new talent.[11]

Co-lending models

These might include "hub-and-spoke" lending models, in which smaller or emerging lenders can act as "sales / originators / pipeline generators" for community lenders with more capital and underwriting expertise. In addition, co-lending or loan participation models in which a lead lender involves other lenders who may be newer to the space but have capital to invest may be helpful

- One leading coalition of community lenders discussed the development of sector-based "centers of excellence" within their network where leading lenders in a certain sector (e.g. multifamily housing, community solar, etc.) can offer underwriting services to emerging lenders for a fee.
- Multiple lender interviewees expressed strong interest in participating in loan participation or co-lending programs. One lender added, "A thousand percent – this would be extremely helpful," while a second said "100 percent interested – this has been our way of starting because we are small."
- An experienced green lender noted that "getting an institution comfortable with renewable energy is best done as a participation with other like-minded lenders."
- Several lenders discussed loan participations they offer, including two who are purchasing loans from partners, and another who is selling loans to partners.

- Two lenders discussed how they are building an "integrated capital management platform" to "support community lenders [engaging in] loan participations."
- A different interviewee discussed working on a similar capital management platform that would "create an envelope for banks – developers can use this platform and upload projects, then CDFIs can bid on the projects."

Some caveats were also raised around the idea of co-lending and loan participations:

- A lender noted that in practice, co-lending can "effectively mean that the more experienced lender needs to train the less experienced lender." A training program could potentially be integrated with co-lending platforms to reduce the burdens on the experienced lenders.
- An investor noted that "there may not be any market for purchasing loan participations from green banks, because the transactions tend to be small and non-uniform." The same could be said of many loans originated by other community lenders. Generally speaking, larger investors will likely be most interested in purchasing participations in large amounts and where the loans are both fairly uniform and geographically diverse. This challenge would best be resolved by developing more formal secondary market structures over time, which we discuss in a separate theme below.

Shared services, back offices, and tech-enabled tools to lower costs and increase efficiency

Shared services could potentially help lenders reduce operating costs as well as overcome barriers to entry by performing functions with which lenders do not have experience or that are best carried out at a larger scale than any one lender can easily achieve. For example, a mature green bank could provide licenses or access for fees to its loan servicing and lending support services to more nascent green banks. A number of both for-profit companies and nonprofit organizations have developed or are developing business lines that make it easier for lenders to engage in climate finance, and a number of lenders reported engaging in conversations to explore new collaborations as well. These business models include tech platforms as well as business-to-business services. Examples that came up in our conversations included:

- In the credit union space, there is ample precedent for the use of shared services: Credit Union Service Organizations (CUSOs) provide a wide range of services to members including IT, loan servicing and lending support services, back-office support, and financial and risk management. Some stakeholders have had conversations about whether a "clean energy CUSO" could enable credit unions to more easily engage in climate finance.
- The U.S. Green Bank 50 and the Justice Climate Fund have announced a partnership through which the organizations will "collaborate to mobilize capital and resources," and to provide technical assistance to lenders throughout their networks.[12]
- Several affordable housing lenders reported meeting regularly to explore opportunities for collaboration and to "avoid fragmentation" of the market.
- Companies such as OneEthos and Banyan Infrastructure are providing a variety of technology solutions to enable lenders to originate, process, and manage portfolios of clean energy loans.
- One community lender coalition is encouraging emerging lenders to focus on project pipeline development and not build out huge underwriting and compliance teams that could be instead shared/centralized more.
- Several GGRF recipients also had been exploring using portions of their awards to offer shared services to lenders.

In other conversations, lenders and other stakeholders expressed a desire for the development of shared infrastructure in areas such as:

- Development of a platform for data collection, as well as impact measurement and management
- Dissemination of underwriting tools and guidelines, sample loan documents, pro forma templates, diligence checklists, and other core tools to help integrate clean energy and resilience concerns into community lenders' everyday lending work.

- Scoping out collective projects to present to funders in order to "de-clutter the landscape with a more coherent ask," as one interviewee put it.
- Funding shared technical assistance services (lender training and tools, technical assistance programs for borrowers) that help lenders both to build markets and to effectively underwrite deals.

Case Study 7

Co-Lending Programs

Connecticut Green Bank Smart-E Loan Program

The Connecticut Green Bank administers the Smart-E loan program which assists homeowners with financing for over 90 home energy and resiliency-related improvements to owner-occupied homes. Supported through a loan-loss reserve and interest rate buy downs, lenders are able to offer unsecured, low-interest, no-money-down financing to homeowners. Participating lenders, contractors, and the Green Bank collaborate through a single project management tool (NGEN), facilitating quick loan closings and project tracking. Since 2013, the program has invested over $195 million and financed more than 9,600 projects. These projects have deployed over 17 megawatts of clean energy and helped reduce nearly 3.5 million MMBTUs of energy which will avoid over $122 million in energy costs over the life of the projects, 28 percent of which are located in LMI census tracts. Similar programs are in place in Arizona, California, Colorado, Indiana, Michigan, New Mexico, Oregon, and Texas.

SELF Climate Equity Plug & Play

Solar and Energy Loan Fund (SELF) is a CDFI and Green Bank headquartered in Florida. SELF has launched a Climate Equity Plug & Play program as a turnkey solution that allows community lenders in other states to "plug" into SELF's lending platform and jump-start their home improvement lending. The platform comes complete with SELF's proprietary underwriting system, which assesses a borrower's ability to repay rather than traditional metrics, and provides associated resources and support. Lenders may even access SELF's low-cost loan capital. With Plug & Play, SELF can partner with nascent green banks and existing CDFIs, alike, to efficiently deploy capital to local homeowners and contractors across the country. The program has so far successfully engaged 13 partners, covering 17 states, with additional partners slated to join.

NYCEEC Loan Participation

A core part of NYCEEC's business model is to partner with other mission-oriented lenders on loan participations. Loan participations provide a number of benefits to lenders, including: (1) increasing impact with a limited balance sheet; (2) 'testing the market' to see if existing loan pricing and other terms align with the market; (3) learning from other lender's loan documents and processes; (4) expanding potential liquidity options in the event of workout issues; (5) helping to manage lender concentration risk; (6) an 'organic way' to move toward more standardization; (7) building internal capacity in new lending areas; (8) expanding into new geographies; and (9) supporting securitization and other portfolio strategies through developing systems to track transferred loan interests. NYCEEC has sold participations to other mission-aligned lenders in many loans it has originated and has also acquired participations in loans originated by other lenders.

Exploring mergers, integrations, and alliances

At the far end of the spectrum of organizational collaboration, outright mergers, integrations, or alliances between organizations could help them to consolidate, reduce overhead, and improve efficiency and profitability. A consultant suggests the field may need to "think about consolidation and lowering overhead" to survive. Two other interviewees also noted hearing questions about mergers and consolidation much more often than before, as part of an effort to "preserve the core of what people are doing" in the words of one.

The Center for Impact Finance recently published a working paper on the Future of Consolidation in the CDFI Sector that has broad applicability to all community-based, mission-driven lenders and is relevant to the situation now faced by many lenders and project developers in the climate space. The paper notes a number of challenges and barriers that organizations should consider before embarking on a merger, but also highlights significant benefits related to organizational effectiveness and sustainability that merged organizations have recounted.

> **...the field may need to "think about consolidation and lowering overhead" to survive.**

Theme 2.4:

Focus on markets and project types that are still financeable (and impactful)

Interviewees were clear that organizations will need to rely less on subsidies to make their business models work. They discussed prioritizing project types that have more positive project economics – but what that means varies by sector and geography; therefore quite a wide variety of project types were mentioned by different interviewees. Ultimately, lenders will need to do their own careful analyses of the markets in which they work to unearth the best opportunities. Several themes emerged from the conversations, however, that may be helpful to lenders in identifying opportunities that could work in their market.

"Tried and true" efficiency and electrification projects

Building energy efficiency projects have the potential to pencil even without large subsidies if the scope of work is built around maximizing energy savings, which an energy audit can help to evaluate. Electrification projects may still make sense in areas without easy access to utility natural gas or where electric resistance heating is used. For example, many northeastern states use delivered fuel oil for heating, and southeastern states use electric resistance heating. In both scenarios, switching to a heat pump can create energy cost savings. Several lenders reported actively working to develop energy efficiency and electrification loan products to respond to this opportunity.

Solar projects

The feasibility of solar projects will vary widely by geography. Solar projects become more viable when electricity costs are higher and where state-level supports are available such as state tax credits, solar renewable energy certificate programs, or programs to facilitate permitting. A number of interviewees anticipate that solar project economics could improve over time as electricity costs rise and installers and equipment suppliers face pressures to reduce costs. Several interviewees also discussed possibilities for New Markets Tax Credit subsidies to support solar development.

Battery storage and geothermal

Interviewees noted that tax credits were fully preserved for both battery storage and geothermal projects. An investor noted that "on the venture [capital] side, we see a lot of companies pitching products outside of the technologies targeted by the current administration.

Resilience investments

Investments designed to help buildings or communities mitigate risks (including but not limited to risks from extreme weather events) can be wise from an economic perspective if viewed with a holistic lens. One interviewee related partnering with a water conservation technology provider to deploy sensors, meters, and mitigation measures (like toilet valve shutoffs) into affordable housing properties. They found that 93 percent of water damage events could be mitigated by these fairly low-cost solutions. The Center for Impact Finance has produced a toolkit for Resilient Community Development Finance that helps lenders to assess opportunities to integrate resilience (defined broadly) into deals, based on the shared experience and thinking of a working group of community lenders.

"Balcony" or "plug-in" solar

These projects consist of small (generally < 2 kW) solar kits that a tenant or homeowner (or small business owner) could install themselves and use to power home appliances. Utah has led the way with the passage of bipartisan legislation that exempts these systems from going through utility interconnection processes provided they meet certain technical and safety requirements.[13] A number of other states are following Utah's lead. The low costs of these systems may help to drive consumer interest and create consumer lending opportunities.

Financeable Project Types

Energy Efficiency and Electrification

Balcony Solar

Solar

Transportation

Battery Storage

Other Projects

Resilience

Mixed Market Business Models

Transportation

One lender reported that "transportation is a really interesting sector right now – particularly freight and medium and heavy-duty trucks. There are solutions where electric is cheaper than traditional solutions." Two other lenders reported partnering with each other to support independent truckers in meeting port emission standards. A fourth lender is looking at financing EV charging facilities. A fifth lender noted strong interest in EVs but also expressed concerns over many EVs being simply "too expensive."

Other project types

Lenders and interviewees expressed optimistic takes on a wide range of other project types, including food systems, water resources, nature-based solutions, and efficiency loans in specialized industrial processes (such as coffee roasting).

"Mixed market" business models

Interviewees also felt that mission-driven lenders should explore "mixed market" business models that balance mission-focused projects with more profitable ones. Green banks commonly serve a mix of markets, while CDFIs are not required to deliver 100 percent of their financing to CDFI-eligible target markets and could use affiliated entities for some mainstream-market activity as well. Some lenders have begun expanding the geographic markets they serve in order to take advantage of opportunities for different types of deals in different regions.

Case Study 8

Montgomery County Green Bank Resilience Dedicated Fund

In 2025, the Montgomery Country Green Bank launched the Resilience Dedicated Fund to help affordable housing providers proactively address climate risks such as flooding, extreme heat, and storm damage. It was created after the County expanded the Green Bank's authority in 2023 to include physical resilience in addition to clean energy investments. Structurally, the fund operates as a low-interest, revolving loan facility, blending the flexibility of a line of credit with the mission focus of a traditional loan fund. Borrowers can access capital to make necessary repairs and improvements, but each investment must be paired with resilience enhancements—such as stronger roofing, water management systems, or energy efficiency upgrades—and technical assistance is offered to help identify and plan these resilience measures. Financing terms typically range from $3 million to $5 million with interest-only periods and three-year extendable terms, and underwriting is done at the portfolio level rather than project level.

Early results indicate the fund is already being used to support projects such as Victory Housing's renovations at Hampshire Village[14], demonstrating demand for flexible capital that bridges the gap between resilience planning and implementation. By providing upfront financing and pairing it with technical resources, the Resilience Dedicated Fund aims to shift the sector away from reactive, grant-dependent approaches and toward proactive climate risk management that reduces long-term operating costs, enhances resident health and well-being, and strengthens community resilience. The Montgomery County Green Bank also sees this model as scalable and replicable nationally, offering a framework for other jurisdictions to attract both public and private capital toward integrated resilience investments in affordable housing and community infrastructure.

Theme 2.5:

Seek to monetize the economic value that projects create for insurers

Interviewees hope that projects serving low-income communities might be able to garner investment from both property and casualty insurers and health insurers who may see bottom-line benefits when these projects are developed.

P&C insurance companies

Property and casualty (P&C) insurers are facing a tidal wave of claims from climate-related disasters, causing steep increases in insurance costs. Both homeowners and multifamily housing owners are grappling with rising premiums and deductibles at the same time that they are capital-constrained to make investments that would reduce the risk of losses, creating the "single most challenging issue" for affordable housing owners according to one interviewee. In some places, insurers are stepping back from entire markets – or issuing plans that are "priced like crazy" – where they feel the risk is too high, leaving customers with no option but to turn to state-run "last resort" property insurance plans."[15]

At least in theory, property owners and property insurers stand to benefit from resilience lending programs offered by community lenders that increase the resilience of buildings and reduce the risk of losses. One might expect insurers to be willing to reduce premiums in properties that take these measures, and possibly to deploy some of the investment capital to community lenders with resilience lending programs. Last resort plans may be a particularly important partner for community developers, since they do not have the option of turning their backs on the market.

To date, interviewees felt this opportunity has largely not been realized due to a number of outstanding uncertainties and concerns. One question is whether insurance companies will recognize the reduced risk of property loss from resilience measures and reflect that in their premiums. Better data are needed to make a compelling case on the loss reductions from certain measures. One interviewee working in multifamily affordable housing reported beginning to collect such data. A second issue is that in some situations, resilience investments might reduce premiums but also increase the insured basis of the property. An interviewee related how the Louisiana Housing Finance Corporation has mandated fortified roofs

as part of its financing requirements and requires a premium discount for affordable housing that has such roofs. The interviewee noted that fortifying the roof also increases the insured value of the property, effectively offsetting the premium discount. A third challenge may be that according to one interviewee, "about half" of state-operated last-resort insurance plans "are running out of money," suggesting that they are not in a strong position to embark on innovative changes to programming.

While P&C insurers are likely to focus on measures directly addressing property resilience, some interviewees believe that insurers could be interested in investing in programs holistically addressing both resilience and energy needs. A consultant we interviewed is focused on "bringing energy efficiency and resiliency together" to be able to attract capital from the insurance industry. Energy upgrades and resiliency sometimes are best pursued through a single scope of work at the time a building is being constructed or undergoing major renovations. Insurers carry sizable investment portfolios which may include long-duration assets such as bonds and mortgage debt in their portfolios. Some have invested in community development funds. Large insurers, including Prudential and State Farm, have dedicated community development staff. Programs in California[16] and Massachusetts[17] provide examples of insurance companies working together to invest in community loan funds. Insurance investments are constrained, however, by regulators who assess the credit quality and valuation of securities owned by insurance companies. Tapping this investment at scale will require addressing these concerns.

In the P&C insurance space, state governments have an important role to play in catalyzing action. In Alabama, the state government has led the way in aggressively reducing wind and hurricane risks for homeowners through stronger coastal building codes and widespread adoption of FORTIFIED roofs, a proven Insurance Institute for Business & Home Safety (IBHS) standard that helps homes withstand hurricanes, high winds, hail, and severe storms. Specifically, the Strengthen Alabama Homes Program is funded via insurance licensing fees paid to the state and provides grants to homeowners to defer costs associated with the installation of FORTIFIED roofs. As highlighted in the National Housing Crisis Taskforce's State and Local Action Plan, this public sector-led investment has catalyzed the private market and now 85 percent of FORTIFIED roofs receive no public resources.[18] In addition, homeowners with FORTIFIED roofs can obtain up to 55 percent discount on their wind portion of their property insurance. Building off of this momentum, the Federal Home Loan Bank of Dallas created a FORTIFIED Fund in which CDFIs support the deployment of grants for FORTIFIED roofs in Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

Health insurers

According to the U.S. EPA, "Climate change poses many threats to the health and well-being of Americans" including increased risk of extreme heat events, heavy storms, asthma attacks, and the spread of disease.[19] Additionally, a substantial literature exists drawing linkages between the built environment and health – specifically that investments in "green" building can drive health improvements for building occupants.[20] One study estimated that in California alone, residential building electrification could save more than $3.5 billion in health costs every year.[21]

Health insurers thus stand to benefit from climate resilience and mitigation projects, including, for ex-

Case Study 9

HPN Captive Insurance Fund

Housing Partnership Network (HPN) is a national nonprofit collaborative of over 110 housing providers and lenders, which, in addition to a number of social enterprises, owns a reinsurance captive called Housing Partnership Insurance Exchange (HPIEx). Created in 2004 and overseen by HPN's members, HPIEx provides superior property and general liability, workers' compensation, and health insurance coverage to HPN members when compared to what is offered in the market.

ample, "better buildings" projects and transportation projects improving air quality. A Center for Impact Finance Financial Innovations Roundtable Event co-hosted with the Federal Reserve Bank of New York explored in depth the connections between climate and social drivers of health, including the potential to raise investment from health sector payers to address these concerns.[22] As a health insurer stated at the event, "If social determinants of health are causing vulnerable groups to have more and more hospital visits and stays, that affects our line of business. The reality is, it hurts us. [We] have chosen to be proactive to all these issues, including climate and environmental components."

Scaled investment from health payers into better buildings and other social determinants of health is not yet happening, however. As one speaker at the Roundtable event noted, "the [U.S. healthcare] system is not ready for this. Many players are deeply involved in a fee-for-service paradigm." Another added, that "the actions we're trying to organize around [i.e. health sector investment in social determinants of health] are an unnatural act in the healthcare marketplace." That said, there are a number of examples of health sector investment in programs addressing building-related social determinants that could be built upon:

- An interviewee cited the Healthy Neighborhoods Equity Fund in Massachusetts, which has received private investment from health sector players to make affordable housing investments with community, health and environmental benefits.
- The New Hampshire Community Loan Fund has received investment from health sector players in New Hampshire, including Dartmouth Hitchcock and Concord Hospitals, to address social determinants of health such as affordable housing.
- The National Housing Trust partnered with Children's Law Center, Children's National Hospital, and others organizations to administer the D.C. Health, Green, and Affordable Housing program. This effort focuses specifically on high-risk buildings where a large number of childhood asthma cases are appearing. The program is working to deliver healthy, efficient, and resilient housing upgrades to over 800 multifamily units.

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- An interviewee noted an "interesting concept" for potential replication being piloted by the New York State Insurance Fund's Climate Action Premium Credit Program, through which it is providing a 5 percent workers' compensation premium credit to hospital and health system policyholders that develop and implement climate action plans.
- The Green & Healthy Homes Initiative (GHHI) is a national nonprofit dedicated to advancing racial and healthy equity by addressing the social determinants of health. Its core mission is achieved by creating healthy, safe, and energy-efficient homes. GHHI coordinates whole-home assessments and integrated upgrades to break the link between substandard housing and poor health outcomes, while also lowering utility bills. Additionally, GHHI has trained over 1,800 workers in sustainable job skills to date and has made a significant impact on policy at the state and federal levels.[23]

Photo: Skyline/Adoboe Stock

Theme 2.6:

Seek to monetize the economic value that projects create for utilities and hyperscalers

Electricity costs are rising more than twice as fast as inflation.[24] As of August 2025, residential electricity prices were up 11 percent from January on a national basis.[25] These price increases are driven by surging electricity demand, with the construction of large data centers – "hyperscalers" – being a significant contributor. According to NRDC, preliminary forecasts show that data centers could require more than 50 gigawatts of peak electricity capacity by 2030 – enough to power more than 20 million households – in the 13-state PJM Regional Transmission territory.[26] Interviewees are concerned about prices continuing to go up as a result. As one put it, "we don't have enough electrons – and when demand exceeds supply, prices go up… let's not have grandma pay the tab for AI infrastructure."

Beyond raising prices, surging demand also raises the specter of whether utilities will be able to reliably supply enough electricity to their customers, with some interviewees concerned about the potential for brownouts and interruptions in service in the future.

As many interviewees and event participants commented, these dynamics place pressure on both utility companies and hyperscalers to do something lest they take the fall for communities being crippled by soaring energy prices and plagued by blackouts at the same time. In this section we review possible ways that community developers could partner with these entities to promote clean affordable energy and resilience for communities.

Utilities

As regulated monopolies, utilities interact often with environmental and consumer organizations advocating for cleaner, reliable, and lower cost energy. For community development groups, a number of interviewees and event participants noted, there is an opportunity to collaborate with utilities as implementation partners and pipeline originators to further mutually beneficial goals. One interviewee described how community developers and lenders can position themselves as a potential solution between the advocacy community and the utility in delivering energy efficient and clean energy solutions:

"We need to think about different types of partnerships which may actually mean not fighting the utility – it

may mean working with the utility. The business models will depend on the region. For us, we are looking at how we can bring utilities and hyper-scalers together to invest in household energy efficiency and distributed solar and storage as a part of the grid. In some utility territories, this could be least-cost generation... You can build purpose-aligned partnerships even with people you don't agree with about everything."

Areas of partnership for community development groups to pursue with utilities include:

Deployment of utility-funded efficiency programs

According to ACEEE, utility investments in energy efficiency programs reached a record $8.8 billion in 2023[27] – making these programs one of the largest funding sources nationally that community developers could partner with to promote affordable energy. These programs are primarily funded through charges paid by customers on their utility bills. Utilities often fail to reach a key customer segment that is also paying those charges – low-income households. Specifically, ACEEE finds that low-income households receive only about 13 percent of utility efficiency spending due to up-front repair costs needed (e.g. mold remediation, roof repair, gas leaks, etc.) to make the home eligible for energy efficiency investments.[28]

By providing both gap financing and customer service to help their borrowers navigate utility program incentives, community lenders could greatly increase the rate at which low-income customers access these services. In turn, an interviewee pointed out, this is a valuable service for utilities – "utilities have a mandate to serve everybody – it creates political risk to shut power off [to a customer who has fallen behind on bills], so there is a lot of common cause with them to align around energy affordability."

An event participant described their role as a lender as being "the people who can deploy the mandate" for their utility partners. They stated that "utilities may have an efficiency mandate, but not be able to fix the house so that it can utilize the [utility program] money – if you can deal with that challenge and manage the contractors you can have a good utility relationship." Interviewees also noted, "little stuff – like little efficiency and solar projects – are kind of annoying to a utility [to manage]. But they matter in an environment when you are short on power. Someone who can take care of that for them is a good partner."

There are a number of community lenders who currently fulfill that function for a partner utility. They can serve as examples for other lenders and utilities that may lack clarity on each other's operations and potential partnership opportunities. Consultant Chris Kramer has published a map and database of utility-lender partnerships, as well as utility financing programs that might benefit from further partnering with community lenders, which readers should consult. One lender we interviewed described a product they piloted with a large utility where customers paid back their loans via the utility bill (in other words, utility "on-bill" financing utilizing capital provided by the community lender).

Utility purchase of peak-hour energy

Peak hours of electricity demand present an enormous challenge for utilities to adequately supply the demand to keep the lights on – and do so affordably. As one interviewee put it, "some utilities don't care about carbon emissions, but they do care about energy reliability." Utilities pay a significant premium over baseline generation to meet this demand, which they try to mitigate by charging "time of use" rates and through demand-side management programs. For community developers, projects that provide power or mitigate demand at peak hours are potentially attractive for utility investment, especially if they can operate at scale. Another interviewee reported that the utility in their service territory has at times paid upwards of 80 cents per kilowatt-hour for peak hour generation. They are working on developing distributed, rooftop solar and storage projects that both provide affordable energy to low-income households and serve as a "virtual power plant (VPP)" that will sell stored electricity to the utility during peak demand hours. CIF is developing a new training course for project developers on how to integrate virtual power plant programming into their projects.

Interviewees and event participants noted that it will be important for community developers to understand the kind of utilities they are working with (investor-owned utilities; municipal utilities; electric cooperatives) and to invest the time to "cultivate a relationship of responsiveness," as one participant put it. Other key

Case Study 10

Utility Partnerships

Collective Clean Energy Fund (CCEF) On-Bill Financing Program

The Collective Clean Energy Fund (CCEF) is a Colorado-based green bank that, in partnership with Tri-State Generation and Transmission Associate, delivers a $50MM+ on-bill financing program for residential and small commercial energy upgrades across Colorado. Working in collaboration with Tri-State's member cooperatives, the program enables customers to make energy improvements with no upfront cost and repay the investment through their monthly utility bill.

In its inaugural year, the program financed more than 100 projects across predominantly rural communities in Colorado, supporting electrification, efficiency, and clean energy upgrades. Notably, 62 percent of total program funding has flowed to low-to-moderate income households, demonstrating the program's ability to advance both affordability and equity outcomes while maintaining strong utility alignment and customer protections.

Traverse City Light & Power/Venture North, Upper Peninsula Power Company/Northern Initiatives

In Michigan, CDFI Venture North partnered with the local municipal electric utility Traverse City Light & Power (TCLP) to administer Energy Efficiency Micro Loans to businesses and nonprofits. The loans covered project costs for improvements such as solar panels, energy-efficient equipment replacement, and building upgrades, making clean energy adoption more financially feasible for small businesses and reducing their energy bills in the long run. TCLP customers in good standing were eligible for loans up to $50,000 at 0 percent interest.

A similar partnership exists across the lake between Northern Initiatives and Upper Peninsula Power Company (UPPCO) serving UPPCO small business commercial customers. The program starts with a free energy assessment that lists top priorities, energy savings, and cost. Customers can then take out a 0 percent interest loan for up to $50,000, payable over up to five years, to make their selected energy efficiency improvements. Participants of the Energy Efficiency Program also gain access to available rebates that can range from 25 percent to 75 percent of the cost of the improvements. The program reaches businesses that traditionally face barriers to financing by looking beyond conventional credit metrics. Customers with low credit scores are eligible, provided they are current on payments, and additionally receive support from the CDFI to improve their credit standing.

The success of joint energy efficiency loan programs often hinges on education – both to create market demand and to build contractor capacity. In regions such as Michigan's Upper Peninsula, cautious community attitudes toward adopting new technologies present another major hurdle, despite efforts like utility advertising and contractor workshops. This situation underscores the need for expanded education and technical assistance to improve not only public awareness for existing programs but also understanding and readiness for climate-related solutions.

stakeholders highlighted by participants to pull into utility partnerships were rate payers, local economic development leaders ("utilities have a job to do economic development") and workers and unions (who "can help you go really far in your utility relationships").

Technology Companies and Data Centers

Data centers are being sited and built across the country at a lightning speed, to meet the demands of technology companies. Data center developers typically prioritize speedy construction and are not limited by cost constraints. While siting decisions are sometimes approved by state and local governments without public input or approval processes, in other cases, local advocates are striving to influence the decision-making process and leverage opportunities for investments in communities, including investments in clean and affordable energy. These opportunities may be encapsulated in community benefits agreements, which require technology companies and/or data center developers to invest in the development of renewable energy, such as community solar, to help power the data centers.

Certain technology companies seeking to use data centers have made some form of public commitment to procure renewable power for their operations, in an effort to project a positive reputation to communities. The case remains open, however, on how they will address the impact of data centers on the availability and affordability of electricity for households and businesses in their community. Indeed, the amount of electricity[29] and water[30] data centers (and thus technology companies) need is staggering: some proposed data centers require 2GW of power, equivalent to the energy use of 2 million households;[31] and cooling a large data center requires 5 million gallons of water each day, the equivalent usage of a town with 50,000 people.[32] Solutions from both supply and demand sides of the equation are needed.

Interviewees felt that opportunities exist to bring in investment from technology companies to support energy efficiency, distributed solar+storage, and VPP projects that can be wins for all three stakeholders: the household, the utility, and the technology company. Demand-side investments like energy efficiency and VPPs can help address peak load concerns from the utility and avoid added capacity investments and lower household energy bills. Larger scale distributed solar+storage efforts can not only deliver additional capacity to the grid and help to address peak load, but also reduce energy costs for homeowners and provide added resilience in times when extreme weather hits.

To ensure that communities benefit from the development of data centers, some interviewees suggest working with state Housing Finance Agencies (HFAs), state energy offices, regulators, or other state quasi-public agencies to create a transparent fund to which technology companies could direct funds to support clean, affordable energy, and affordable housing. Influencing state and local governments will require clean energy proponents to conduct public relations campaigns to educate the public on the salient issues, and to develop model community benefit agreements. Many communities are fighting to simply block the development of data centers, rather than consider possible benefits and investments that could be associated with them.

Some interviewees suggested that data centers could be combined with VPPs, depending on the ownership structure. For example, a third-party lease structure might facilitate such a hybrid model. Others hypothesized that the heat generated by data centers might be captured to create thermal storage opportunities.

Interviewees agreed that there is a need to lay out the concept of how hyperscalers building data centers could produce efficiency, as a collective playbook would be more helpful than numerous individual agreements. This would involve developing a high-level structure with adequate scale to demonstrate how much funding would be impactful and in what ways. Key challenges include mobilizing community support and moving quickly enough to impact data center siting decisions. Once the key elements of a desirable playbook are identified, advocates could take collective action across multiple states.

For one interviewee, the cancellation of all 60 grants under EPA's Solar for All Program – a $7 billion low-income solar program – presents a potential opportunity for technology companies to step in to fund a

program that was slated to deliver 4GW[33] of distributed solar in every state in the country, saving 900,000 low-income households over $350 million annually[34]. Programs across the country – mostly focused at the state-level – were poised to launch. According to the interviewee, "there are 60 workplans sitting there, ready to be implemented."

In addition, a coalition of mission-based multifamily affordable housing developers and lenders who collectively own hundreds of thousands of affordable homes and invest billions annually in affordable housing are considering the design of a national fund that could be deployed at a more local level to fund energy efficiency, onsite solar+storage, and resilience upgrades. Such a fund could be seeded with technology company capital and help to address some of the concerns mentioned above while delivering energy cost savings and resiliency benefits to residents.

Finally, many cities are looking to address their aging single family housing stock through city, utility, and federal programs like HOMES and HEAR. These "whole home approaches" and "one stop shops", if designed effectively (like Philadelphia's Built to Last Program) and connected to community lenders and developers, have the potential to be scaled via investments from technology companies. This increased capacity would allow low-income customers to complete necessary home repairs, enabling them to access the energy efficiency programs they are likely already paying into.

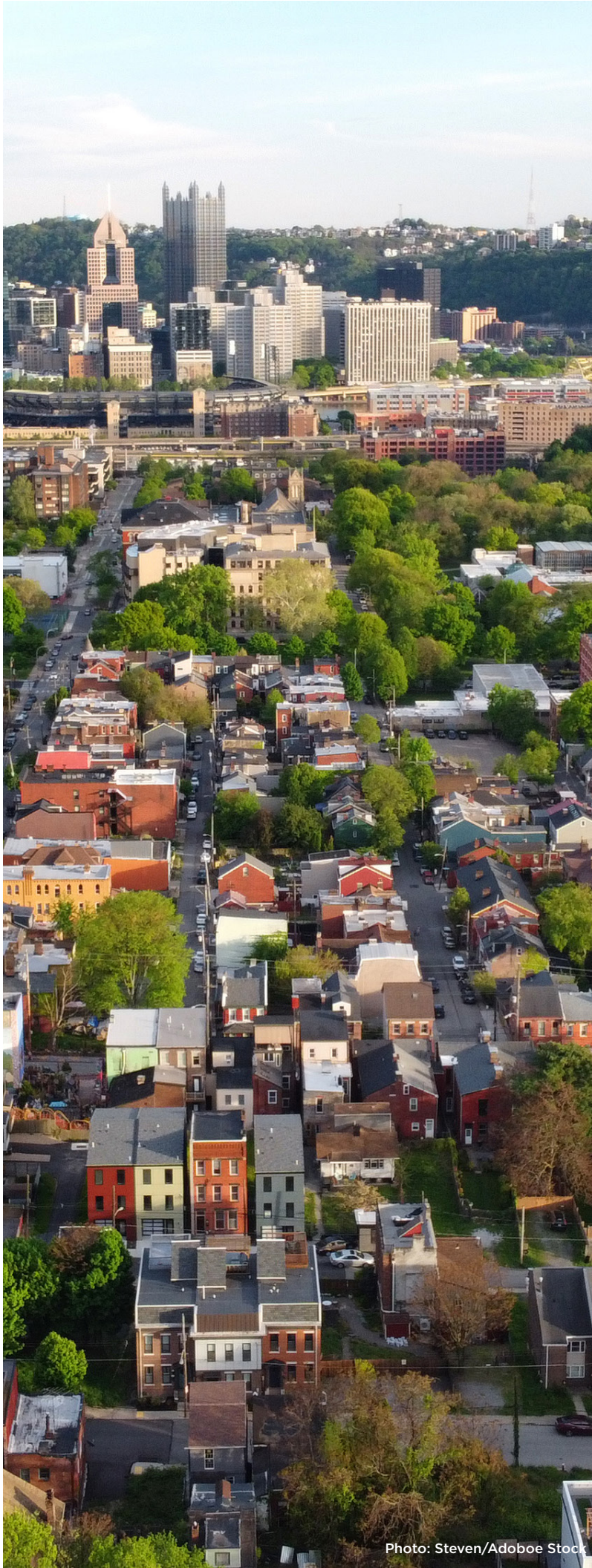

Photo: Steven/Adoboe Stock

Theme 2.7:

Explore partnerships with impact investors and public finance to broaden the capital sources for the field

Community lenders will not be able to replicate at scale the terms of capital that would be provided by sources like the EPA Greenhouse Gas Reduction Fund. Furthermore, as discussed earlier, there are substantial concerns around the misalignment of the investment parameters many impact investors have and the terms that many mission-driven lenders and project developers are seeking. However, a number of interviewees feel that opportunities do exist to source capital from impact investors and public finance markets on terms that community lenders can still utilize. This broad theme breaks down into many specific financing strategies that interviewees are exploring. We discuss each in turn below. No single clear capital solution emerged from our conversations and most of these strategies appear to have at least some doubts or unanswered questions about them.

Bond financing and "Impact Notes" programs

Several event participants and interviewees were bullish on state and municipal bond financing as "where we're going to get the billions to do this work." An event participant recommended working on pooled bond funds that would facilitate a "path to unlock capital at massive scale." Several lenders we spoke with – including both loan funds and banks – are exploring the issuance of tax-exempt bonds in partnership with state or municipal agencies, while others are exploring the direct issuance of "Sustainability Notes" in hopes of accessing longer-term capital than they are currently raising and tapping impact investor markets they are not currently reaching.

Both CDFIs and select green banks have experience with bond issuances at varying levels of scale. An increasing number of the largest CDFIs have obtained investment ratings from agencies such as Fitch or S&P and have used these ratings to make retail bond investment offerings. LISC, for example, has issued Impact Notes using a Social Bond Framework consistent with the International Capital Market Association (ICMA) and mapped to United Nations Sustainable Development Goals. In 2022, it reported raising $100 million in investment;[35] its notes achieved an AA- S&P rating and were available to retail investors investing as little as $1,000. Similarly, the Connecticut Green

Bank (CTGB) has been operating a successful "Green Liberty Notes and Bonds" program for years, also mapped to the United Nations Sustainable Development Goals available for retail investments as low as $100, and with bonds rated AA- by S&P. CTGB has sold-out 12 consecutive note issuances[36] and has issued almost $150 million in bonds since 2019.[37]

Limitations to scaling bond issuances for community lenders include:

- **Equity needs.** Several of the lenders we spoke with have balance sheets at or near the maximum levels of leverage allowed by most investors (for CDFI loan funds, the traditional "Minimum Prudent Standard" for net assets ratio is 20 percent) or depository institution regulators. CIF is working with HPN on building a "CDFI Equity Fund" to establish pathways for conventional market equity to support equity-constrained CDFI Loan Funds to grow. Calvert Impact has also developed an

Case Study 11

Connecticut Green Bank Green Liberty Bonds

A central innovation of the Connecticut Green Bank's (CTGB) Residential Solar Investment Program (RSIP) was the creation and monetization of Solar Home Renewable Energy Credits (SHRECs). Under state law, Connecticut's electric distribution utilities are required to purchase these credits under long-term, fixed-price contracts. This structure created a predictable, investment-grade revenue stream tied directly to the electricity produced by thousands of RSIP-supported residential solar systems. By aggregating SHRECs across the entire portfolio of participating homes, the CTGB was able to convert dispersed rooftop solar generation into a single, stable financial asset.

CTGB then used this revenue stream to support bond issuances, including its noted Green Liberty Bonds – a first-of-its-kind approach in U.S. public clean-energy finance. SHREC purchase agreements serve as the collateral backing the bonds: future SHREC revenues flow to bondholders as repayment, giving investors confidence in the financial security of the instrument.[41] Because the SHREC contracts are long-term and utility-backstopped, they meet the reliability standards needed for capital-market participation and enable CTGB to secure strong credit ratings and competitive pricing. CTGB initially achieved investment grade ratings without any credit enhancement from the state, and their success helped lead to state approval of a Special Capital Reserve Fund, which the CTGB could use to further reduce the cost of capital it raises from the municipal bond markets.

By securitizing SHREC revenues, CTGB unlocks upfront capital from private investors, which are then reinvested into more clean energy projects. This financing model transformed what would have been incremental, pay-as-you-go environmental payments into an engine for scaled, near-term climate investment. It also broadened public participation in clean energy finance, as the Green Liberty Bonds were deliberately structured to be accessible to retail investors with low minimum purchase amounts as well as a "retail investor day" one day before institutional investors, ensuring that retail investors could participate in the issuances. In effect, the SHREC-backed bond program allowed Connecticut to leverage small solar installations on individual homes into a large, liquid, and replicable financing platform for statewide clean-energy growth.

"Equity for Impact" (E4I) product that utilizes similar structures and is working towards a product launch. This type of equity will not be as powerful as pure grant equity at helping lenders lower their overall cost of capital, which will impact pricing for end borrowers, but has the potential for significant scale.

- **Credit enhancement needs.** Credit enhancements, such as guarantees or loan loss reserves, will be necessary for notes issued by both unrated and rated entities to expand investor interest and lower their cost of capital. Several interviewees commented on the need and potential for pooled credit enhancement tools to enhance the ability of lenders to raise capital. The Community Investment Guarantee Pool, which is supported by investment from over a dozen philanthropies including The Kresge Foundation, is an example of such a tool, and has supported the expansion of a number of affordable housing and climate investment lending programs.
- **Rating process.** Access to the broadest pool of potential investors will require organizations to obtain an investment rating, which to date has only been achieved by a handful of the largest CDFIs and green banks. Maintaining an investment rating will also constrain the types of activities that a lender engages in. Alternatively, issuers will need to find partners for a private placement.

Donor-Advised Funds

Donor-Advised Funds (DAFs) are charitable vehicles where a donor can claim a tax deduction in the year they provide the funds, but then direct the deployment of these funds to their final charitable uses over time. One interviewee commented that undeployed funds in DAFs represent an "enormous pool of capital" that could be used to support community resilience and affordable clean energy projects but is largely "sitting on the sidelines."

According to the 2024 National Philanthropic Trust's Donor-Advised Fund Report, undeployed total charitable assets in DAFs reached $251.5 billion in 2023, driven partly by gains in the stock market where much of these funds are invested.[38] This figure compares to $1.48 trillion held at private foundations but unlike private foundation endowments, DAF funds are not subject to the same fiduciary rules that have impeded "impact first" investment out of foundation corpuses. The DAF payout rate (the percentage of DAF balances deployed per year) stayed steady at 24 percent, meaning that on average, the typical DAF dollar sits in a DAF for about 4 years before being granted to its final charitable use. CIF has published in the past on the interest and motivations of DAF donors in putting undeployed funds to good use through impact investing.[39] However, a number of misunderstandings[40] have hindered deployment of DAFs for impact investing, including a

Limitations to Scaling Bond Issuances

reluctance on the part of financial advisors to embrace this practice. An additional barrier to working with DAFs stems from their diffuse nature – there are over 1.7 million individual DAF accounts, whose donors have different interests and priority geographies.

Nevertheless, DAF funds have to be invested somewhere, and creating a vehicle that is easy to use for DAF sponsors could generate a significant pool of dollars available for short- to mid-term impact investments. An interviewee, who advises DAFs extensively on impact investing, reported strong interest in climate issues from investors. Such investors are generally interested in making investments that are about three years in term, earn low single digit returns, and are directed to CDFIs at the fund level as opposed to individual projects. Cash deposits in CDFI banks and credit unions are another investment option that could be grown. One interviewee reported success encouraging DAF holders to make recoverable grants to clean, affordable energy and resilience projects as an alternative to investments. These recoverable grants could, for example, be used to support pre-development and acquisition activities for projects, becoming repayable if the project moves forward.

Corporate Carbon Offset Investments

In the U.S., investment in clean energy credits is driven largely by state regulatory requirements on utilities (Renewable Energy Portfolio Standards and Energy Efficiency Portfolio Standards). However, corporate purchases of voluntary carbon credits offer an additional funding possibility for community developers to explore. For example, two interviewees we spoke with have successfully raised funds for rooftop solar projects for low-income families through this strategy.

Research by MSCI finds that the global carbon credit market was around $1.4 billion, and seems to be poised for growth, with projections that it could be worth $7 to $35 billion by 2030. A significant question for community developers is whether these credits can be sold at high enough prices to provide deep support to high-social-impact projects and make it worthwhile for the substantial effort that would be required to reach out to corporate investors.

We spoke with an interviewee who advises corporations on high-social-impact carbon credit purchases, where the corporations are paying a premium over standard prices in the environmental commodity markets. They reviewed a number of barriers to scaling this market. The interviewee related that "in no cases are corporations buying these [high-social-impact] credits as their only product – it is way too expensive. They do it because it enables them to create this multifaceted impact and tells a story that is important for them." However, because the credits (and therefore the PR benefits) last for 10 years, there is a challenge to constantly find new buyers. Furthermore, with political attacks now mounting on pro-climate actors, the public relations benefits are attenuated – as the interviewee put it, "the corporations are steadfast in what their values are, but if they worry that telling about [their carbon credit purchases] will actually reflect negatively on them, some companies will put their money elsewhere." Lastly, environmental commodity markets have standards for verification of additionality where it will be difficult for community developers to adhere to all of the required practices – as the interviewee put it, the market is "not meant for boutique transactions."

As a result, the interviewee concluded, high-social-impact carbon credits are "not flying off the shelves… in general, you don't have companies leaping out of the woodwork to support impactful, low-volume programs." The interviewee remained hopeful, though, about possibilities to aggregate credit demand from smaller companies where their total electricity loads are small and they might be willing to pay a higher per-unit price to be able to tell a great story about their impact.

Case Study 12

Clean Energy Credit Programs

Solar United Neighbors' Impact SREC Program

Solar United Neighbors' (SUN) Impact SREC Program leverages impact and corporate capital to expand solar accessibility in underserved markets. The program provides upfront funding based on the future solar renewable energy credits (SRECs) that a system will generate over 10 years, specifically targeting markets where SRECs have limited open-market value due to low prices or limited buyer demand. Under this model, homeowners transfer ownership of their system's SRECs to SUN in exchange for an upfront payment to their installer, calculated based on projected SREC production. SUN monitors system output and sells the SRECs to corporate partners committed to investing in local clean energy impact. This innovative approach generates immediate funding (typically $1,000–$1,500) to reduce installation costs for homeowners, offsetting 10-12 percent of total installation costs and leading to meaningful reductions in upfront financial barriers. In under two years, the program has served over 100 income-qualified households across Arizona, Texas, Florida, and Colorado, demonstrating scalability in underdeveloped SREC markets. Building on this momentum, the program is now expanding to serve nonprofits in energy-burdened communities, positioning it as a replicable, scalable solution for advancing solar equity nationwide. This model exemplifies how strategic partnerships between community organizations and corporate climate commitments can drive tangible progress toward clean energy access for all.

Barrio Eléctrico

Barrio Eléctrico is a nonprofit in Puerto Rico dedicated to helping families who cannot typically access the commercial solar market. It installs, maintains and operates resilient, residential solar and battery storage systems and provides community energy education and home energy assessments. Its solar Power Purchase Agreements provide electricity at approximately a 30-40 percent discount to market electricity rates (market rates fluctuate in Puerto Rico), saving the average family $48 per month as of the latest market electricity rates in December 2025.

To date, Barrio Eléctrico has completed over 400 residential solar installations and 700 home energy assessments, with 450 additional families in pipeline. Total installed capacity is 2.9 MW PV and 7.35 MWh of battery storage. Over 90 percent of households served are low-income and 75 percent are very low-income, and over half of households served have a medically vulnerable family member.

Barrio Eléctrico was the first nonprofit in Puerto Rico to monetize US federal Investment Tax Credits for solar, initially through tax equity partnerships that combined ITC and Opportunity Zone investment, and now through the direct pay mechanism. Through a broker, it also sells voluntary Renewable Energy Credits (RECs) to corporations, who pay a premium over standard REC prices for the social impact generated. Barrio Eléctrico is looking to minimize its dependence on federal funds by aggregating battery-stored power and monetizing its value through Virtual Power Plants, peak-hour energy sales, and by monetizing grid services such as frequency and voltage stabilization along the grid feeder lines where it works. The University of Puerto Rico at Mayaguez and CIF are helping Barrio Eléctrico with technical analysis and financial modeling work to support the development of these innovative strategies.

Theme 2.8:
Create standardized financial products to support aggregation and scale

Overview of the idea: a number of interviewees argued that now is the time for the field to coalesce around standard approaches to climate finance, enabling access to capital at scale. Community lenders will always have an important role in boutique lending to meet specialized needs in their community – their flexibility is what sets them apart from large banks. However, interviewees also believe that many deals and loans have the potential to be served by more standardized products. While increased collaboration between lenders via loan participation, shared underwriting services, and more (as covered in Theme 2.3) can lead to "organic, bottom-up" standardization, some interviewees and participants expressed a belief in the potential for some products to be standardized in a more "top-down" fashion. To the extent that it is possible to create standardized products, the resulting ability to aggregate loans could greatly increase access to capital and liquidity. Ultimately, standardized products could form the basis for secondary markets that unlock longer-term capital than what is available today and also enable community lenders to overcome balance sheet constraints to scaling their lending. Standardized lending products could also improve operational efficiencies by unlocking opportunities to grow shared services and platforms.

The price of making every deal a bespoke deal, one interviewee commented, is that "a lack of standardization makes it difficult for lenders to develop scalable, consistent climate finance products." One participant expressed the desire for the field to take a product- and sector-based lens and collectively identify proven loan products from leading community lenders to emulate. At least one community lender network is exploring pooled loan loss reserves to not only improve project economics but to incentivize more standardized products across a wide network of lenders. An investor noted how a lack of standardization makes it more difficult for capital to flow from investors to community lenders, for example by purchasing or investing in pools of loans – "if each transaction is bespoke, it's very hard, spending the same time to re-underwrite each loan."

Interviewees expressing support for the idea of developing secondary markets vehicles included a developer who suggested that the field should work to create

a “transparent secondary market fund” where community lenders could sell loans. A lender mentioned as a model a secondary market initiative called Scale Link, which buys microloans from CDFIs and packages and securitizes these loans. Moreover, several interviewees reported investing significant efforts in fleshing out the possibilities for secondary markets, such as conducting research on existing loan products and recent project finance requests to highlight areas where the development of a standardized product or products for aggregation would be most viable and fruitful.

Many of the ideas discussed in this section require further research and diligence. CIF plans to continue to explore opportunities to fund this work in collaboration with community lenders and partners. Next steps include coordinating with lenders on a particular asset class and product type (e.g. commercial solar arrays on small business rooftops) and determining how product terms, origination, underwriting, and servicing could be standardized and at what scale capital could be deployed. Market research also needs to be completed in partnership with lenders to understand investor appetite for providing liquidity. Further, additional capital markets research is needed to determine whether a common green or sustainable bond framework may be beneficial and potentially attract a more diverse set of investors that are seeking green or sustainable bonds. Due to the decentralized nature of CDFIs, green banks, and many of the other actors involved, this type of standardization would require significant facilitation and capacity building support but could also yield the needed liquidity to fund market transformation.


Photo: Courtesy of RE-volv

Case Study 13

Secondary Market Vehicles

IPC Secondary Market

Despite increased investment in solar across the country in recent years, there is a substantial deficit in solar investment in LMI communities. The lowest income communities have one-third the solar adoption rate as compared to the highest income communities. Even worse, LMI community solar represents 4 percent of the entire community solar market as of 2024.[42]

A secondary market is a crucial component to the overall financial system, providing liquidity and improving pricing accuracy and affordability. A robust secondary market also provides an iterative feedback loop that increases standardization in the primary market, helping to drive efficiencies and lower costs of origination, which is critical to keeping financing affordable for LMI communities. There are currently limited secondary markets available for clean energy lending, and the ones that do exist focus primarily on primer borrowers. Expanding secondary markets' reach to LMI communities is critical in supporting a more just clean energy transition, particularly in an era of adverse federal government policies and action.

After robust market engagement and modeling in partnership with NRDC, Forsyth Advisors, and Firefly Energy Consulting, Inclusive Prosperity Capital (IPC) created and launched a demonstration secondary market vehicle in 2025 with a $2 million investment from a mission-aligned investor and the purchase of approximately $2.5MM in commercial solar loans. IPC is now looking to scale this work with strategic partners, leveraging its deep expertise of commercial solar in underserved markets and the modeling, term sheets, and contracts underlying the demonstration.

Inclusiv Loan Participation Marketplace for Residential Solar Loans

Through Inclusiv's Loan Participation Marketplace, credit unions can manage risk, expand their loan portfolios, and manage liquidity by both selling and buying loan participations. As a facilitator, Inclusiv prepares lenders to sell portions of their loans, enabling them to maintain relationships with their borrowers through loan servicing. Inclusiv buys these loans, retains a portion on its balance sheet, and, once seasoned, resells up to 80 percent of them to interested credit unions.

In its early stage of implementation, Inclusiv has purchased around $7MM in residential solar loans, originated in CDFI investment areas. Thanks to these loans, averaging $23,500, around 200 households in 28 states have seen reductions in utility bills. Finally, three credit unions have invested in the program, purchasing portions of these pools resold by Inclusiv.

A private loan participation platform specialized in credit unions supports all these transactions, allowing all parties involved access to automated reports, loan distribution, and accurate remittances at low servicing fees.

Also, thanks to the Kresge Foundation, both loan sellers and buyers have access to up to 20 percent of loan-loss guaranty on the charged-off balances, based on the portions each holds. This credit enhancement represents an incentive toward expanding access to these needed loans in low- and middle-income communities.

Having this proof of concept validated, Inclusiv is ready to take the next step of transacting $1 MM per month in 2026.

Photo: Courtesy of Barrio Eléctrico

CONCLUSION

While the headwinds slowing down progress – ranging from federal policy reversals and capital misalignment to less investment in market-building – are significant, they do not change the heart of the matter: community-based finance plays an essential role in the pursuit of a cleaner, affordable, and resilient future. The innovative work and deep commitment of community lenders, mission-driven developers, and their partners show that the effort is far from over. These setbacks are temporary. Now is the time to reinvent ourselves, focusing on sustainable local and regional solutions that can bring real, positive change to working families.

To keep this vital momentum going, we must make one thing a priority: tell the story of our impact. For too long, we've relied on complicated financial reports and abstract climate metrics. The most compelling case for investment is a human one. It's the story of a family whose monthly utility bills dropped, a small business that stayed open because its operations were more resilient, or children whose health improved thanks to cleaner indoor air. By focusing on, tracking, and sharing these real-world successes, the community finance sector can easily persuade the public, win over new partners, and unlock more capital.

The second imperative is to build stronger bridges all the way from the grassroots-level to the deal room. We need intentional networks of local partnerships, robust support to help community groups grow their capacity, and clear, simple ways for smaller projects to be bundled and financed efficiently. We must create a straightforward path for community-led initiatives to get the scale of funding they need to move from a great idea to a successful reality.

The outlook for affordable energy and community resilience finance remains bright, especially if we seize this as a moment to refocus on strategic, outcomes-based work. In the absence of federal leadership, innovation will continue at the state and local level. Now is the opportunity for community lenders to solidify their leadership in a clean energy transition. Above all, this work is about more than just climate – it's about a core mission to guarantee a healthy, financially secure, and stable future for all communities.

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