



Community Benefits in Energy Projects

Understanding the building blocks that utilities, cooperatives, and clean energy developers have used to engage communities



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Rocky Mountain Institute (RMI) is an independent, nonpartisan nonprofit founded in 1982 that transforms global energy systems through market-driven solutions to secure a prosperous, resilient, clean energy future for all. In collaboration with businesses, policymakers, funders, communities, and other partners, RMI drives investment to scale clean energy solutions, reduce energy waste, and boost access to affordable clean energy in ways that enhance security, strengthen the economy, and improve people's livelihoods. RMI is active in over 60 countries.



UNIVERSITY OF MINNESOTA

About UMN

The Center for Science, Technology, and Environmental Policy (CSTEP), housed at the University of Minnesota Humphrey School of Public Affairs, fosters interdisciplinary and community-engaged research on energy and environmental policy. The mission of CSTEP is to build local capacity to address socioeconomic inequality by leveraging the resources and expertise of the research university in service to community priorities.

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Executive Summary

Working well with communities contributes to successful deployment of new energy projects. Yet, utilities and developers face a steep learning curve in effectively engaging communities. Recent federal legislation had prioritized community engagement, leading to the adoption of a growing set of best practices. This report highlights exemplary community benefits commitments from utilities,ⁱ made public through federal funding programs, and recommends community engagement practices that build strong stakeholder relationships and foster community buy-in on project benefits.

Whether federal programs continue to require community engagement and benefits planning or not, community pushback on energy projects remains a significant and challenging to navigate project risk. Local opposition has been one of the three biggest contributors to the cancellation or delay of new clean energy projects.¹ A study on opposition to clean energy projects found that failing to solicit community input into decision-making processes was a significant factor in nearly 30% of the projects experiencing delays or cancellation.²

At a time when increasing load growth forecasts create demand to efficiently, affordably, and quickly deploy even more energy infrastructure,ⁱⁱ utilities and developers are seeking ways to reduce project build-out risks. Engaging communities with the intent to provide meaningful community benefits is our recommendation for turning the pitfalls of community pushback into community support and ensuring clean energy deployment meets local needs.

Three practices contribute to successful community engagement. From our study of community benefits offered by utilities and developers, this report contains detailed explanations and real-life examples for how to:

1. Build stakeholder relationships and enable communities to engage
2. Use community engagement as the way to determine community benefits
3. Use accountability building blocks to earn community trust

In 2024, RMI and the University of Minnesota (UMN) Center for Science, Technology, and Environmental Policy (CSTEP) studied the largest source of public data on community benefits commitments that was available: the community benefits plans (CBPs) submitted by first-round selectees of the Department of Energy's (DOE's) Grid Resilience and Innovation Partnerships (GRIP) Program.ⁱⁱⁱ To broaden the type of projects analyzed, RMI also reviewed examples of community benefits from utilities and clean energy projects that preceded federal CBP requirements.

ⁱ This refers to all types of utilities: investor-owned, member cooperatives, municipal, and public.

ⁱⁱ Find more information on load growth from RMI, <https://rmi.org/insight/get-a-load-of-this/>, and from an RMI analysis on building data centers alongside wind, solar, and batteries near existing grid connection sites, <https://rmi.org/how-power-couples-can-help-the-united-states-win-the-global-ai-race/>.

ⁱⁱⁱ These applications, submitted to the DOE in 2023, became publicly available in March 2024 when the DOE fulfilled a Freedom of Information Act request (<https://www.netl.doe.gov/home/foia/GRIP>).

To ensure our analysis included a community perspective, we created the Community Benefits Building Blocks framework (see Exhibit ES1). This framework helps connect engagement approaches and benefit types to specific community priorities. We used the framework to evaluate which community priorities were tangibly addressed by GRIP CBP benefits. Insights from our evaluation give utilities and developers ways to follow the three recommended practices:

1. Strengthen internal capacity for two-way engagement with communities. Incorporating community feedback and supporting the ongoing participation of community members are examples of two-way engagement that build strong stakeholder relationships and make projects less susceptible to community pushback. Examples in *Section 2: Engagement approaches* (page 19) provide more explanation.

a. What this means:

- Two-way engagement involves more commitment on the part of the utility and developer than one-way outreach efforts. Incorporating external input and successfully delivering benefits depends on coordinating decisions among internal departments and can have an impact on every stage of engineering, procurement, and construction.
- Project owners can increase their capacity for two-way engagement through staff-wide trainings, dedicating teams to manage community benefits coordination, and hiring experts on local context and communication norms. Engaging communities earlier in project development can also make the outcomes from two-way engagement more productive.

b. Where we saw this:

- Most of the GRIP CBPs discussed consultation with stakeholders. About half discussed two-way engagement and early consultation with external organizations for input on community benefits.
- The examples of strong one-way and two-way engagement practices from GRIP selectees are transferable across all types of energy projects.
- Many GRIP CBPs noted that external partnerships are instrumental for effectively designing and delivering community benefits.

2. Determine community benefits with community input. Investments in resilience and clean energy access can improve a company's bottom line while improving customer service in general, but matching benefits directly to those who might feel the impacts of project location decisions and construction is not automatic. GRIP selectees had to be intentional in showing how communities surrounding projects would materially benefit in ways that address community priorities.

a. What this means:

- Make clear connections between potential benefits and stated stakeholder priorities in defining what each community will find meaningful.
- A tool like the Community Benefits Building Blocks framework can help set expectations about realistically addressing community priorities and discussing different types of priorities — whether related to process inclusion, distribution of benefits, or enforcement of outcomes — at the most appropriate stage of benefits planning.

b. *Where we saw this:*

- GRIP selectees solicited input from the community and potential partners early in the proposal-writing stages.
- Many of the GRIP CBPs described direct stakeholder engagement to demonstrate how benefits connected to real community needs.
- Nearly 50 examples of leading organizations delivering meaningful community benefits are collected in the *Community Benefits Catalog* (described in *Section 5: Determine community benefits with community input* [page 38]).
- Each real-life example is matched to one of 15 Community Benefits Building Blocks with an explanation of how that community priority is addressed.

3. Use accountability-to-community mechanisms as a foundation for trust and buy-in. Funding selectees must meet federal reporting requirements, but these fall short of countering public distrust when there are weak mechanisms or metrics tracking how well community concerns are addressed over the project's lifetime.

a. *What this means:*

- Utilities and developers can build direct accountability to communities through a combination of enabling structured community input, codifying the commitments made to communities, and reporting progress on those commitments. Section 4 discusses where GRIP CBP examples of accountability actions match Community Benefits Building Blocks.

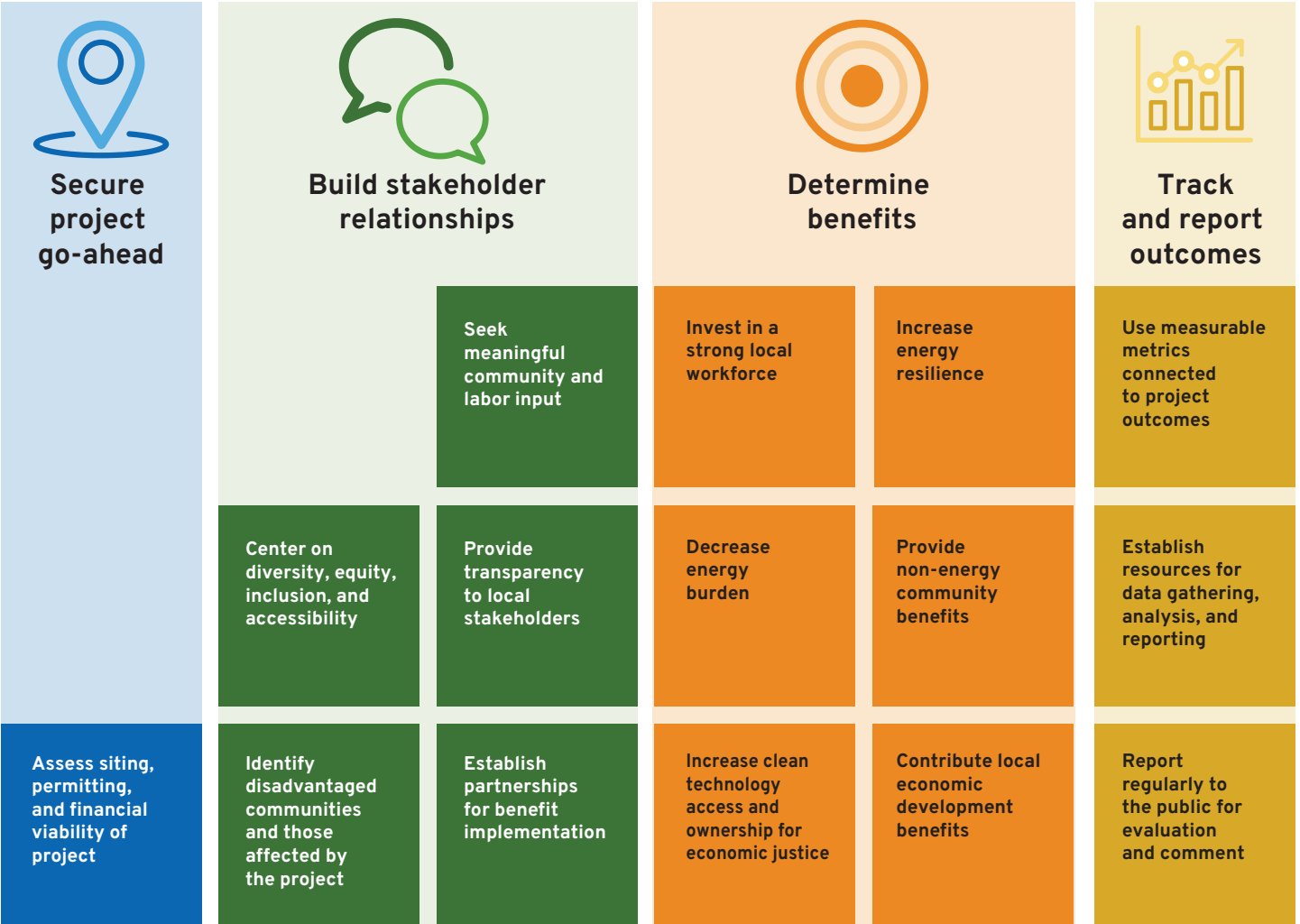
b. *Where we saw this:*

- Nearly 70% of the selectees committed to one or more direct-accountability-to-community actions.
- Some GRIP selectees voluntarily committed to entering legal contracts, such as community benefits agreements or project labor agreements (PLAs), with their stakeholders.
- Because nearly all GRIP Round 1 projects will be deployed on existing rights-of-way or through distributed energy resources (DERs) that do not have siting concerns, this analysis did not touch on engagement over siting decisions. Yet a lack of accountability and productive community input plays a role when projects deal with public debate on siting and construction.³

Community pushback on energy projects has been a long-standing contributor to delays and project cancellations. Whether or not federal guidance continues requiring community engagement and planning for communities, we have gained more examples of model practices for engaging effectively with communities in clean energy deployment. Using best practices in community engagement and benefit delivery provides alternative pathways for utilities and developers to avoid unpredictable delays and strengthen project deployment.

Exhibit ES1 Community Benefits Building Blocks

Through iterations of reviewing community benefits data and characterizing good practices, we developed a set of Community Benefits Building Blocks and created a *Community Benefits Catalog* of real-life examples showing these building blocks in use. Both resources are designed to support stakeholder engagement in the development of new energy projects.



RMI Graphic.

The Building Blocks are 15 distinct types of benefit actions. They are presented as options to choose from as project owners and communities decide which actions best meet local community priorities. Although community benefits planning isn’t a linear process and no singular process sequence is acknowledged as the best practice, the Building Blocks are associated with different tasks in the process of community benefits development, indicating the most relevant time to decide on these actions.

You will find nearly 50 real-life examples in the *Community Benefits Catalog* showing how the Building Blocks are being implemented and measured.

How to Use This Report

RMI and UMN's CSTEP conducted a study of community benefits that utilities and developers have committed to in recent project proposals. The largest data set comprised 54 CBPs submitted to the DOE in 2023 for the GRIP program.⁴ To broaden the scope of community benefits analyzed, several examples from utilities and clean energy projects that were not subject to federal CBP requirements were also included in our review.

CSTEP and RMI conducted stakeholder interviews to gain insights into the experience of community benefits planning, supplementing what was written into the plans themselves. We spoke with applicants, selectees, advocates, technical assistance providers, and community-based organizations (CBOs). Covering more than just GRIP experiences, these conversations provided a deeper understanding of developing community benefits and touched on challenges and motivations beyond those associated with meeting federal policy requirements.

Each section of this report covers a distinct aspect of our research.

Section 1 provides context for why we chose to study community engagement and benefits at this time, the data we had access to, and the framework we developed to organize our findings.

Sections 2, 3, and 4 share observations from our qualitative coding of the GRIP CBPs. Each section begins with a findings summary. Specific examples from the data are included to illustrate the findings. Each section then ends with a conclusions summary to keep observations and subjective evaluations separate. We investigated commonalities and noticeable omissions for community benefits by looking at the who, what, and how in the GRIP CBP narratives, which can be articulated as:

- **Whom did GRIP Round 1 selectees reach and in what ways?** There were trends in the types of organizations selectees engaged, the approaches used to identify those organizations, and the relationships between applicants and communities that formed before, during, and after proposal writing.
- **What community benefits are the GRIP projects delivering?** The promised actions and programs could be grouped by primary benefit, such as increasing affordability, providing education and training, and job creation. We were also able to characterize the commonly used approaches to determining those benefits.
- **How do the GRIP CBPs provide accountability?** GRIP selectees were asked to discuss metrics and reporting approaches in their CBPs. Although metrics and reporting will satisfy accountability to the funding program, we looked at how to support direct accountability to communities through engagement approaches and mechanisms for community input.

Sections 5 and 6 contain recommendations, resources, and conclusions that are based on our analysis of GRIP CBPs and the research interviews:

- **Section 5** introduces two resources to help utilities and developers put recommendations from this report into action.
- **Section 6** provides a summary of our recommendations and takeaways.

Two Appendices are included that provide more information about our analytic approach:

- **Appendix A** summarizes how policies at federal or subnational levels can support community benefits planning, based on the examples and lessons learned from recent community engagement efforts.
- **Appendix B** explains our qualitative research approach and includes the coding rubric used to analyze the GRIP CBPs.

1. Why Focus on Community Benefits?

Key Section 1 takeaways

- Investing in best practices for community engagement can mitigate project risks associated with community pushback, such as combative litigation and project cancellations.
- Private and public investment is being channeled into US energy infrastructure by the Bipartisan Infrastructure Law (BIL) (2021) and Inflation Reduction Act (IRA) (2022), under guidance to ensure that communities benefit from these federally funded projects.^{iv}
- Examples selected from publicly available CBPs show realistic and successful community engagement practices. These practices work toward ensuring that affected communities feel the benefit of project investments directly.

Public pushback on energy projects represents a significant project risk. A recent survey of project developers found that community opposition is one of the three biggest contributors to the cancellation or delay of new clean energy infrastructure projects.⁵ A study on opposition to energy project siting found that ineffective community input into decision-making processes was a significant factor that increased the likelihood of delays or cancellation for nearly 30% of the projects.⁶

Among developers with cancelled projects, most replied that they would have started engagement earlier when asked what that they would have done differently.⁷ In-depth interviews of residents around large-scale solar sites found that projects where the public was engaged directly and in earlier project stages increased local community support of project decisions, challenging the perception that public input inherently slows progress.⁸

There is no single, prescriptive way to address local community needs. Across the nation, each community has a unique set of priorities, which presents complexity for project owners wondering how to work with communities well. Utilities and developers are already equipped to efficiently meet safety and health requirements and navigate the engineering and construction aspects of their project but tend to face the uncertainty of social and community dimensions with fewer resources.

Recognizing this gap, we analyzed dozens of real-world examples of CBPs submitted by selectees for the DOE's GRIP program. Although these CBPs were developed under the unique requirements of the BIL and IRA, they provide broadly applicable lessons. Project owners of all types — utilities, cooperatives, manufacturers, developers, and governments — can use this work to inform how they approach community relationships, even in the absence of federal funding incentives.

iv At publication of this report, the futures of federal programs through BIL and IRA are uncertain. Up-to-date information about funding opportunities like the GRIP program can be found through the DOE website (<https://www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program>).



In March 2024, the DOE complied with a Freedom of Information Act (FOIA) request and posted applications from the organizations selected to advance in the first round of the GRIP program.^v The FOIA provided one of the most comprehensive public windows into how energy infrastructure developers can approach community benefits planning. Additionally, we conducted research interviews to more deeply understand the barriers to community engagement and developing community benefits.

Like many of the BIL and IRA funding programs, the GRIP program required applicants to submit CBPs that explained how they would engage stakeholders and deliver direct community benefits. These submissions were scored as part of the application, with CBPs accounting for 20% of the total evaluation rubric. Strong CBPs were a notable factor in the applicant selection process; most successful applications scored above 70% in this category, while the average across all submissions was under 60%.⁹ The Grid Deployment Office (GDO) explained in its FAQs that “CBPs should demonstrate what community efforts can be achieved specifically in relation to the project and as a result of federal funding. ‘Business as usual’ approaches are not encouraged.” In our interviews, applicants who did not advance mentioned weak CBPs as a factor.

The findings of our study are not limited to federal programs. From our analysis of these CBPs, we distilled transferable strategies that future project owners can adopt regardless of funding source. The resulting insights and reflections can help utilities and developers continue building energy projects successfully with community support.

The role of community benefits in the GRIP program

The GRIP program’s purpose is “to enhance grid flexibility and improve the resilience of the nation’s power grid against growing threats of extreme weather and climate change.”¹⁰ As large new loads create more strain on the grid, such infrastructure upgrades are even more critical to the electricity system’s resilience.¹¹ The DOE announced selectees for Round 1 of the GRIP program in October 2023. Round 1 GRIP projects total over \$3.46 billion in federal grants across 44 states and 58 projects (see Exhibit 1). The DOE announced Round 2 GRIP selectees in November 2023, for another \$3.9 billion of funding.¹²

^v The DOE disclosed frequently requested materials through the FOIA. This disclosure released 56 of the 58 selected self-redacted applications, including their CBPs. Of the 56 disclosed applications, 2 were additionally excluded from analysis due to large numbers of redactions. We analyzed 54 GRIP Round 1 CBPs through qualitative coding methods. See Appendix B for details about the approach used.

Exhibit 1

GRIP funding overview

GRIP topic area	Eligible applicants	Total Round 1 funding and number of selectees	Total GRIP program funding (over five years through three application rounds)
Topic 1: grid resilience utility and industry grants	Electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers	\$914.5 million in federal cost share, 16 selectees	\$2.5 billion
Topic 2: smart grid grants	Institutions of higher education, for-profit entities, nonprofit and not-for-profit entities, state and local governmental entities, and tribal nations	\$1.114 billion in federal cost share, 34 selectees	\$3 billion, 50% cost share minimum
Topic 3: grid innovation programs	A state or a combination of two or more states, an Indian tribe, a unit of local government, and a public utility commission	\$1.436 billion in federal cost share, eight selectees	\$5 billion, 50% cost share minimum

RMI Graphic. Source: “Grid Resilience Innovation Partnership (GRIP) Program Overview,” Strategies Consulting

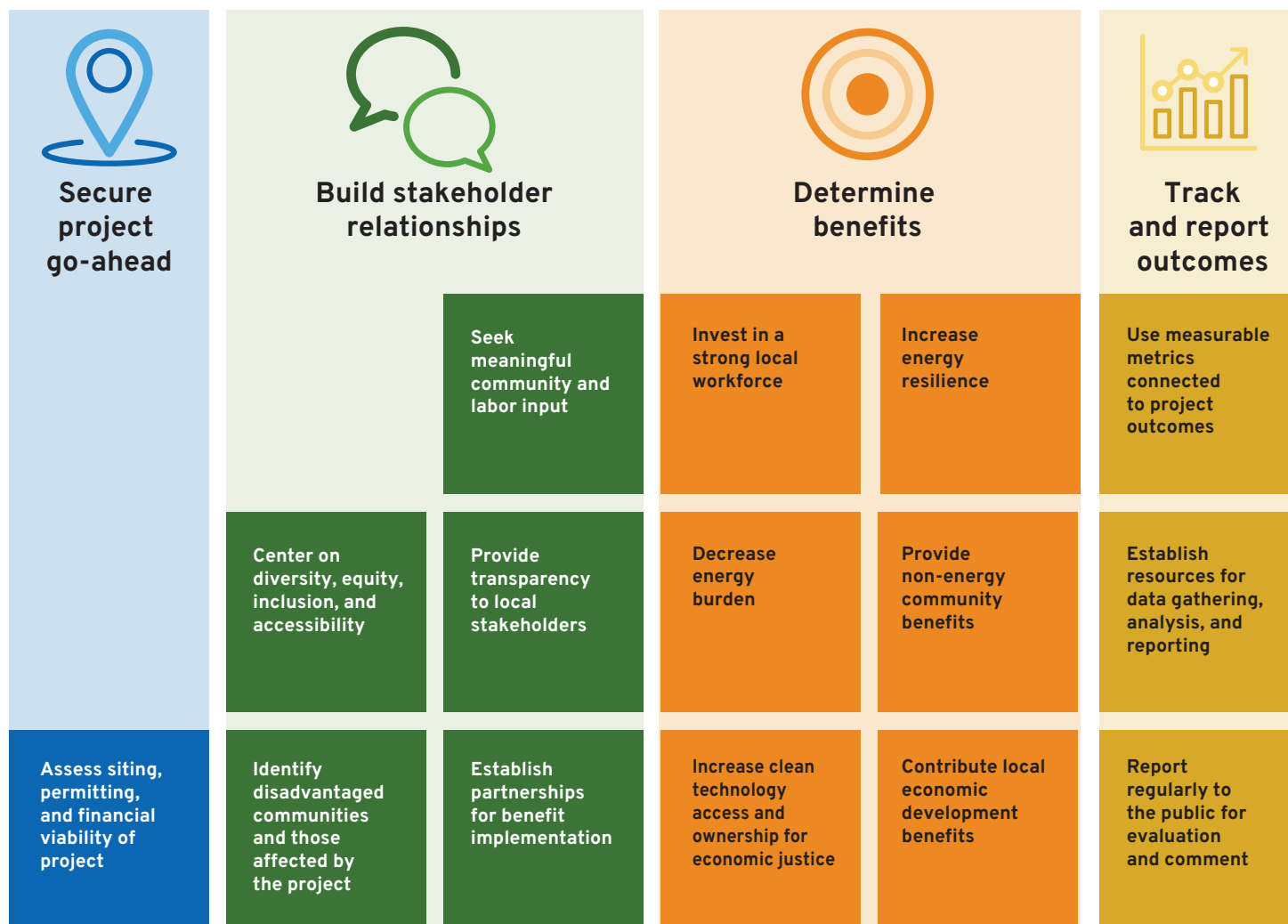
Community Benefits Building Blocks

To support our analysis, we developed the Community Benefits Building Blocks framework (see Exhibit 2, next page), which organizes how to plan for, deliver, and track community benefits while ensuring local communities’ needs and challenges are central. The framework captures 15 distinct types of actions, each reflecting a category of potential community concern or stakeholder priority. These actions are associated with different tasks in the process of community benefits planning by utilities and developers:

- Secure project go-ahead (e.g., siting, financing)
- Build stakeholder relationships (e.g., transparency, partnerships)
- Determine benefits (e.g., resilience, economic opportunity)
- Track and report outcomes (e.g., metrics, transparency)

We linked benefit actions and commitments that utilities and developers have used to specific building blocks to confirm which stakeholder priority was being addressed. See *Section 5* for a discussion on how to use the Community Benefits Building Blocks to identify and address relevant community concerns.

Exhibit 2 Community Benefits Building Blocks



RMI Graphic.

2. Whom Did GRIP Round 1 Selectees Engage and in What Ways?

Key Section 2 takeaways

- All GRIP selectees included external organizations in the proposal-writing stages of their applications.
- Selectees used many different engagement and partnership approaches, which we characterized primarily as either one-way or two-way engagement.
- The type of project does not dictate or limit the types of engagement approaches that are effective. Best practices in engagement can be used in any project; procedurally inclusive actions can even be independent initiatives.

Section 2 provides insight into how GRIP selectees approached community benefits planning and shares examples for how other utilities and developers can put these building blocks for strong stakeholder relationships into action.

We observed whom the GRIP selectees engaged and how they determined whom to engage and analyzed the ways in which they structured these engagements. Exhibit 3 shows the Community Benefits Building Blocks (types of actions or programs) associated with building stakeholder relationships during benefits planning and development.

Exhibit 3

Build stakeholder relationships



RMI Graphic.

Types of organizations named in CBPs

The organizations most frequently engaged matched the DOE's CBP guidance and prioritization of workforce development:

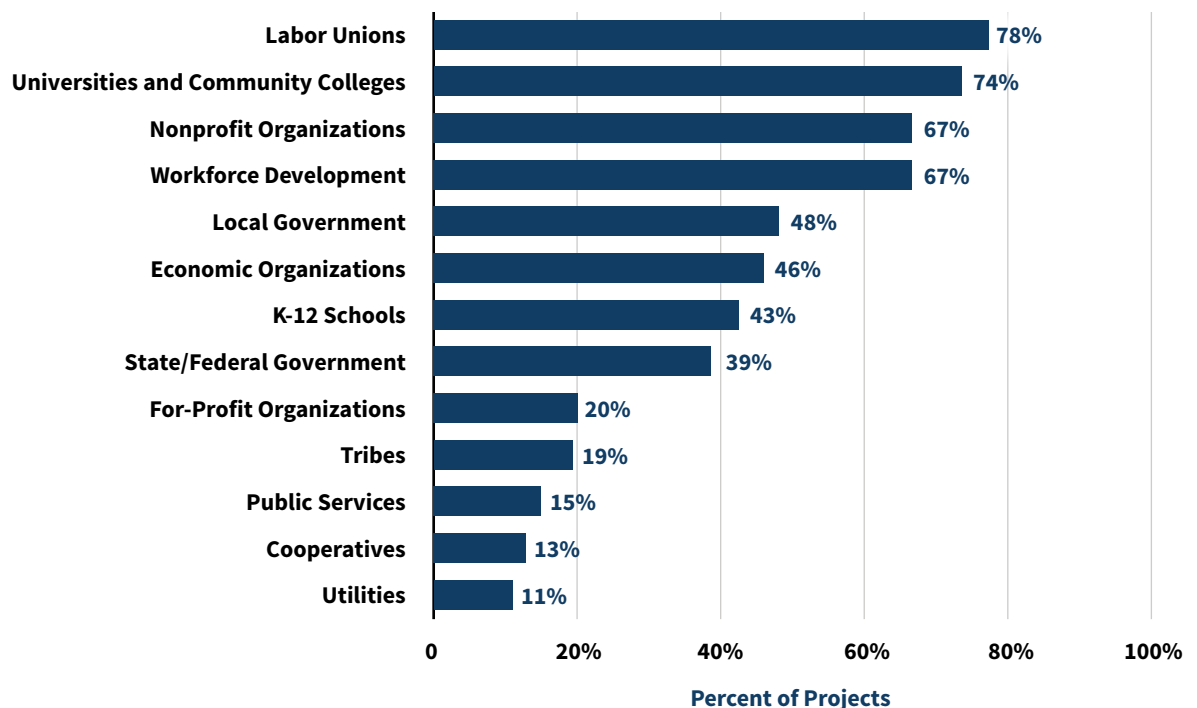
- Labor unions (78%)
- Universities and community colleges (74%)
- Workforce development organizations (67%)

Exhibit 4 contains a full listing, with percentages, of the types of outside groups GRIP Round 1 selectees mentioned they partnered with in developing their CBPs.

Fifty-four percent (28 of the CBPs) mentioned that CBOs provided input into the project and influenced benefit design.^{vi} Notably, a few selectees spoke in detail about CBOs, tribal communities, and neighborhood associations being essential conduits for critical community input. Interviewees who worked most closely with CBOs noted that CBO partnership facilitated engagement with frontline and disadvantaged communities.

Exhibit 4

Relationships with external organizations



RMI Graphic. Source: CSTEP

^{vi} In this study, we wanted to evaluate the extent of participation by locally based organizations providing input into the project on community needs beyond jobs and other economic issues and philanthropy. These organizations are what we are referring to when we use the term community-based organization or CBO. Recognizing and defining what qualifies as a CBO has a long history and includes where the organization is based, who makes up its decision-making body, what topics it focuses on, and what goals it aims to accomplish. In the past, RMI has made distinctions among community development organizations, community-based advocacy organizations, community service organizations, and community-based research organizations.

For example:

- In Vermont, **Burlington’s Electric Department (BED)** has a long-standing vehicle for community input that will facilitate understanding and successful deployment of its load flexibility GRIP project. In 1982, the city established neighborhood planning assemblies (NPAs), grassroots neighborhood organizations in Burlington’s wards. BED finds them to be among the city’s most robust community engagement tools. In 2022, BED gathered community feedback through the NPAs about an electrification policy for new construction, major renovations, city buildings, and large existing commercial buildings.
- For its GRIP project, the **Georgia Environmental Finance Authority** recruited the community solar nonprofit Groundswell to advise and help it implement community engagement. Groundswell will gather insights on the value of energy resilience from disadvantaged communities affected by the project and facilitate community engagement activities. One of the participating companies, Georgia Transmission Corporation (GTC), dedicated the funds to cover the cost of facilitation and materials for public meetings and community events, and Groundswell will work with GTC’s public affairs director.

Building on and going beyond existing relationships

Ninety-one percent of GRIP CBPs said existing relationships with external organizations (often with labor unions or universities) supported their GRIP project proposal. Only 13 plans specified that relationships had been initiated during the process of proposal development, and 21 plans described relationships that applicants anticipated building after the CBP was submitted.

Most selectees that mentioned community involvement in proposal design also leveraged preexisting engagement initiatives, often engaging their communities one to five years before their grant application. In rural areas, several interviewees described barriers to public engagement stemming from a lack of obvious community representatives to approach.

Given the valuable role that external partnerships can play, it is crucial for utilities and developers to seek out trusted organizations already in the community and ask how they can be brought into conversations for collaboration. Where small or underresourced communities may not have formal organizations ready to engage, project owners are tasked with paying extra attention in identifying trusted intermediaries and common gathering places, or investing in education and capacity-building. The following sections share additional tools for identifying and understanding affected stakeholders.

Stakeholder mapping

Over one-quarter of the CBPs included a deliberate stakeholder mapping process to identify whom to engage. Stakeholder mapping involves the systematic identification and categorization of individuals, groups, and organizations that have an interest in or could be affected by a project.^{vii}

For example, **Liberty Utilities** and the **Empire District Electric Company** each developed a stakeholder map under the supporters, neutral, resisters, and detractors (SNRD) framework to help identify key groups

^{vii} Power mapping is a related exercise that involves additional identification of the levers and relationships needed to achieve a particular goal, such as developing an energy infrastructure project. For example, power mapping can incorporate an analysis of which stakeholders identified in a stakeholder map are likely to be allied or opposed to an infrastructure project. Resources are available from the Union of Concerned Scientists (https://www.ucsusa.org/sites/default/files/attach/2018/07/SN_Toolkit_Power_Mapping_Your_Way_to_Success.pdf) and the BlueGreen Alliance (<https://www.bluegreenalliance.org/wp-content/uploads/2023/12/Companies-Succeed-Communities-Benefit-User-Guide-vFINAL.pdf>).

to engage and to set priorities for engagement. Other selectees also used the SNRD framework. Exhibit 5 (next page) is an example from the Empire District Electric Company’s GRIP application.

Exhibit 5

SNRD stakeholder map from the Empire District Electric Company CBP

“This stakeholder map will be regularly updated and will inform how the utility implements its digital and in-person engagement strategies.

- “23 external organizations were identified as ‘community enablers and beneficiaries’ in the ‘Supporters’ and ‘Neutral’ groups of its stakeholder map.
- “These included economic organizations (local chambers of commerce and economic development organizations), local governments (city and county governments), K-12 schools, public service organization (a local hospital), state government, for-profit organization (a local bank), and others (e.g., rotary clubs).”

Stakeholder Group	Key Groups or Organizations	Key Engagement Priorities
Supporters	Commerce chambers, municipal governments, large customers sensitive to outage costs, EPC contractors, medical and emergency management organizations.	Capitalize on their enthusiasm — identify meaningful opportunities to reflect the facilitation or resources of these organizations in formal agreements.
Neutral	Local labor unions, customers in system areas with multiple redundancies (or own backup power), Indian Tribes, local government officials.	Emphasize their points of value — identify what matters to neutral stakeholders who could be pivotal and focus on these issues to convert them into supporters.
Reisistors	Vulnerable consumers sensitive to rate increases and organizations advocating on their behalf. Proponents of grid defection (typically solar/storage aggregators).	Listen, learn, incorporate, re-engage — capture concerns in a way that does not assume “knowing the answer.” Incorporate concerns into plans and regularly re-engage.
Detractors	Non-identified — but could include landowners or local conservation groups who may have reasons to actively interfere in access/work on specific sites.	Focus on integrative rather than distributive outcomes. Work to proactively identify through site-level projects planning work (once DOE funding approval is granted).

Empire District Electric Company Graphic. Source: “Project DA: Distribution Automation Deployment in Missouri, Kansas, Arkansas, and Oklahoma. Community Benefits Plan”

In the context of community benefits planning, the practice of stakeholder mapping can clarify whom to engage, how to prioritize outreach, and where gaps in representation may exist. Mapping is the most useful when it can be revisited throughout a project’s lifetime and when its outputs lead to customized approaches to relationship-building.

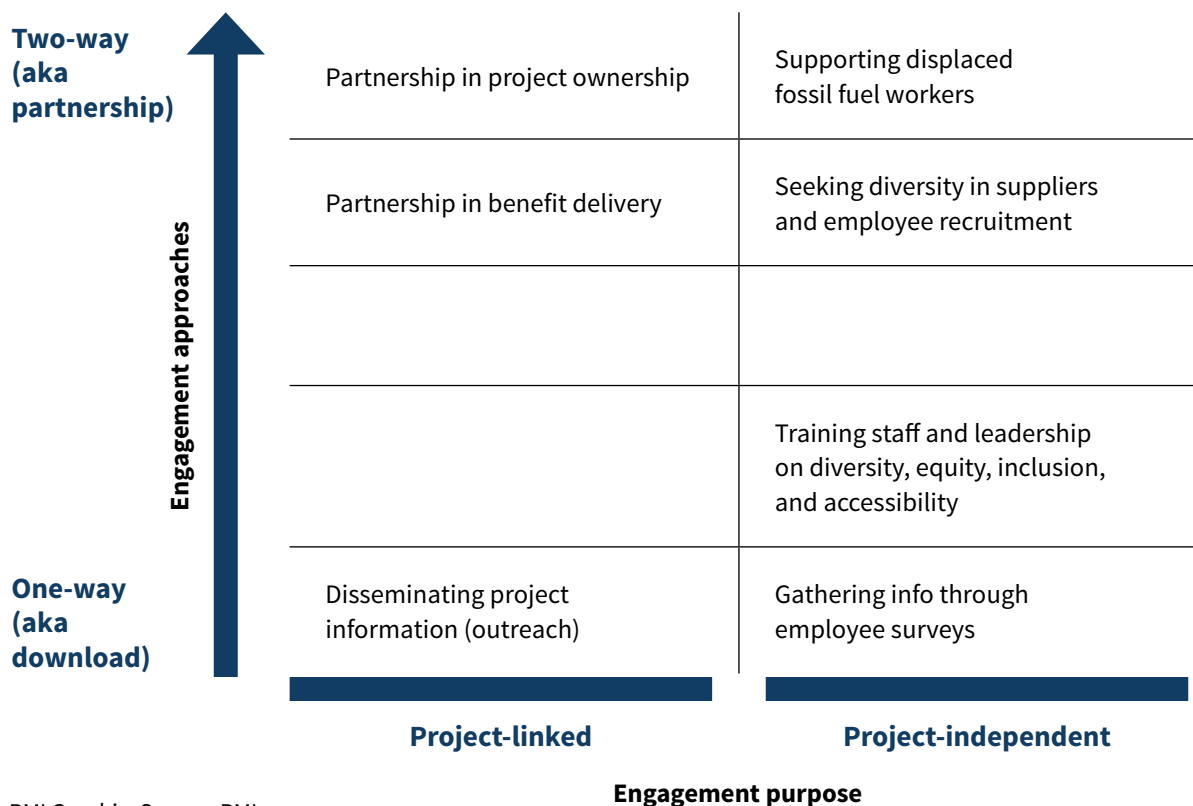
Engagement approaches

We reviewed GRIP engagement approaches against the International Association for Public Participation’s Public Participation Spectrum and then characterized them into one of two categories:^{viii}

- **One-way engagement** — forums and communication campaigns where information flows primarily in one direction over facilitating dialogue between parties
- **Two-way engagement** — a series of communication exchanges with community members and organizations to refine input in collaboration with project owners

We also looked at whether CBP actions were linked exclusively to the project itself. In combining that inquiry with our review of engagement approaches, we evaluated whether actions aimed at engagement and participation could be regarded as project-linked or project-independent. Project-independent actions are those that a utility or developer could employ outside of project development as part of a core business strategy to increase its reputation for trustworthiness. Exhibit 6 shows project-oriented and project-independent engagement approaches ranging from one-way to two-way examples.

Exhibit 6 Building relationships through engagement



RMI Graphic. Source: RMI

^{viii} The Public Participation Spectrum is a framework for the goals and expectations associated with increasing levels of stakeholder engagement and influence. We find it helpful in clarifying the roles of community members, deciphering what roles are relevant in any particular context, and recognizing what changes are appropriate to facilitate (<https://iap2.org.au/resources/spectrum/>).

Nearly all CBPs discussed consultation with stakeholders. In addition:

- 46% discussed two-way engagement with stakeholders (25 CBPs).
- 43% discussed consulting stakeholders early with the intention to build trust and inclusion throughout the process of community benefits planning (23 CBPs).

In the GRIP CBPs, one-way communications approaches for engaging directly with community members included offering information sessions and hosting public meetings as public education programs. One-way engagement examples also met accessibility and inclusiveness priorities by carefully developing educational and outreach materials to reach underrepresented groups and disadvantaged communities specifically.

Some of the most robust two-way engagement approaches included iterative listening sessions and the creation of advisory boards. Interviewees described how these approaches would help increase project buy-in.

The following utilities provided notable examples of one-way to two-way engagement approaches:

- The **Alaska Energy Authority**'s detailed public engagement plan recognizes "that broad support for [the project] is necessary for successful project implementation" and sought to design a "public participation process [that] draws on diverse perspectives from a broad cross section of stakeholders."¹³ The plan describes two phases, a planning phase and a public engagement phase.
 - Public participation planning phase:
 - Define the purpose of the CBP, develop stakeholder engagement strategies, and define SMART goals.^{ix}
 - Begin with introductory public work sessions at each of the five participating utilities to solicit feedback and "identify areas where stakeholders wish to have more data or information."¹⁴
 - Pursue "data collection and research (including surveys) to address data gaps identified by the public," including development of an online interactive mapping tool of the project, enabling the team to "solicit public comments that are geocoded by location, allowing identification of site-specific issues, needs, and themes."¹⁵
 - Public engagement on project impacts of concern:
 - The authority will host work sessions with relevant organizations to facilitate early engagement on environmental impacts; watershed impacts; subsistence impacts; state and federal land management; power cost equalization; workforce development; support for minority business enterprises; diversity; equity; inclusion; and accessibility (DEIA) recruitment and workplace policies; and state legislation.
 - Conclusions from the work sessions will be reported to the team's leadership.
 - Minutes from the sessions will be publicly available through the project website.

ix SMART is an acronym for specific, measurable, achievable, realistic, and time-bound.

- In **PPL Electric Utilities'** CBP, a series of three local workshops is planned to gather community input on the siting of new facilities in Pennsylvania, creating an “environment of transparency while eliminating certain risks associated with the project.”¹⁶ Two-way engagement between the utility and affected communities is anticipated to be mutually beneficial, where communities align on benefits and project implementation plans and the project owners can plan on reduced project development risk.
- Florida's City of **Lake Worth Beach** project concept originated in 2017, six years before the GRIP program, through public engagement with the municipal utility's customer-led Electric Utility Advisory Board (EUAB).
 - Projects were identified through discussions between the EUAB and the City Commission as well as public workshops that were broadcast online and regular public reporting that was open to public comment.
 - Processes for ongoing community feedback facilitated by electric utility outreach coordinators will be funded by the GRIP award. The coordinators will engage advisory boards and neighborhood associations staffed by residents and customers.
 - The city plans to engage citizens in accessible locations and through online conferences and will leverage existing city mechanisms to engage a diverse set of voices and increase transparency of decision-making.

Some selectees used strategic partnerships with trusted community intermediaries to codeliver benefits. These partnerships will help increase participation among underrepresented and disadvantaged communities, such as when a local institution supports workforce recruitment in its disadvantaged community (DAC) or when local small businesses are included as designated recipients of dedicated economic development resources from the project. For example:

- **Portland General Electric** is “scoping a mapping exercise to identify an effective community collaboration and [CBO] partnership” in Oregon.¹⁷
 - The utility partnered with a local nonprofit for its specialized community engagement experience.
 - The CBP discusses tapping into existing coalitions of CBOs and an existing Strategic Tribal Engagement Plan to ensure more comprehensive engagement with stakeholders that might otherwise have been left out of the CBP.
- **Generac Grid Services** partnered with Action for Boston Community Development to leverage a network of community action agencies throughout Massachusetts.
 - The partnership will allow Generac to build on existing programs that serve low-income communities with local services, including energy assistance.
 - Generac's CBP emphasized that having partners with strong community ties would allow it to incorporate community input early in the implementation of the project before processes are set in stone.

Across the GRIP CBPs, engagement strategies varied widely in structure and depth. Selectees that had embraced two-way engagement and ongoing collaboration with community stakeholders seemed more credible as trustworthy partners and better positioned to have community input strengthen their projects instead of work against them.

The GRIP examples show how two-way engagement approaches can evolve into established “soft” infrastructure that is valuable to sustain over time. Some selectees’ engagement initiatives persist beyond the life of a single project. As project-independent actions, practices like continuously updating stakeholder maps or creating broader community advisor roles help integrate effective engagement into core organizational capacity, increasing the ability to handle the social and community dimensions of future projects more predictably.

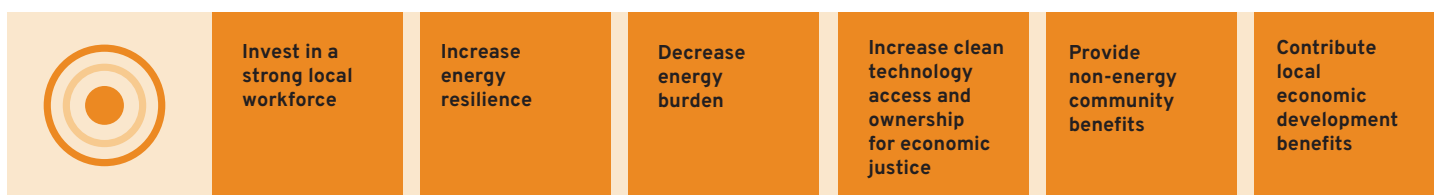
3. What Community Benefits Are GRIP Projects Delivering?

Key Section 3 takeaways

- Resilience was inherent in the GRIP funding program’s purpose, and increased energy resilience was the most-mentioned benefit.
- Clean technology access and ownership benefits included expanded access to DERs, EV infrastructure, and grid-enabled technologies.
- Affordability and reduced energy burden were meaningful benefits, when measured. Nearly half of CBPs mentioned energy affordability, but only a fraction translated infrastructure upgrades into household-level impacts with clear metrics.
- Local economic development was an underutilized benefit category. Similarly, non-energy community benefits were uncommon in the GRIP CBPs. These types of benefits were missing strong connections or metrics to demonstrate the extent of local community benefit.

Exhibit 7 shows the Community Benefits Building Blocks associated with determining benefits, which are actions and programs that can address community priorities. For example, if energy resilience is a community concern, then the project can focus on benefits that increase energy resilience.

Exhibit 7 Determine benefits



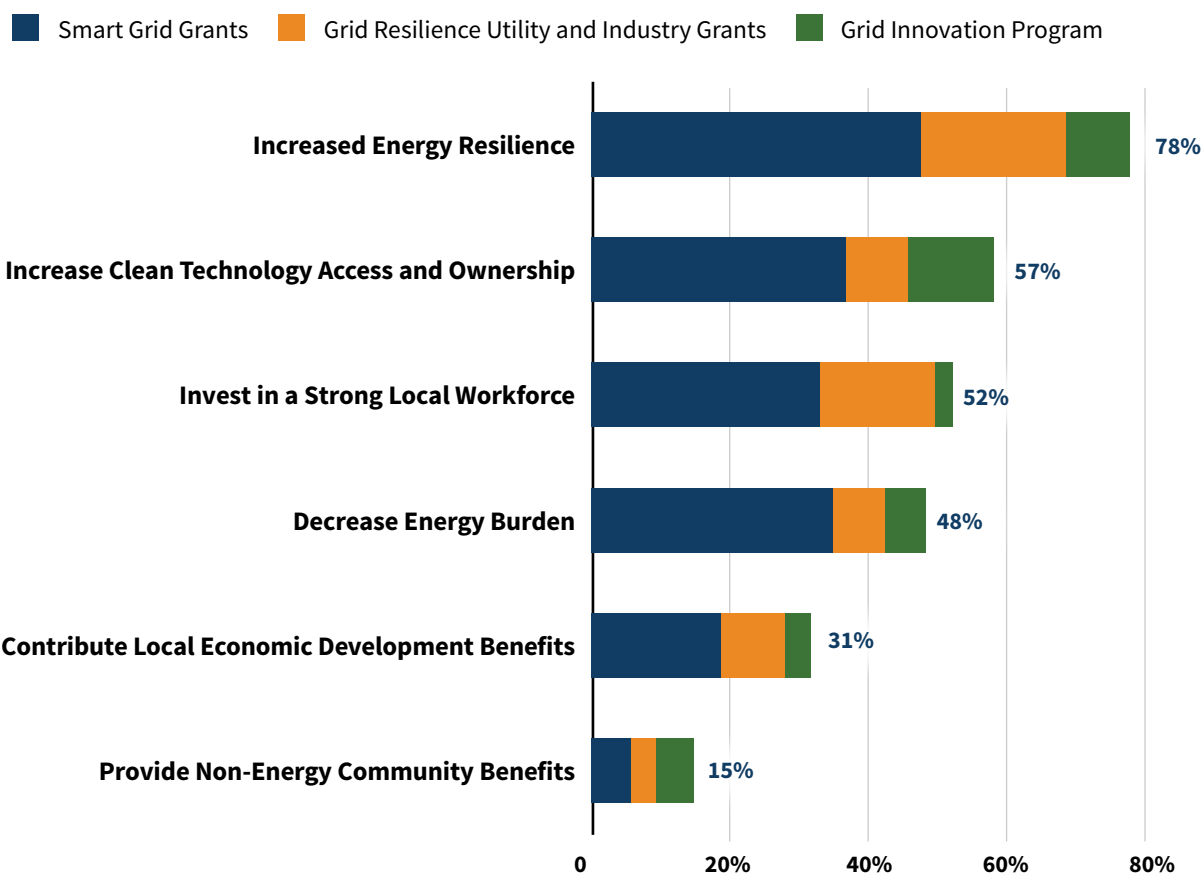
RMI Graphic.

This section highlights the types of benefits GRIP projects committed to and the design strategies used to make them community-serving. Although these CBPs were created in response to federal requirements, their structures, tactics, and framing offer valuable models that developers across the country can draw from as they seek to build community buy-in, reduce project risk, and deliver shared value in the communities where they operate.

Exhibit 8 shows the percentage of GRIP CBPs that mentioned programs or actions connected to the six benefit categories.

Exhibit 8 Mentions of six benefit categories

Societal benefits are inherent in improving the electrical grid for resilience, reliability, and affordability. Still, pushback from local communities has effectively delayed and cancelled large energy projects. A range of concerns can fuel community opposition, and the Community Benefits Building Blocks helped us evaluate which community benefits match local concerns.



RMI Graphic. Source: CSTEP

The framework does not prescribe which priorities to focus on; instead, the 15 building blocks represent types of actions or programs to choose from. Many are directly connected to energy projects, but other community priorities — such as health, housing, conservation, and environmental impacts — are priorities that communities and project owners could also decide to address together.

Six of the Community Benefit Building Blocks are associated with the task of determining benefits. GRIP Round 1 CBPs included benefits that fit into all six categories. Most CBPs included benefits that will lead to increased energy resilience, but only a small number of CBPs included benefits intended to provide non-energy community benefits. This section includes examples from GRIP CBPs for each building block.

Increase energy resilience

GRIP was explicitly designed to fund grid resilience improvements, and correspondingly over 75% of projects mention resilience benefits, including extensive discussion of how their proposed projects would decrease outages and increase energy resilience against extreme weather events.

Nearly 40% of CBPs detailed how disadvantaged communities surrounding the project sites would directly benefit. Several CBPs mentioned how the increasing frequency of wildfires, hurricanes, and severe storms heightens the vulnerability of disadvantaged communities, thus stating how resilience to such events creates direct benefits for disadvantaged communities. For example:

- The **Tri-County Electric Cooperative** in South Carolina will integrate new electric meters, vegetation management software, and data analytics to reduce outages in one of the most economically depressed areas in the country. Improved reliability would “have a direct correlation with the quality of life that [its] members experience” and would provide “life-saving service to several of the members who are on life-saving medical devices,”¹⁸ estimated at 81 members. Mapping households dependent 24/7 on life-saving medical devices with an artificial intelligence-updating “health burden” tool clearly prioritizes and protects medically vulnerable members.
- **Xcel Energy** said its GRIP project would implement “wildfire risk reduction and system hardening, helping the communities we serve be more reliable, safer, and resilient” as extreme weather events increase in Colorado, Minnesota, New Mexico, Texas, and Wisconsin.¹⁹ GRIP funding helps expand existing initiatives particularly to rural and disadvantaged communities that would benefit from increased resiliency.

With the stated purpose of the GRIP program centered on resilience, projects naturally extended resilience benefits to the community. Yet benefits seemed meaningful and effective when selectees translated infrastructure upgrades into household-level impacts with clear, measurable metrics and backed claims of local community benefits with tangible programs or actions. This theme of using data and intentional program design to ensure benefits are community-serving became an indicator of best practices in our study.

Increase clean technology access and ownership

Clean technology access and ownership were included in more than half of the CBPs, making the benefit category the second most cited after resilience. This category includes broad service-territory benefits, such as increased hosting capacity for clean energy and consumer-owned cleantech in general, and benefits aimed at individuals and local communities, such as increasing community access to distributed solar and battery storage, supporting asset ownership, or even offering stakes of financial equity in the project.

What distinguished stronger CBPs was not simply the presence of DERs or cleantech infrastructure, but intentionality in how those resources would reach disadvantaged communities, reduce structural barriers to access, or support longer-term participation in the clean energy economy.

Several CBPs included measurable deployment goals, incentive structures, or outreach aimed at ensuring disadvantaged communities could participate in and benefit from clean technology investments. For example:

- In Pennsylvania, the **Duquesne Light Company**'s grid visibility project expects "to deploy approximately 52% of [smart grid chips] where energy costs are a considerable portion of a household's income." This focused data collection will help establish metrics to "inform program enrollment and design ... with the aspiration of reducing energy burdens and enhancing services to low-income customers."²⁰
- **Ameren Missouri** proposed substation upgrades and line conversions in disadvantaged communities that will "provide additional distributed energy resources, electric vehicle charging infrastructure, and renewable energy hosting capacity, empowering the community to utilize renewable energy as an alternative to traditional fossil fuel generation as load increases."²¹
- The **Los Angeles Department of Water and Power** plans to integrate 6,000 commercial EV customers into its Managed Charging Program, with half of new enrollees selected from disadvantaged communities and receiving higher financial incentives.

DERs, such as solar and batteries, have easily recognized forms of local deployment, including neighborhood solar gardens and individual residential installations. In some GRIP projects with DER infrastructure deployment, selectees established goals for increasing parity from disadvantaged communities because they experience cumulative barriers to participation and individual ownership of associated technologies.

Some CBPs went beyond increasing opportunities for access to explicitly supporting cleantech adoption, technology ownership, and an ownership stake in the project itself. As examples:

- The **Tri-State Generation and Transmission Association** designed a partial rebate program for residential members interested in home-energy storage to "increase 'energy democracy,' including community ownership in disadvantaged communities."²² Tri-State and its 40 member utilities serve customers in Colorado, Nebraska, New Mexico, Wyoming, and 18 sovereign tribal nations.
- In Oregon, The **Confederated Tribes of Warm Springs** codeveloped a transmission project with **Portland General Electric**, enabling the tribe to participate in and own new transmission capacity that "will create opportunities for green energy development on Tribal lands" and thus will increase tribal revenues. This arrangement enables the tribe to develop new solar resources on its land and generate revenues for reinvestment in community services and enterprises, "creating greater economic stability for Tribal members."²³ The project reflects an approach by utilities and developers of recognizing tribal sovereignty in developing partnership models for infrastructure ownership.

The following options can realistically be incorporated into project designs by utilities and developers:

- Use deployment targets and equity metrics to ensure cleantech access is not incidental
- Design incentive structures (like tiered rebates or income-qualified programs) to reduce cost barriers
- Explore where models of community or tribal ownership can increase project viability, most likely where clean energy infrastructure intersects with sovereign lands or frontline neighborhoods

Invest in a strong local workforce

The third-most-promised benefit across GRIP Round 1 CBPs (mentioned in 52%) was investment in the local workforce. More than one-third of CBPs described training and education programs, and more than a quarter committed to skilled-job creation. These benefits ranged from pipeline efforts like STEM curriculum development in secondary education to targeted hiring and apprenticeship programs supporting energy transition careers.

Many CBPs referenced existing workforce development programs; only a small number described workforce investments as new efforts catalyzed directly by the GRIP project.

We looked for specificity about how GRIP-funded infrastructure would create new jobs or expand access for underrepresented groups, and characterized workforce benefits into two categories:

1. Training and education benefits in general, including educational K-12 programs fostering a workforce pipeline, vocational training programs for skills and jobs connected to the energy sector, apprenticeship programs for specific job categories, trade skills workshops and programs developed with unions, employee training and career advancement programs, and programs leading to high-wage, career-track opportunities.
2. Direct job creation and economic impacts in which selectees cited the number of jobs that projects would create, during construction and as direct hires of the company; the wage levels of these jobs; and whether the recruitment would draw from underrepresented or disadvantaged populations, including training-to-hire programs directly connected to the funded projects.

Tangible workforce benefits directly connected to the funded project also seemed correlated with strong labor union relationships. Specific examples of CBPs with intentional workforce benefits include:

- The **Sacramento Municipal Utility District** in California stated that its proposed Regional Workforce Development Strategic Plan would result in “training at least 3,000 people to position them for clean energy and other economic opportunities.”²⁴
- **PacifiCorp** will conduct regional asset hardening and install system automation technologies in California, Idaho, Oregon, Utah, Washington, and Wyoming, including the flood-prone areas of the Yurok tribe in Northern California and in Utah near Navajo tribal areas. Its Project PEER CBP described a specific pre-apprenticeship program at high schools near the Yurok Tribe and a training partnership with Utah State University near multiple tribal communities.
- In Michigan, **Consumers Energy Company** will “work with union partners to hire, onboard, and train the necessary people to perform the work. All program apprentices — many coming from underrepresented backgrounds — will rotate through this grant-funded work for training purposes.”²⁵

These examples show workforce investments that are specific, locally grounded, and designed to create lasting value — for both the energy systems and the communities where projects will be built. Incorporating intentional recruitment actions to bring underrepresented or disadvantaged demographics into either category of workforce benefits determined which of the GRIP benefits seemed most connected to environmental justice principles.



Decrease energy burden

Nearly half of the CBPs included extensive discussion of how the proposed infrastructure projects would create affordability benefits by reducing energy burden in disadvantaged communities and for low-income households.^x In many cases, these benefits stemmed from avoided outages, coordination of energy use, or expanded access to efficient technologies.

We made note of CBPs with actions that targeted their energy burden alleviation toward populations most likely to experience high energy burdens (i.e., low-income households and residents of deed-restricted housing). These CBPs provided concrete estimates of annual savings rather than relying on generalized claims. Only a fraction of selectees' CBPs quantified expected bill savings or linked the benefit to disadvantaged communities to translate infrastructure upgrades into household-level impacts. For example:

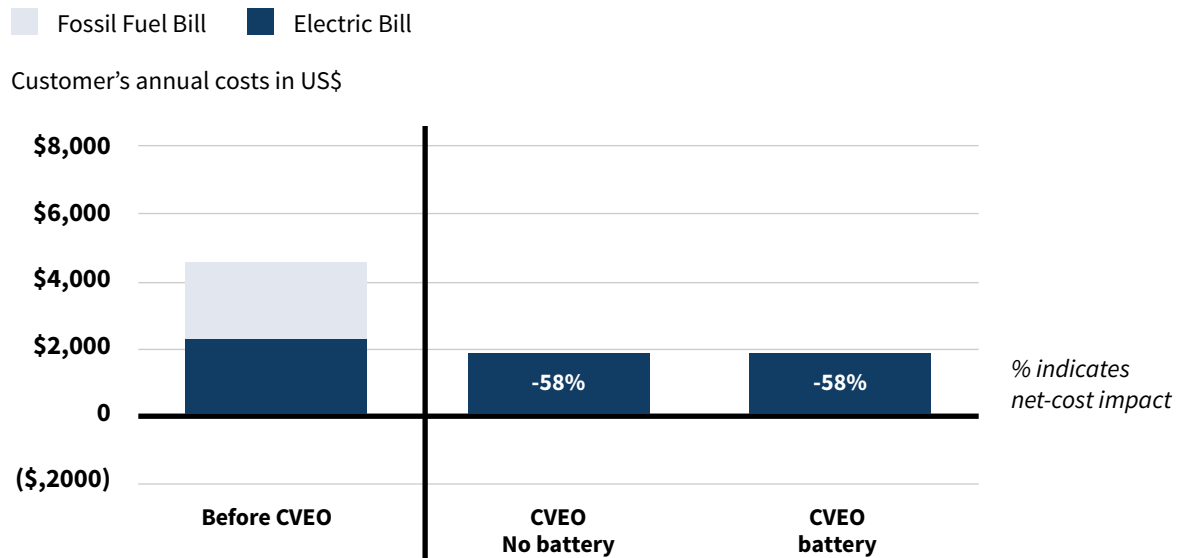
- With **Oklahoma Gas and Electric's** \$102 million project focused on grid automation and mobile energy storage deployment, the utility estimated an average annual reduction of \$50 million in aggregate customer costs because of reduced long-duration, outage-related interruptions.^{xi}
- **Generac Grid Services'** project expects to demonstrate that new electric loads from heat pumps can be offset through control and optimization of other household DERs (e.g., batteries, Wi-Fi thermostats, and hot water control switches). Generac provided estimates of \$150 to \$600 in annual household savings associated with its heat pump and battery deployment in low-to-moderate-income (LMI) households, "a significant impact for most households where the Annual Per Capita Income in Massachusetts in disadvantaged communities is \$48,225."²⁶ It also included an analysis (see Exhibit 9, next page) estimating the potential changes in bills for LMI deed-restricted-housing customers. The exhibit projects a significant reduction in LMI customers' annual costs by eliminating the use of oil to heat their homes. Also, adding batteries is expected to achieve systemic benefits without increasing customer bills.

^x Energy burden is the percentage of gross household income spent on energy costs. The DOE made an online, interactive platform, the Low-Income Energy Affordability Data (LEAD) Tool, available to the public to understand and compare the energy burden of various geographic regions, including census tracts, cities, counties, states, and tribal boundaries. The LEAD Tool is at <https://www.energy.gov/scep/slsc/lead-tool>, and data can be found at <https://catalog.data.gov/dataset/low-income-energy-affordability-data-lead-tool-2022-update>.

^{xi} Traditionally, energy burden is calculated as the percentage of household income spent on energy annually and does not factor in the customer cost of interruption. However, a holistic quantification of energy system burdens could arguably include such costs.

Exhibit 9

Estimated LMI customers' bills in the Cape and Vineyard Electrification Offering (CVEO)



RMI Graphic. Source: Generac Grid Services' CBP

For utilities and developers planning energy infrastructure projects, these CBPs show how bill reduction can serve as a tangible, impactful benefit, particularly when tied to communities already experiencing a high energy burden. It creates a compelling narrative for stakeholder support when utilities can demonstrate that their projects can reduce monthly expenses for households, increase affordability, and thus reduce the likelihood of disconnections.

Contribute local economic development benefits

Nearly one-third of the CBPs linked local economic development benefits to their GRIP-supported infrastructure projects.

Distribution of economic development benefits at a household level is often intangible or poorly quantified. We observed a range in approaches to correlating economic development and direct community benefit within the CBPs that mentioned it.

Some CBPs made general claims that the proposed energy system improvements for grid reliability would have positive impacts on local economies. Others linked project benefits to the local economies where their projects would be built through actions serving local businesses, targeting small business growth, and supporting local job markets. Some CBPs quantified connections with local procurement commitments, a goal in number of small business partnerships, or through modeling of the regional economy to estimate the project's economic impact:

- **PECO Energy Company** plans to “build on PECO’s industry-leading vendor diversity and [DAC]–based small business job creation programs by requiring that bidders for projects under the CREATE Plan describe their plans for identifying opportunities to utilize local and diverse small businesses” in Pennsylvania.²⁷

- **American Electric Power Service Corporation (AEP)** conducted an economic impact assessment with the IMPLAN model for its project across ten states: Arkansas, Indiana, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia.^{xii} AEP estimated that the \$55.7 million project investment (\$27.8 million of which is GRIP funding) would increase total gross regional product by \$35 million and provide a tax impact of \$7 million while “offering potential opportunities to work with ... diverse suppliers.”²⁸

There were few actions or metrics associated with local economic development as a community benefit. Where present, economic impact projections (e.g., AEP’s IMPLAN analysis) substantiated how local community benefits would be tangible and direct.

Provide non-energy community benefits

The Community Benefits Building Blocks framework includes non-energy community benefits so that concerns indirectly affiliated with the electricity system can be raised, such as health impacts, housing and land-use issues, conservation, and environmental concerns. Although they were less common than other types of benefits in the GRIP CBPs, nonenergy benefits examples illustrate how grid projects can be designed to respond to pressing and important community priorities, even when those priorities fall outside the traditional scope of utility planning.

For instance, we noted common types of education and training benefits that were not connected to workforce development or the project directly. In nearly 40% of the GRIP CBPs, education and training benefits included general energy curricula for K-8, high school, technical college, and college students. Commitments also included partnerships with local schools and colleges for technology demonstrations, creating new public exhibits at museums, and writing white papers to share lessons learned from the technology innovations of their project.

Fifteen percent of CBPs included safety and environmental improvements linked to infrastructure projects as tangible community benefits. These CBPs emphasized addressing hazards associated with the current energy system, such as hazardous substances and local air quality impacts. Several project proposals would also create safer working conditions for utility staff.

A few examples from the GRIP CBPs addressed health, housing, or other types of non-energy-related priorities include:

- The **Southern Maryland Electric Cooperative (SMECO)** discussed environmental harms from the decay of existing utility poles with creosote in wetlands within its service area. Creosote is a wood preservative and US Environmental Protection Agency (EPA)-designated toxic substance that can pose risks to humans, fish, and invertebrates when used in aquatic structures.^{xiii} SMECO’s proposed project would replace these poles to protect wetlands and waterways.

xii IMPLAN is just one of the tools that enable analysis of direct and indirect “ripple effect” impacts of an infrastructure investment in different sectors. See IMPLAN’s website for more information about the methodology: <https://support.implan.com/hc/en-us/articles/360038285254-How-IMPLAN-Works>.

xiii Creosote is undergoing registration review, a process EPA conducts for all pesticides every 15 years to ensure that products can carry out their intended function without creating unreasonable risks to human health and the environment (<https://www.epa.gov/ingredients-used-pesticide-products/creosote>).

- **Kaukauna Utilities in Wisconsin** discussed improving grid reliability to reduce environmental exposure and burdens for communities near its run-of-the-river hydropower plants. Its grid-forming battery energy storage system would enable hydroelectric plant black-start capability,^{xiv} reducing the chance of flooding when generators fail to run during heavy river flow.

Although GRIP CBPs included only a few of these priorities, we learned from interviews with advocates and other project case studies that actions addressing housing, transportation, nonelectricity infrastructure investments, and land-use considerations have created strong alignment and partnership between project owners and host communities.

Non-energy community benefits in the GRIP CBPs were mostly tied to educational programs or safety and environmental concerns. A small number of CBPs specified benefits such as removing hazardous materials, mitigating local flooding risks, or improving environmental safety conditions. These actions were generally tied to specific infrastructure upgrades and were otherwise unassociated with broader community priorities like housing or public health.

As a category of building block, non-energy community benefits are important to consider because grid projects are often built in locations where residents are concerned not only about power reliability, but also about the broader impacts of infrastructure on their environment, well-being, and access to public resources. Utilities and developers can help address nonenergy needs through modest capital improvements, community partnerships, or public-facing education, strengthening their relationships with affected communities.

xiv Black start is the ability of electricity generation to restart parts of the power system, in particular to recover from a blackout or power grid failure (<https://eepower.com/tech-insights/black-start-generators-energy-to-restart-the-power-grid/#>).

4. How Do GRIP CBPs Provide Accountability?

Key Section 4 takeaways

- GRIP selectees used a range of tools for accountability — from public reporting to advisory groups to formal agreements — all of which can be applied to many project contexts, regardless of technology or location.
- Like community engagement, accountability is a sustained practice. Taking accountability actions across the life of the project, from early engagement through implementation and then operation, addresses community concerns best.
- Project developers can reduce future conflict by voluntarily adopting approaches that support community input and transparency. As strategies for building up community acceptance, establishing structures for two-way engagement and transparency help address concerns before they become resistance.

GRIP's federal guidelines encouraged public benefit delivery and required plans for applicants to regularly report progress to the funding program. The funding agency was not prescriptive about the ways in which selectees would be directly answerable to communities and, consequently, proposals varied widely in their approaches: some emphasized transparent communication and local reporting, others described formalized agreements to institutionalize benefit commitments. In interviews, we heard that choices in accountability actions strongly influenced community perceptions of trustworthiness and attitude toward the projects.

GRIP CBPs included accountability-related building blocks from all four tasks associated with community benefits planning. We found that utilities and developers can demonstrate accountability in three practical ways:

1. Enabling structured community input
2. Codifying the commitments made to communities
3. Making progress on commitments visible to the public

Establishing direct accountability to communities relies on productive relationship-building in contrast to the combative litigation that communities seek when there are no other pathways to influence projects. Communities look for representation, ability to enforce commitments, and the rationale behind project decisions. Delivering projects in a way that heeds these signals and demonstrates accountability does more to foster community support than strictly following the CBP requirements in funding programs.

Enable structured community input

Several GRIP CBPs described efforts to establish ongoing community input. Selectees proposed forming new advisory groups or bolstering existing councils to represent community voice on their project. Others mentioned tapping into existing community forums like neighborhood associations.

In some cases, applicants detailed how advisory groups would be composed, what authority they would hold, and how their input would be integrated into project operations. In others, advisory structures were described as vehicles for communication or relationship management more than influencing decision-making. Even with limited decision-making authority, these groups support continuity in access to information, provide local expertise on implementation risks, and can serve as responsive communication channels between project owners and affected communities. Examples include:

- **Sumter Electric Cooperative (SECO)** in Florida will explore the “formation of an ad hoc member advisory committee to review SECO Energy’s Strategy Map and related action plans, advise on implementation of any action items, and provide community feedback to the Board and executive leadership.”²⁹
- The **Los Angeles Department of Water and Power** will create “a Steering Committee comprised of CBOs, community representatives, and labor to ensure that there is robust community participation throughout the planning, decision-making, and implementation process to ensure that both procedural and distribution justices are in place to achieve equity.”³⁰
- **PECO Energy Company** is establishing an environmental justice advisory committee (EJAC) that includes “representatives from environmental justice (EJ) communities [in Pennsylvania] identified through recommendations from a Steering Committee of elected officials and leading local non-governmental community representatives.” The EJAC “will be chaired by PECO’s Vice President of Governmental and External Affairs,” and its purpose is to “discuss energy and environmental issues that impact DACs, which will inform PECO policies and community engagement practices.”³¹

Creating standing channels for stakeholders to provide structured feedback or help inform project decisions is a best practice and includes formal structures such as advisory groups, steering committees, and community councils.

The effectiveness of advisory groups often depends on clear member-selection processes, defined scopes of influence, and dedicated resources for participation. When well-supported, they can also serve as learning environments where participants deepen their understanding of utility operations.^{xv} This education makes advisory input more pertinent to project owners and more valuable for shaping implementation strategies — particularly when the group includes members with strong ties to affected communities.

xv Ava Community Energy’s Community Advisory Committee (CAC) in California exemplifies a developer-initiated advisory group that fosters mutual learning between the utility and community stakeholders. Through regular meetings on program design, procurement decisions, and budget allocations, CAC members gain insights into utility operations, enabling more informed and effective community input (<https://avaenergy.org/meetings/community-advisory-committee-meeting-4-14-25/>).

Codify the commitments made to communities

Some GRIP CBPs described formal mechanisms, through legal agreements, internal policy, or tangible metrics, for example, to lock in commitments over the life of the project. Formal mechanisms are meant to clarify expectations, offer a degree of enforceability, and help manage risk over long construction timelines. Legally binding agreements such as community benefit agreements (CBAs) and PLAs were examples of ways to offer enforceability and accountability directly to stakeholders:

- The **Los Angeles Department of Water and Power** stated that its steering committee would help the utility “gain new insights and advice to develop plans, strategies, and processes that are sensitive to the community context in which it occurs, and that support community and labor engagement leading to negotiated agreements or partnerships or explore new opportunities by stimulating robust, high-quality conversations.”³²
- **Ameren Missouri** described its intention to execute a formal CBA with a specific named CBO by a specific date, supported by a letter from the organization. A formal agreement will “delineate the required terms for Ameren, including the delivery of impactful benefits identified and supported by community stakeholders in exchange for continuous local support throughout the duration of the program.” Ameren Missouri goes on to commit to working with the CBO to collect feedback and “determine the proper allocation of resources that will best allow targeted DACs and underserved areas to reap the benefits.” The utility’s existing and recently renewed labor agreements with seven unions in the state also “mitigate the risks associated with workforce availability and better ensure the program’s stability, success, and longevity.”³³

Internal policy actions within utilities and developers help reinforce the commitment to community accountability. For example, project owners acknowledged that many meaningful project benefits require coordination among their workforce, legal department, and external affairs department. In interviews, some applicants and selectees mentioned extended cross-department discussions over the feasibility of benefit delivery with their senior leadership. Interdepartmental alignment, review of internal inclusion and diversity policies, and changes to due diligence processes were precursors to developing a feasible community benefits strategy.

New, tangible internal policy actions were identified in 24% of CBPs and included:

- Proposed training programs for staff and leadership on topics relevant to community benefits delivery, including inclusive hiring, supplier diversity, and workplace safety.
- Commitments to update hiring or procurement policies to prioritize local and small businesses or expand recruitment in targeted communities.
- Internal coordination efforts — such as cross-departmental planning teams or leadership sign-off requirements — to align benefit delivery with broader organizational goals.
- Dedicating resources to career transition assistance for existing workers, including skills training and job search support, and committing more resources to workplace health and safety.

Designing a robust set of metrics to evaluate progress against the goals and commitments of community benefits is another tangible action demonstrating accountability.^{xvi} Many communities report difficulty in ensuring a project developer follows through on commitments made years ago at the negotiating table.³⁴ Like legal agreements, well-designed metrics can persist over time.

Oversight of community commitments requires longevity, especially for energy infrastructure projects with construction timelines spanning 5–10 years. Thus, community advocates have pushed for enforceable commitments to codify benefit promises, rather than relying solely on nonbinding benefit plans. Codifying commitments through formal agreements, internal policy changes, and well-designed metrics can indicate an organization’s readiness to implement long-term community-facing commitments. Such actions can help stabilize community expectations about projects.

Make the progress on commitments visible to the public

Transparency in planning processes and commitments

Nearly 75% of GRIP CBPs (40 out of 54) included actions aimed at making their project plans and community benefits commitments visible to stakeholders. These actions ranged from publishing CBPs online to direct engagement with identified community leaders.

Examples:

- **Oklahoma Gas & Electric** committed to publishing its project’s CBP publicly so that “key stakeholders, customers, and the broader community can engage on the utility’s planned actions.”³⁵ In addition, the utility included plans for interactive roundtable discussions with key stakeholders and community leaders to continuously tailor the utility’s efforts toward the needs of the intended DAC beneficiaries.
- **Virginia Electric and Power Company** discussed plans to brief local, county, and state officials, conduct outreach with cultural advocacy groups and tribes, create a project website with visual aids about the new technology in the project, and develop a new mailing list of affected landowners based on proximity to the project.

Although the depth of transparency efforts varied, the prevalence of voluntarily including such actions underscores the value and importance of transparency to utilities and developers as a building block for meaningful community engagement.

The DOE also took steps toward standardizing transparency after the Round 1 selection process. The GDO revised its GRIP CBP guidance to require a mandatory community benefits outcomes and objectives document that would be made publicly available.³⁶ We viewed this as a step toward meeting public demand for visibility into project outcomes.

Regular reporting to the public

GRIP applicants were asked to create plans for public reporting on benefit delivery during each budget period of their funded project. Selectees’ reporting strategies included web-based mechanisms — such

xvi RMI offers a set of 16 metrics that represent robust yet flexible ways to evaluate the extent of an energy infrastructure project’s benefits to surrounding communities on an ongoing basis. See “Quality Metrics Can Help Deliver Community Benefits” (<https://rmi.org/quality-metrics-can-help-deliver-community-benefits/>).

as project websites and progress dashboards — and convening strategies such as public meetings and scheduled community updates.

Exhibit 10 shows the Community Benefits Building Blocks associated with tracking and reporting outcomes, which are meant to last throughout project implementation and operation.

Exhibit 10

Track and report outcomes



RMI Graphic.

For example, as the way “to best hold Ameren accountable,”³⁷ **Ameren Missouri** committed to soliciting ongoing community input through public meetings, workshops, forums like quarterly engagements in postprogram sessions, and a new public website dedicated to tracking the project’s engagements. Ameren outlined accountability expectations in a table with anticipated benefits, expected time frame, and reporting and tracking methods (see Exhibit 11).

Exhibit 11

Truncated sample from the Ameren Rural Modernization program’s CBP: Reporting Commitments

Anticipated benefit	Expected time frame	Reporting and tracking method
Improved workforce development opportunities for underrepresented individuals through the launch of a new Urban Apprenticeship Readiness Program chapter in Cape Girardeau	By end of calendar year 2023	Public web page with application details and program updates linked on Ameren’s site
Deployment of infrastructure (e.g., transformers, control devices) delivering electricity to targeted DACs, supported by DOE funding	Following program completion in Q2 2028	Expenditures and project summaries cataloged and reported to the DOE with SF-425 forms
Increased economic opportunities in DACs through union labor agreements prioritizing local hiring for Rural Modernization program construction	Q1 2025 through Q2 2028	Number of union personnel from DACs tracked and reported in DOE Final Project Briefing Report

RMI Graphic. Source: Union Electric Company, <https://www.netl.doe.gov/home/foia/GRIP>

These examples illustrate how developers incorporated transparency and public reporting to make project plans and benefit delivery more visible to external stakeholders. Reporting on progress supports accountability and helps clarify expectations for communities throughout the project’s implementation.

5. Recommendations and Resources

Key Section 5 takeaways

- Utilities and developers can adopt and adapt strategies from GRIP Round 1 for more productive engagement and deliver realistic and meaningful benefits to communities surrounding their projects.
- Case examples offer precedents, not prescriptive templates, and clarify how to move from abstract values to operational decisions.
- Frameworks and resources help shift community benefits planning from compliance exercises to effective project management functions.

Based on our analysis of GRIP CBPs and our interviews with applicants and selectees, we recommend the following three practices for working well with communities and discussing concerns productively before they foster community pushback:

1. Build stakeholder relationships and enable communities to engage, especially earlier in project development stages and through two-way engagement processes
2. Use community engagement as the way to determine community benefits
3. Use accountability building blocks to earn community trust

Strengthen the capacity for two-way engagement with communities

The utilities and developers that are building the skill set of two-way community engagement often say projects are strengthened in the end.³⁸ Several interviewees mentioned that working with communities on their concerns generated creative solutions that fit within the project's scope.

Although offering a prescribed set of benefits or dollar amounts may be simpler, open conversations with credible community representatives seem to produce stronger mutual benefits in the long run. Examples of these engagement strategies are covered in *Section 2*.

Yet clearly the capacity to engage communities early and meaningfully is still a challenge across the landscape, even though community engagement research finds that robust engagement is a central need.³⁹ Our research interviews revealed a lack of strong relationships with frontline community organizations, insufficient capacity to facilitate participative engagement, and weak commitments to collaboratively design meaningful benefits with stakeholders.

The following tactics could help utilities and developers expand the set of stakeholders they work with successfully:

- **Strengthen capacity to conduct two-way engagement with communities and incorporate external input.** Project owners can increase their capacity for two-way engagement through staff-wide trainings, dedicating teams to manage community benefits coordination, using third-party facilitation, and hiring experts on local context and communication norms.
- **Make data accessible to support the design of community benefits.** A project owner's credibility can be enhanced in the eyes of the public if the basis for fundamental decisions about project siting can withstand public scrutiny. There is public data pertinent to the communities around a project site to consider, including income, education, energy burden, and public health issues. Disconnections, age of infrastructure, systemic outages, and energy burden data at neighborhood or census tract granularity are also relevant data that utilities and developers could share. Tools like the Climate and Economic Justice Screening Tool, California's CalEnviroScreen, and Xcel's Electric Outage Map are examples of resources that have made such information accessible.

Ensuring all stakeholders have access to relevant and validated data facilitates coming to agreement on which communities need the most attention to make electricity service uniform across a service territory and the types of community benefits mechanisms that will be most meaningful.

- **Leverage policy support for early and productive community engagement from all tiers of governance and stakeholders.**^{xvii} Utility-scale and larger energy infrastructure projects are subject to oversight by local and state entities positioned to enforce public input processes and accountability mechanisms.^{xviii} Among the tiers of oversight, we note that utilities are subject to regulation from state public utility commissions and oversight by co-op boards, municipal/government commissions, and city councils. These forums could formalize requirements for community engagement and input as well as provide accountability mechanisms. Local governments can facilitate public engagement with energy infrastructure developers, require the development of legal agreements with host communities, and connect project outcome metrics to local enforcement structures.^{xix}

Determine community benefits with community input

One of the challenges we sought to evaluate across GRIP CBPs was how well the selectees' commitments were connected to concerns from the community. Many CBPs identified benefits that appeared to align with federal guidance or organizational goals, but it was often unclear whether those benefits were shaped by any structured input from the communities expected to receive them.

xvii RMI has initiatives researching and supporting state-level venues with education, dialogue, and analysis-backed insights about clean energy and community engagement. For updates on these recent initiatives, see www.rmi.org.

xviii Governing norms vary by utility, but each utility type has norms relevant to community benefits: advance the public interest (in the case of investor-owned utilities), act on concern for the community (in the case of electric cooperatives), or give back (in the case of public power).

xix Policies support community engagement around electricity sector issues in, for example, Washington, Oregon, California, Illinois, Maine, Minnesota, and New York. Other subnational policies have focused on specific areas of community concern, such as energy efficiency, land use, and beneficial electrification (in Hawaii, Colorado, and New Jersey).

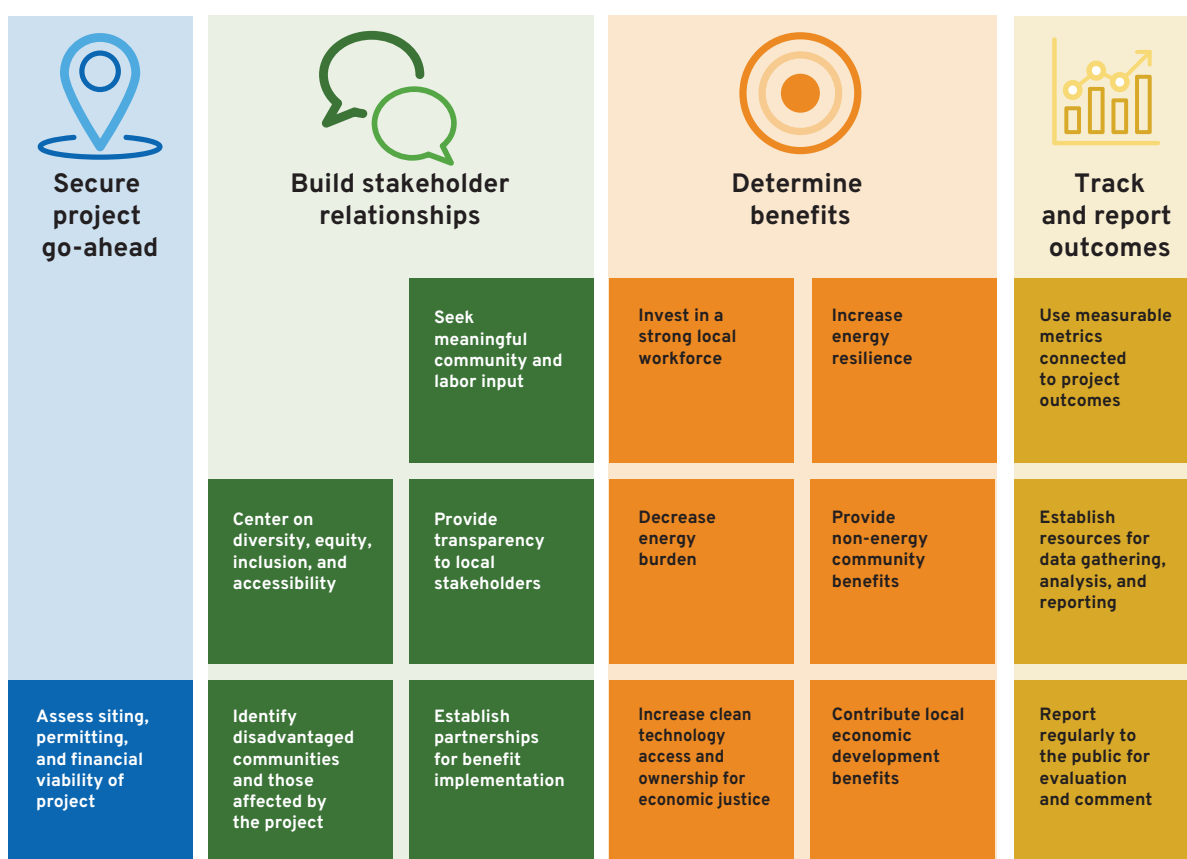
To help utilities and developers make clear connections between potential benefits and stated stakeholder priorities, we developed two resources to support collaboration in planning community benefits: (1) the framework of Community Benefits Building Blocks helps stakeholders discuss how well various benefits match priorities, and (2) the *Community Benefits Catalog* helps stakeholders find implemented examples to emulate and refine.⁴⁰

Community Benefits Building Blocks — mapping potential benefits to stakeholder priorities

The Community Benefits Building Blocks are 15 distinctly defined types of actions that match to specific community concerns. The building blocks are associated with different tasks in the process of community benefits planning (see Exhibit 12).

Exhibit 12

Framework of Community Benefits Building Blocks



RMI Graphic.

The Community Benefits Building Blocks framework can help set expectations among all stakeholders for (1) realistically addressing community priorities and (2) discussing different types of priorities — whether related to process inclusion, distribution of benefits, or enforcement of outcomes — at the most appropriate stage of benefits planning.

Although community benefits planning isn't a linear process and no singular process sequence is acknowledged as a best practice, the following tasks are the core of benefits development for a project:

- Securing project go-ahead
- Building stakeholder relationships
- Determining benefits
- Tracking and reporting outcomes

Grouping benefit actions according to these tasks can help utilities, developers, and community representatives recognize the actions that address concerns with processes (which would be found under “build stakeholder relationships,” for example) versus delivery of benefits (which would be found under “determine benefits” or “track and report outcomes”).

Community Benefits Catalog — leveraging examples of implemented benefits to emulate and refine

As current funding selectees navigate implementation of their community benefits commitments — and future project developers come up to speed on what community benefits can offer — real-life examples exist as precedents for what is realistic to implement and foster community buy-in.

Precedents for engagement approaches and innovative community benefits were found for all 15 of the building blocks. In addition to the benefit examples from GRIP Round 1 projects, the team researched examples of community benefits delivered through other recent projects by utilities, cooperatives, and energy project developers (see Exhibit 13).

Exhibit 13

The Community Benefits Catalog can help with the process of benefits planning



RMI Graphic. Source: [Community Benefits Catalog](#), RMI

The *Community Benefits Catalog* is a spreadsheet resource, released in July 2024 to give data to utilities, developers, agencies, and local stakeholders on nearly 50 real-life benefit examples. Information on the project owner, the technology type, and the project size is included. There are also two columns with suggestions: one column includes thoughtful approaches for including low-income or vulnerable populations for each benefit example; the other column contains recommendations for defining measurable metrics.

The catalog is not intended to be an exhaustive database, but instead highlights notable examples. We expect innovation in community engagement and benefits planning will continue to grow beyond the examples we were able to collect in 2024.

Together, these tools help utilities and developers move beyond generalities (“improve affordability,” “engage stakeholders”) toward more specific, evidence-based benefit design. When used early in the process — ideally before finalizing a project concept or filing for permits — they can help ground benefit discussions in real constraints, real needs, and real-world models.

Be accountable directly to communities to earn trust

Accountability — for process and outcomes — shapes whether communities view benefit commitments as credible. Within our study, it was clear that trust was not just about the content of a benefit plan, but also about how that plan would be carried out, monitored, and adjusted over time. Communities tend to evaluate trustworthiness based on an organization’s track record of honoring input, following through on commitments, and making information accessible. The GRIP CBPs included a range of accountability strategies, which we categorized and analyzed in *Section 4*. In that section we also shared how project owners can demonstrate accountability by (1) enabling structured community input, (2) codifying the commitments, and (3) making progress visible publicly.

Accountability actions to structure oversight, visibility, and responsiveness throughout a project’s development contribute to a project owner’s trustworthiness. For example, many GRIP CBPs included accountability mechanisms like public reporting, advisory structures, or legally binding agreements. Best-in-class CBPs describe how these mechanisms will work together and evolve over the life of the project. For future projects, outside of funding program requirements, voluntary accountability from utilities and developers may merit the effort because it can help secure local support and provide proof that a project owner has followed best practices in community engagement.

6. Conclusion

Our analysis of GRIP Round 1 CBPs provides a window into how utilities and developers are beginning to operationalize community engagement and benefit delivery within grid resilience projects. Although the requirement to submit a CBP was federally driven, many applicants moved beyond compliance, experimenting with community ownership models and committing to legally binding agreements for accountability.

The range of approaches by the GRIP selectees examined in this report validates that there is no one-size-fits-all approach to engagement and community benefits, but the highlighted examples do have several exemplary things in common: they form robust relationships with new and existing partners to support community benefits design and delivery; they provide tangible benefits that are responsive to community needs; they provide transparency and accountability mechanisms; and they prepare utility and developer organizations internally to take on these new business operations. These actions were generated within but are not limited to a federal funding context.

As federal incentives evolve, utility developer–community relationships will depend less on federal guidance checklists and more on organizational readiness: what relationships have been built, what processes allow for external input, what metrics are installed to track benefit delivery, and what mechanisms will be deployed to create accountability for benefit commitments. No single community engagement approach or benefits plan is the perfect model, but the examples we chose to elevate offer openings for utilities and developers to build projects and connect with the communities around them.



Appendices

Appendix A: Codifying early community engagement to provide benefits

Appendix A takeaways

- Working with communities on our energy future is a key skill set for utilities and developers to successfully deploy clean energy projects.
- Federal support for community benefits planning fostered stakeholder identification and early engagement in project proposal development.
- This report outlines key lessons from GRIP and other funding program designs that can inform policies around energy project siting and community engagement and that continue to evolve at federal and subnational levels.

Although many utilities and developers already adjust project designs in response to community input, engagement efforts typically begin after land is secured and options for substantive changes are limited.⁴¹ Community input at earlier stages of project development can reassure communities that potential harms are correctly identified and thoughtfully addressed, fostering transparency, but also allowing project owners to leverage local expertise on the site and context of the project.

Federal funding programs like GRIP pushed many applicants to engage with external stakeholders earlier than they typically would have, and although federal guidance is shifting, initiatives under the federal Justice40 guidance made steps toward meeting community and advocate expectations for engagement on new energy projects.^{xx}

Several of our interviewees described activities that shifted their internal capacity to receive input and work with external partners (e.g., community leaders, educational institutions, and labor organizations), such as coordinating across internal teams, holding listening sessions, and working with labor and workforce partners during proposal development.

These shifts represent an important first step for effective community engagement in project and infrastructure development, set in motion by previous federal guidance. Adopting such practices is likely to benefit utility and developer projects in the long term.

Our study also noted detractors to effective and early community engagement, which present opportunities to strengthen support of community-level influence and participation in future policy discussions at state and local levels.

xx Justice40 was a White House initiative setting a goal for 40 percent of the overall benefits of certain federal climate, clean energy, affordable and sustainable housing, and other investments to flow to disadvantaged communities. To comply with Justice40, consequent federal funding opportunities included requirements for awardees to consult community stakeholders and ensure local community members received benefits from funded projects (<https://bidenwhitehouse.archives.gov/environmentaljustice/justice40/>).

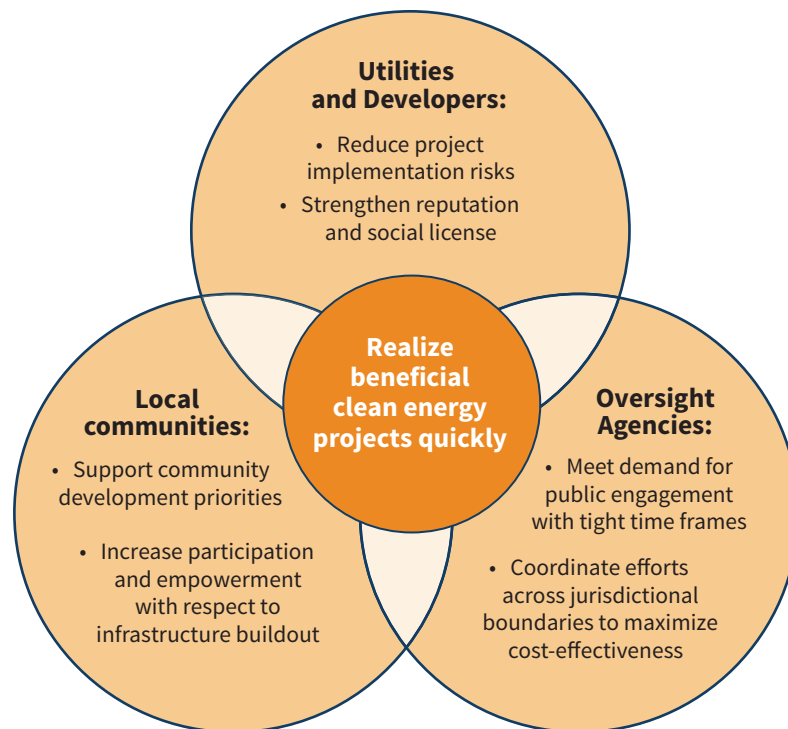
Supportive factors

- Only projects in preconstruction phases were eligible for GRIP funding, giving program administrators the opportunity to use early stakeholder engagement milestones as evaluation criteria for proposals.
- Some DOE grants provided preaward funding for community engagement, which enabled the hiring of facilitators or CBOs and the hosting of community listening sessions in advance of proposal submissions.^{xxi}

Exhibit A1 illustrates how utilities, developers, local communities, and oversight agencies bring distinct priorities to clean energy project development. Early engagement, coordination, and shared accountability move clean energy-development processes toward the intersection of all three needs such that projects are more likely to move forward successfully and deliver meaningful benefits.

Exhibit A1

Aligning interests across developers, communities, and oversight agencies



RMI Graphic. Source: RMI

xxi Examples of technical assistance offered by EPA and offices within the DOE:

- Since its inception in 1994, the Environmental Justice Small Grants Program has awarded more than \$37 million in funding to over 1,500 CBOs, tribal governments, and Native American organizations working with communities facing environmental justice issues (<https://www.epa.gov/environmentaljustice/environmental-justice-small-grants-program>).
- “Energy Improvements in Rural or Remote Areas (ERA) Program Technical Assistance Overview” lists technical assistance programs that may benefit communities and organizations following the ERA program (https://www.energy.gov/sites/default/files/2023-06/ERA_TA%20Overview_2023.06.22.pdf).
- *Federal Energy Funding for Rural and Remote Areas* is a detailed guide published by the DOE’s Office of Clean Energy Demonstrations for rural communities trying to access grant funds (https://www.energy.gov/sites/default/files/2023-10/OCED_Rural-Remote%20Fed%20Overview.pdf).
- The DOE’s Office of State and Community Energy Programs was launched to create new and more accessible pathways to federal funding and technical assistance partnerships for states, territories, tribes, and local communities (<https://www.energy.gov/sites/default/files/2023-07/BIL-and-IRA-SCEP-Fact-Sheet.pdf>).

Detracting factors

- Competition for federal funding was structured with tight deadlines for developing proposals. We believe this emphasized shovel-ready projects and the ability to establish partnerships quickly. Thus, the competitive structure may have worked against principles of transparency through the sharing of public information and against principles of early community engagement if preexisting communication channels for organized input did not already exist. Selectees that conducted early engagement with labor and community organizations typically leveraged existing relationships.
- Federal agencies incentivized utilities and developers to conduct stakeholder engagement and provide community benefits without legally requiring that applicants communicate directly or enter into legally binding agreements with communities. We still heard of community organizations that were unaware of DOE-funded project proposals or who had little capacity to organize around what benefits their community should prioritize in response to these projects
- The influence of funding programs on project decisions and the emergence of community concerns don't rise and fall along the same timelines. Community concerns become more evident and tangible as projects break ground and start operations, long after applicants submit proposals and funds have been dispersed. Funding programs include reporting requirements over the life of the project's construction, but the thresholds for satisfactory community benefits delivery are unclear, and it is also unclear how strong the incentives to address failures are.

Appendix B: Research and analysis methodology

UMN and RMI collaboratively conducted research to discover what could be learned from the GRIP Round 1 examples of community benefits planning. Our investigations included:

- A systematic qualitative analysis of common characteristics within the GRIP selectees' CBP narratives, detailing the benefits commitments made by the applicants
- A series of stakeholder interviews to hear about experiences during the initial stages of developing CBPs,^{xxii} some connected to GRIP applications and some connected to other BIL or IRA funding opportunities
- A review of publicly available community agreements associated with large clean energy projects, such as wind and solar installations^{xxiii}
- A search for implemented benefits programs associated with existing clean energy projects or delivered by companies such as utilities, electric cooperatives, and clean energy project developers^{xxiv}

Systematic qualitative analysis

Qualitative coding analysis is a method of analyzing and interpreting data that involves assigning codes, tags, or labels to identify and categorize patterns, themes, and concepts within a dataset. In qualitative coding, a code is a conceptual label or tag that represents a specific concept, theme, or pattern within the data. Codes are used to identify, categorize, and analyze data. The UMN team generated a coding system through deductive and inductive approaches.

Two researchers collaborated to qualitatively code the GRIP Round 1 CBPs with the ATLAS.ti web program. The UMN team generated a coding system through deductive and inductive approaches (see Exhibit B1). Deductively, the team created initial codes from interviews with subject matter experts. Codes were added inductively from reading the plans and identifying recurring themes through close examination. The researchers established a set of base codes and applied them to each CBP.

xxii Between December 2023 and December 2024, RMI and UMN teams spoke with many applicants and advocates about federal program priorities, CBP guidelines, and community engagement approaches. The team spoke with individuals in 40 different organizations, including 11 advocate organizations, 6 rural electric cooperatives, 5 developers, 5 frontline community-based organizations, 4 consultancies, 4 nonprofits, 4 federal agency offices, and 1 university research center.

xxiii Primary resources for example CBAs were:

- The Sabin Center for Climate Change Law's Community Benefits Agreements Database (<https://climate.law.columbia.edu/content/community-benefits-agreements-database>)
- Power Switch Action's CBA resource page (<https://www.powerswitchaction.org/resources/community-benefits-agreements>)
- *Delivering Equitable and Meaningful Community Benefits via Clean Hydrogen Hubs*, RMI, <https://rmi.org/delivering-equitable-and-meaningful-community-benefits-via-clean-hydrogen-hubs/>

Notable resources on CBPs that were posted after our discovery stage was finished include:

- Wind Energy Community Benefits Database (<https://windexchange.energy.gov/projects/community-benefit-agreements>)
- Database of Community Benefit Frameworks from Across the US, World Resources Institute (<https://www.wri.org/database-community-benefits-frameworks-across-us>)

xxiv Many examples of community benefits implemented by rural electric cooperatives were found through the National Rural Electric Cooperative Association (<https://www.electric.coop/category/cooperative-advantage/community-involvement>).

Next, they developed more specific subcodes for key base codes of interest, such as relationships, linked benefits, new actions, and consultation. They analyzed examples of the base codes in the CBPs to create these subcodes, ensuring each instance was represented distinctly.

All coding was conducted with careful consideration of the contextual factors surrounding each plan and its alignment with definitions outlined in the established codebook. After applying all base codes and subcodes, the researchers calculated the relative frequency of each code. They analyzed variations based on applicant type, funding mechanism, and funding amount.

To address the subjectivity in the coding process, each CBP was reviewed and coded independently by both researchers at least three times, allowing for the resolution of discrepancies.

Our analysis takes an overall appreciative approach to analyzing the CBPs of these applications, which met the DOE's criteria for funding. We were limited to reviewing CBPs from projects selected by the DOE for award negotiation with no access to CBPs of projects that would not receive GRIP Round 1 funding. We did not have access to the specific evaluation of the CBPs within the proposals or any insight into whether they were scored particularly highly by DOE evaluators.

Exhibit B1 Code definitions

Base Codes	Definition
Accountability	The plan discusses accountability and explains how the applicant will retain accountability to carrying out the listed benefits throughout the CBP process. Should explain process beyond a mention of the term “accountability.”
Adaptability	The plan has an acknowledgment of monitoring and addressing gaps throughout the process of the plan’s implementation and provides concrete steps on how to address gaps and adapt the plan over time.
Assessment/evaluation	The plan refers to the evaluation and/or assessment of goals and initiatives outlined in the CBP by the funding opportunity announcement.
Consultation	The plan refers to consultation/direct engagement with community members/residents/groups for the purpose of understanding community needs and addressing these needs through goals and objectives in the plan.
Democracy	The plan mentions democracy directly or refers to the ideas of energy democracy and/or equitable ownership.
Existing actions	The plan refers to incorporating existing actions (those already developed and/or in place by the applicant at the time of CBP development) into the plan. In this context, an action could refer to a program, policy, or initiative that relates to customers, employees, community members, or a combination of the three.
Future thinking	The plan indicates long-term planning and looking into the future beyond the plan itself. This code should only apply to things beyond the plan/funding period.
Implementation	The plan has details on how it will be implemented; this could include a timeline with information on anticipated process/steps and actions required for the plan to be implemented, such as identifying a need to hire X number of staff members in X area.
Linked benefits	Benefits included in the plan can be clearly and explicitly linked to the improvements described by the plan and potential federal funding; does not apply to benefits that are not project specific. Benefits should represent actual benefits, not investment dollars.
Measurable	The plan includes outcomes that are measurable — quantitatively, using a given value/amount, or qualitatively, with an adequate description of the “ideal” outcome.
New actions	The plan refers to the creation of new programs/initiatives/policies/actions created specifically for the CBP and/or with potential federal funding granted by the federal funding opportunity.
Relationships	The plan refers to relationships or relationship-building with organizations, partners, and/or affected communities.
Stakeholder mapping	The plan includes a discussion or extensive list comprising a stakeholder mapping/analysis. There is intent to explore the field of possible stakeholders and engage different needs, benefits, and approaches.
Transparency	The plan includes a discussion of transparency and open/honest communication with affected communities and partners regarding the CBP development process, funding expectations, and/or delivery of intended benefits.

Exhibit B1 Code definitions, continued

Relationship Subcodes	Description
CONTENT	
Tribes	Local tribal organizations.
Local government	City/county/regional government.
For-profits	Private businesses not encompassed by any of the other categories; examples include equipment suppliers and local businesses.
Economic organizations	Local economic organizations/groups such as chambers of commerce and economic development groups.
Labor unions	Any labor union.
Utilities	For-profit investor-owned utilities or municipal utilities.
State/ federal government	Agencies/boards of the federal or state government.
Nonprofits	Nonprofit organizations: topic areas include community development, education, and outreach.
Universities and community colleges	Local universities, community colleges, and trade schools.
K-12 schools	Local schools or education programs targeting students through age 18.
Public services	Public services not encompassed by another category above; specific example includes local firefighting entities.
Cooperatives	Includes other electric cooperatives and coalitions of electric cooperatives, such as the National Rural Electric Cooperative Association (NRECA) and National Rural Telecommunications Cooperative (NRTC).
TIME	
Existing relationships	Plan refers, specifically, to an established, preexisting relationship between an applicant and a partner.
Anticipated partnerships	Partnership/relationship that has not been initiated yet; the plan indicates an intention to initiate with funding.
Recent partnerships	Plan refers to a recently established partnership — indicated in the plan as a result of the project/CBP development process.

Exhibit B1 Code definitions, continued

Linked Benefits Subcodes	Description
Affordability	Refers to cost savings/affordability benefits that flow to customers/residents. May appear in the plan as “decreased energy burden.”
Decreased outages	General referral to decreased outages and improved reliability — decreased outage events, minutes per outage, etc. Does not tie the decreased outages to a specific cause.
Employee upskilling/training	Refers to training/upskilling opportunities for existing employees explicitly attributed to the project; this code does not include training/education/apprenticeship programs for prospective employees or students.
Skilled-job creation	Refers to the creation of skilled jobs directly attributed to the project.
Lowered greenhouse gas emissions	Refers to benefits from the project related to decreased greenhouse gas (GHG) emissions. Examples: direct GHG emissions reductions, less pollution from emissions, lowered risk of climate change (from emissions), increased electrification programs, increased energy efficiency.
New financing models	Refers to new financing models being offered because of the project, for example, new loan opportunities for customers.
Reduced wildfire risk	Refers to decreased wildfire risk because of the project.
Resilience — storms/extreme weather	Refers to increased resilience against storms/extreme weather, including heat and cold temperatures. Wildfire-related risks should go in the previous category.
Training/education opportunities	Refers to the ability to offer training or education opportunities because of the project. These should apply to non-employee programs such as newly created apprenticeships; training opportunities for current employees fall in the employee upskilling/training category.
Democracy/equitable access	Refers to increased benefits of energy democracy, equitable ownership and/or parity in terms of clean energy access as a direct result of the project.
Economic improvements	Refers to a diverse list of economic benefits, including economic development directly related to the investments of the project or increased support for small businesses/suppliers.
Safety/environmental improvements	Refers to a benefit to the environment or a community safety benefit.
Expanded renewable capacity	Includes expanded capacity of renewable generation, increased capacity for DERs, increased capacity for electrification/electric appliances (EVs, heat pumps, etc.).

Exhibit B1 Code definitions, continued

New Actions Subcodes	Description
Accountability	Example: create new advisory group.
Internal policy	Example: steering committee, DEIA policy/curriculum, employee benefits, recruitment practices (including supplier contracting without a direct connection to a new partnership).
Training	Example: company employee upskilling.
Education	Example: new curriculum development.
Engagement	Example: creating an engagement strategy, media outreach.
Management	Example: creating a grant management office.
Partnership	Example: creating a new partnership/memorandum of understanding.
Consumer	Consumer benefits. Example: new loan opportunity for customers, residential connection upgrades.

Consultation Subcodes	Definition
Two-way engagement	The plan explicitly mentions or describes participating in two-way engagement with community members/partner organizations. This may include a mention of incorporating feedback and community input/concerns into the project's planning or implementation.
Early consultation	The plan includes a discussion of early consultation with external partners/collaborators/community members; partnerships and contacts were not contacted hastily without an intention to build trust and inclusion throughout the process.

RMI Graphic. Source: CSTEP

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