CAFWD
CALIFORNIA FORWARD

Berkeley Public Policy
The Goldman School

RETHINKING COMMUNITY BENEFITS: INDUSTRY-SPECIFIC INSIGHTS FOR A TRANSFORMING CALIFORNIA

Mel Moyce

May 2025

ACKNOWLEDGEMENTS

Thank you to California Forward for their generous sponsorship and thought partnership, particularly Taylor Carnevale, Kate Gordon and Nuin-Tara Key for their valuable insight and support.

Thank you also to the many experts who generously contributed their time and knowledge through interviews. This subject has resonated with many inspiring and committed individuals.

The author conducted this study as part of the program of professional education at the Goldman School of Public Policy, University of California at Berkeley, with support from California Forward (CA FWD). The judgements and conclusions are solely those of the author and are not necessarily endorsed by CA FWD, the Goldman School of Public Policy, by the University of California or by any other agency.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

California faces multiple, intersecting challenges with rapidly growing energy demand, the need to decarbonize, and increasing climate-related risks. At the same time, the state has a strategic advantage to lead the energy transition in clean tech manufacturing, lithium extraction, and energy infrastructure development. While this shift offers the potential for major economic and climate benefits, it also brings localized impacts and land use trade-offs. Without centering impacted residents and communities, California risks deepening inequality, repeating past harms, or stalling development due to conflict and mistrust.

Community benefit-sharing mechanisms offer a way to align development with local priorities. When executed well, community benefits can be a powerful tool for advancing more equitable development. But many projects move forward without any formal benefit-sharing at all, and even where benefits are promised, securing strong, enforceable commitments requires clear structures, community capacity, and ongoing support, which is often lacking.

This report focuses on three foundational sectors of California's energy and industrial transition: critical minerals, clean tech manufacturing, and renewable energy. The objectives of this work were to: identify how community benefit-sharing mechanisms are currently being used in these sectors; highlight sector-specific and cross-sector challenges in implementing effective community benefits; and examine California's regulatory environment to determine how it supports or hinders robust benefit sharing.

This analysis was conducted as part of a broader, ongoing initiative by California Forward, in partnership with UC Berkeley's Possibility Lab, to support communities in navigating benefit-sharing opportunities. Specifically, this work has contributed to the development of an online repository of agreements, intended to offer accessible, practical models for shaping locally beneficial projects.

This report draws on a review of over 300 collected benefit-sharing agreements, supported by expert interviews and literature review.

Key findings include:

1. **Formal community benefit mechanisms remain limited across sectors.** While expectations around benefit-sharing are growing, strong and enforceable community benefit agreements remain uncommon. Existing agreements vary widely in quality, structure, and impact.
2. **Community access to expertise is a persistent barrier.** Interviews with experts and advocacy organizations revealed that many communities lack access to the legal, financial, and technical expertise needed to negotiate robust agreements or monitor their implementation, placing them at a disadvantage relative to developers.
3. **Negotiated benefits may not align with long-term community priorities.** Benefit-sharing efforts are often structured around short-term contributions, such as lump-sum payments,

targeted toward priorities identified by the negotiating counterparty at the time of agreement. While these may address immediate concerns, they may not reflect broader or longer-term community goals, particularly in the absence of proactive needs assessments or planning frameworks.

4. **Sectoral patterns reveal uneven progress.**
    - In critical mineral extraction and processing, formalized benefit-sharing mechanisms remain rare in the U.S., but international models such as revenue-sharing agreements and community equity participation offer valuable precedents. These approaches present a strong opportunity for broader adoption.
    - In clean technology manufacturing, benefit-sharing is still experimental but shows promise, particularly in the context of local hiring and workforce development.
    - In renewable energy, the use of benefit-sharing agreements is expanding, but implementation remains fragmented and inconsistent across projects.
5. **The role of local government is evolving.** Benefit-sharing agreements are increasingly functioning as tools of public governance, particularly when tied to land use approvals or permitting processes. However, opinions vary on whether local governments or community-based organizations should take the lead in negotiating and overseeing these agreements. This raises important questions about representation, capacity, and the appropriate division of roles in ensuring that community benefits are equitable, enforceable, and aligned with local priorities.

To strengthen and scale the use of community benefit-sharing mechanisms across California's energy and infrastructure sectors, this report recommends a two-pronged approach: (1) incentivizing the broader use of robust, enforceable agreements, and (2) equipping communities with the tools, data, and support needed to negotiate effectively and advocate for their priorities.

To encourage more consistent adoption, public funding and approvals should be tied to meaningful benefit commitments, following successful federal models. Policymakers may also consider piloting Community Benefit Ordinances (CBOs) to create clearer, more transparent pathways for negotiation. In addition, this report recommends expanding the use of models of co-ownership and revenue sharing, to direct these investments towards long-term community wealth-building. Expanded access to technical assistance, paired with regionally coordinated needs assessments, would ensure a more equitable "seat at the table" for community groups, provide clearer guidance for developers, and ensure that investments are responsive to local priorities. Together, these efforts would foster more equitable outcomes, reduce project friction, and strengthen the long-term legitimacy of energy and infrastructure development across the state.

INTRODUCTION

California is navigating multiple, intersecting challenges: rapidly growing energy demand, the need to decarbonize, and increasing climate-related risks and extreme weather. At the same time, as much of the world faces similar challenges, the state has a strategic opportunity to lead the energy transition in clean technology manufacturing, lithium extraction, and renewable energy infrastructure development.

These industries offer major economic and climate benefits and have the potential to support high-quality jobs and economic revitalization, but they also come with localized impacts and land use trade-offs. In California, the path to development is often complex and time-intensive, shaped by regulatory requirements and permitting processes, and frequently challenged by community concerns. While these challenges are multifaceted, there is growing recognition that projects move more efficiently and deliver greater value when they earn community support. To meet the demands of the energy transition, California must reframe development as a collaborative process rather than a transactional one.

Community benefit-sharing mechanisms have emerged as a way to navigate these challenges and align development with local priorities. Typically, developers agree to benefits, such as workforce development programs, local hiring commitments, or community investment funds, in exchange for community support or smoother project approvals. When executed well, community benefits can be a powerful tool for advancing more equitable development. This requires both developers and communities to have the tools, capacity, and shared understanding needed to design and implement meaningful benefits. Communities must be equipped to articulate their priorities and negotiate from a position of strength, while developers must be prepared to offer and implement tailored, responsive benefits.

Objectives

The objectives of this work were to:

- Identify how community benefit-sharing mechanisms are currently being used in renewable energy, critical minerals, and clean tech manufacturing in California.
- Highlight sector-specific and cross-sector challenges in implementing effective community benefits.
- Examine California's regulatory environment to determine how it supports or hinders robust benefit sharing.
- Systematically assess a range of policy solutions aimed at expanding and improving community benefit-sharing practices.
- Provide clear, pragmatic recommendations for incentivizing broader and more meaningful use of community benefit-sharing agreements.

Methods

1. Compilation and Quantitative Analysis of Agreement Database

A database comprising 308 community benefit-sharing agreements and related plans across a range of energy-adjacent sectors, including but not limited to renewable energy, critical minerals, and clean tech manufacturing, was constructed and analyzed. Agreements were selected based on public availability. While the sample is not comprehensive, it reflects a range of sectors, geographies, and agreement types that were publicly disclosed in the last 20 years (Figure 1). Due to the confidential nature of many benefit-sharing agreements, this sample underrepresents the total number in existence. As such, the findings should be viewed as illustrative rather than statistically representative.

This dataset was coded for variables such as benefit types, agreement types, signatories, geography, and supply chain. Data was quantitatively analyzed to identify trends, prevalence, and characteristics of current benefit-sharing practices, providing an empirical basis to assess current trends and practices.

Agreement Locations by Sector

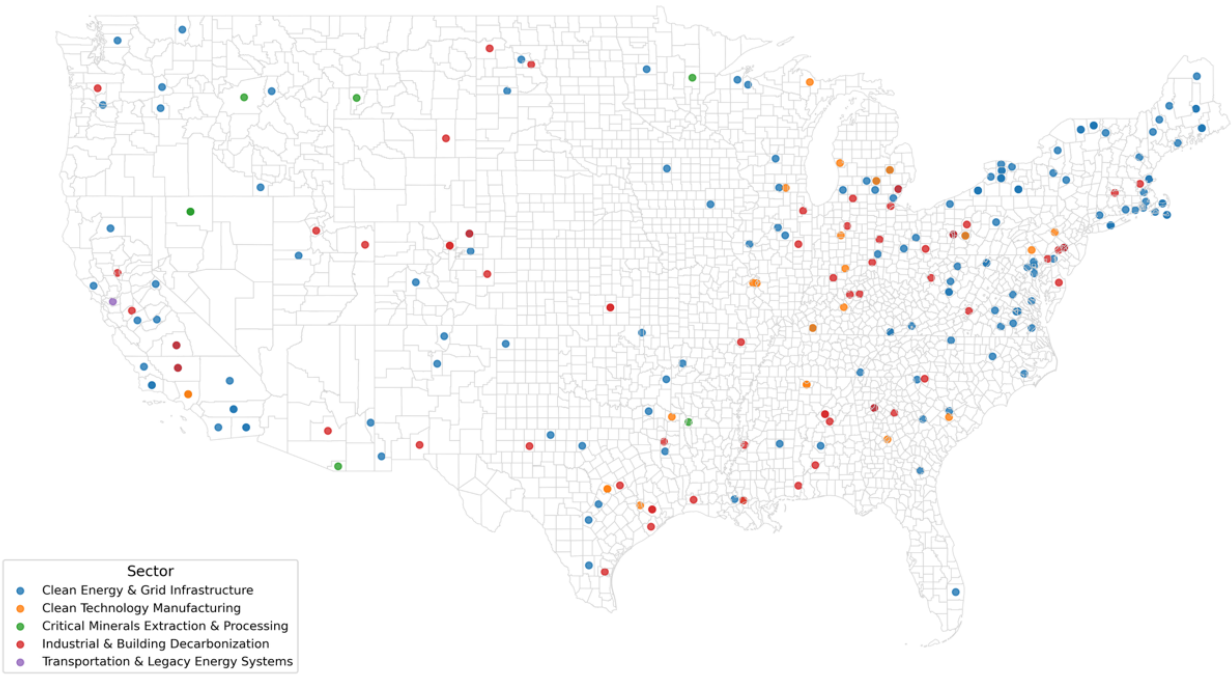

Figure 1. Geographic distribution of the selected community benefit-sharing agreements analyzed in this report (excluding Hawaii, Alaska, and international examples reviewed). Agreements shown represent only those evaluated by this study and are not intended to reflect the full scope of existing community benefit-sharing agreements.

Although the primary focus of this work is California, agreements were sourced from across the United States, as well as a few international examples, to provide a broad view of existing practices and innovations.

Each agreement was systematically coded based on a predefined schema including: (1) industry sector, (2) project location (state and county), (3) agreement type (e.g., Community Benefit Agreement, Project Labor Agreement, Host Community Agreement), and (4) benefit categories (e.g., workforce development, local procurement, revenue sharing, environmental restoration, public services).

2. Semi-Structured Stakeholder Interviews

To supplement this desk research, 17 semi-structured interviews were conducted with subject-matter experts and key stakeholder groups, including attorneys, community leaders, labor representatives, federal and tribal government representatives, and policy researchers. Topics were tailored to the interviewees area of expertise, but questions generally focused on identified issues and opportunities with benefit-sharing schemes.

Interviews were thematically analyzed to extract key insights on practical implementation barriers and enabling conditions across diverse project contexts.

3. Literature and Policy Review

A rigorous review of peer-reviewed literature, industry reports, regulatory documents, and policy briefs was conducted to establish a comprehensive baseline of recognized best practices in community engagement, benefit-sharing design, equity frameworks, and accountability mechanisms. Literature review findings were systematically integrated into sector-specific analyses to provide benchmarks for assessing existing practices, identifying gaps, and grounding recommendations in established frameworks and evidence-based practices.

4. Case Study Evaluation

To test the resulting research-based criteria, a subset of six U.S.-based agreements from after 2010 was selected. Cases were stratified to avoid repetition by project industry, spanning battery storage, carbon sequestration, fossil fuel infrastructure, and mining, with one solar and one wind project included to reflect variation within electric power generation. From this stratified set, agreements were randomly selected. Each agreement was then reviewed and assessed against the proposed best practice criteria to evaluate the criteria's clarity and applicability.

Limitations

Several limitations constrained the scope and findings of this analysis. First, many community benefit-sharing agreements, particularly those negotiated privately between developers and community-based organizations, remain confidential. Consequently, the dataset analyzed for this study underrepresents the total number of existing agreements and skews toward publicly disclosed or government-facilitated contracts, which are more accessible.

Second, assessing the true outcomes and community impacts of these agreements requires direct engagement with affected communities which was beyond the scope of this study. Likewise, understanding implementation challenges fully would necessitate direct interviews with developers,

which this research did not undertake. Additionally, the collected agreements and plans include Community Benefit Plans, which are typically not legally binding and only recently established, making it difficult to evaluate their implementation status or success.

Nonetheless, the analysis provides a descriptive snapshot of current community benefit-sharing practices. Further research, particularly longitudinal studies incorporating project and benefit delivery outcomes is essential to fully understand long-term outcomes and genuine community impacts.

BACKGROUND AND CONTEXT

California in Transition

Across the United States, electricity demand is projected to surge by more than 130 gigawatts by 2029, driven by the explosive growth of data centers, domestic manufacturing, and widespread electrification. This includes an estimated 90 GW from data centers, 20 GW from manufacturing, and another 20 GW from transportation and electrification.[1]

5-year Nationwide Growth Forecast

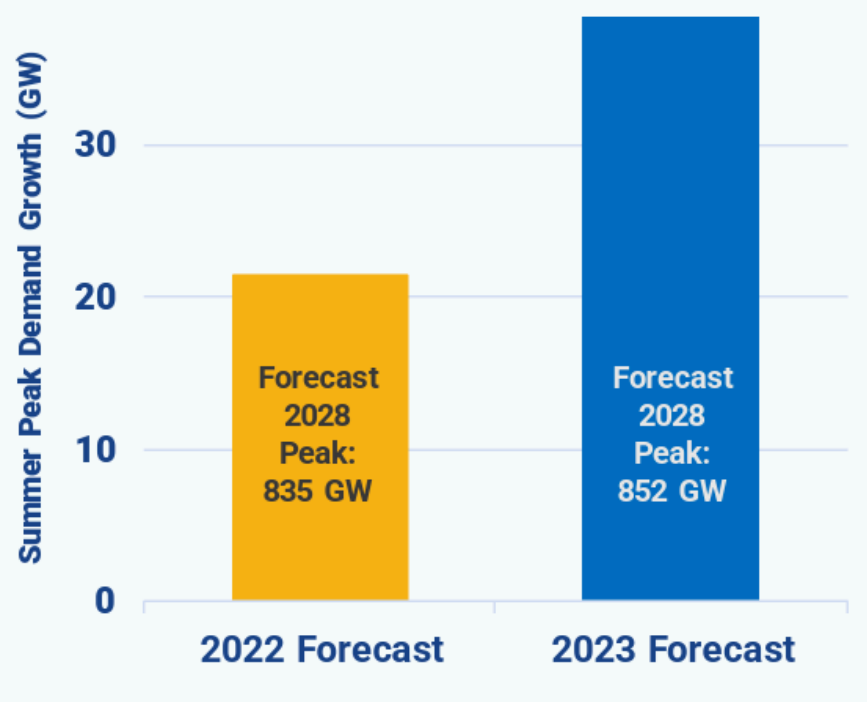

Figure 1. Between 2022 and 2023, grid planners nearly doubled the 5-year load growth forecast, Source: Grid Strategies: The Era of Flat Power Demand is Over, December 2023

To help meet rising electricity demand while decarbonizing its own economy, California must dramatically expand its clean energy infrastructure and industrial supply chains. Despite ambitious climate goals, the state is not yet on track to meet key targets, particularly in the transportation sector, which remains the largest source of greenhouse gas emissions.[2,3] At the same time, California is navigating a complex transition away from oil and gas production and facing mounting pressure to

[1] "Managing Unprecedented Electricity Demand Growth on the Path to Net Zero Emissions."
[2] "2024 California Green Innovation Index."
[3] "Transforming Transportation."

reduce emissions from its expansive agricultural sector, both of which are significant contributors to climate change.

Yet California also holds a unique and pivotal position in the national clean energy transition. It is home to world-leading research institutions and clean tech startups, the country's only rare earth mine, vast geothermal lithium reserves in the Salton Sea, and an emerging industrial base. To reconcile the competing pressures of scaling up clean energy while transforming legacy sectors, California will need new strategies to secure community support, deliver equitable economic benefits, and accelerate infrastructure deployment.

Projects must be built quickly, but many Californian communities, particularly those historically burdened by pollution, economic disinvestment, or environmental injustice, are wary of becoming sacrifice zones for an energy transition they did not help design. At the same time, developers face growing uncertainty, delays, and opposition, especially where trust is low, threatening projects that California needs to meet its climate goals.

Recent Projects in California's Clean Energy Sectors

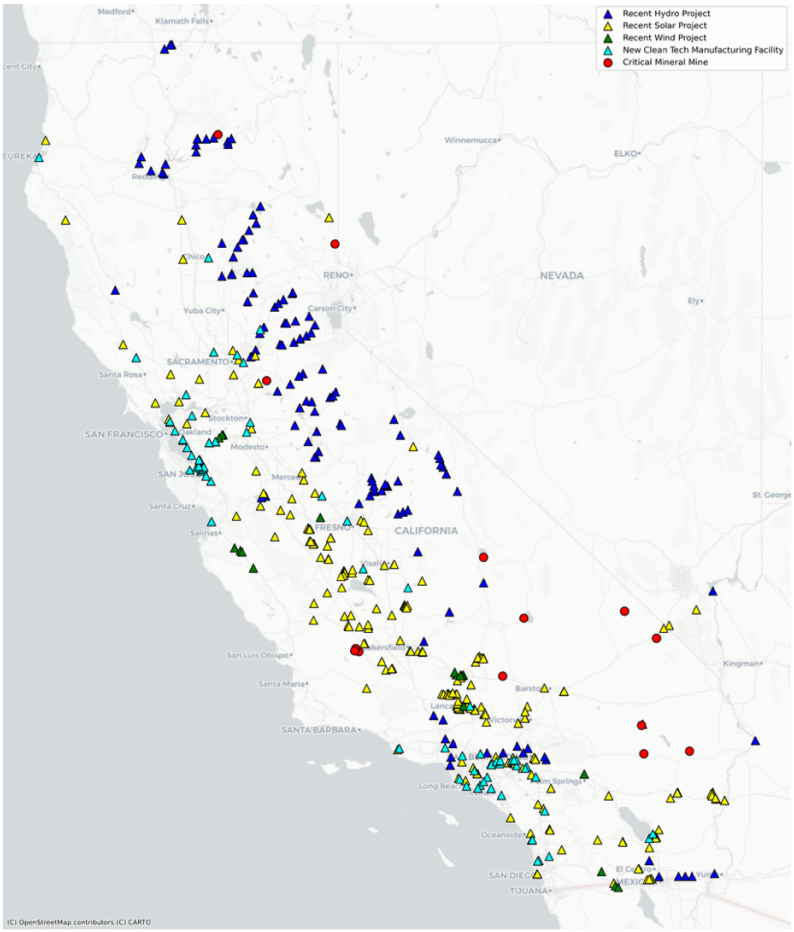

Figure 2. Recent Energy Sector Projects in California. "Recent" infrastructure refers to projects in or after 2015. Clean tech manufacturing includes facilities producing batteries, electric vehicles, and related supply chain inputs. Data sources: California Energy Commission (CEC), California Department of Conservation, Clean Economy Tracker developed by Atlas Public Policy and Utah State University

Federal Incentives and Emerging Uncertainty

In recent years, interest in community benefits has grown rapidly as public investments in clean energy and advanced manufacturing have expanded. Major federal funding opportunities through the Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL) began requiring structured proposals outlining how applicants planned to deliver tangible benefits to workers and communities, called Community Benefit Plans (CBPs), after receiving federal funding. CBPs became a major factor in competitive funding decisions, influencing up to 20% of the technical scoring criteria.

CBPs prompted a wave of new activity. In response, developers, nonprofits, and local governments mobilized, producing toolkits, hosting workshops, and actively seeking out examples of effective strategies. Community benefit sharing became a central topic in industry discussions and a defining feature of many project proposals.

Recently, however, federal policy changes have reversed or stalled many CBP requirements, creating uncertainty for applicants, agencies, and the communities that stood to benefit. Unlike the legally binding agreements discussed later in this report, CBPs lack formal enforceability, making them especially vulnerable to rollback or neglect. While some developers continue to see benefit-sharing as a strategic way to build trust and reduce opposition, others may now reduce or eliminate these commitments, risking delays, conflict, and growing public mistrust. *In this context, the case for proactive, equitable benefit-sharing is both urgent and practical.* Meeting rising public demands requires clear incentives, strong frameworks, and tools that can channel investment toward shared, long-term value.

Community Engagement and Opposition in Clean Energy Infrastructure

Local opposition has often been linked to insufficient community engagement. A 2024 survey of 123 U.S. utility-scale wind and solar developers found that "community opposition and strict local siting ordinances" were the leading causes of project delays and cancellations.[4] In this survey, roughly half of recent wind and solar projects reported significant schedule delays (with 20% taking over six years to develop) and about 30% of projects were ultimately canceled, often after facing public resistance.

A peer-reviewed analysis by Susskind et al. (2022) documented 53 utility-scale renewable energy projects across 28 U.S. states that were delayed or blocked between 2008 and 2021. Nearly half (49%) of those projects were ultimately canceled, representing the loss of approximately 4,600 MW of potential clean energy capacity. Another third faced major permitting delays due to local opposition. Similarly, a 2023 review of over 1,400 wind energy projects in North America found that nearly 1 in 5 U.S. wind projects encountered organized opposition involving lawsuits, protests, and appeals across multiple levels of government.[5]

---

[4] Nilson et al., "Halfway up the Ladder."

[5] Stokes et al., "Prevalence and Predictors of Wind Energy Opposition in North America."

These high rates of opposition are often not rooted in opposition to clean energy itself. In many cases, opposition stemmed not from ideological objections to renewable energy, but is more often procedural, that is, rooted in distrust of the processes by which decisions are made, and benefits are distributed.[6,7] Resistance stems from exclusion from decision-making and lack of trust that community concerns will be addressed, suggesting that inclusion and risk mitigation could reduce conflict.

Communities may distrust that new projects will bring positive outcomes. Following the 2008 recession, state and federal leaders promoted the promise of "green jobs" as a path to shared prosperity and environmental renewal. While those investments did create some new opportunities, the scale, quality, and distribution of those jobs often fell short of expectations.[8] This legacy may continue to shape perceptions today.

Perceived and actual risks both drive opposition, but research indicates both can be mitigated through early, transparent information sharing.[9] Nilson et al. (2024) find that many developers report that increasing community engagement results in less project cancellations. "This is despite the fact that current spending on community engagement is a very small proportion of total project expenditures."[10]

However, engaging communities is not just about heading off delays. When people perceive the planning process as fair and inclusive, they are more likely to view outcomes as legitimate, even if not everyone gets their preferred result.[11] This procedural justice can translate into smoother permitting and less adversarial proceedings.

In short, community opposition represents a major barrier to clean energy development. However, research consistently finds that such opposition is rarely ideological; rather, it is driven by procedural concerns—specifically, limited community input, lack of transparency, and mistrust of developers and permitting authorities. This suggests that accelerating project delivery does not require shifting public opinion on climate action, but improving how projects are planned, communicated, and negotiated with local communities. While no large-scale empirical study has conclusively linked community benefit-sharing strategies to shorter project timelines, *these agreements are explicitly designed to address the procedural issues that most commonly lead to conflict.* By increasing transparency, formalizing local benefits, and creating mechanisms for community participation, well-structured benefit-sharing approaches have the potential to reduce opposition and facilitate smoother, faster project development.

---

[6] Susskind et al., "Sources of Opposition to Renewable Energy Projects in the United States."
[7] Barnett et al., "Imagined Publics and Engagement around Renewable Energy Technologies in the UK."
[8] Goldenberg, "Barack Obama's Green Stimulus Plan Fails to Deliver the Money."
[9] Susskind et al., "Sources of Opposition to Renewable Energy Projects in the United States."
[10] Nilson et al., "Halfway up the Ladder."
[11] Cowell, "The Role of Place in Energy Transitions."

COMMUNITY BENEFIT SHARING AGREEMENTS

Evolution of Application

Formal benefits-sharing plans and agreements, independent of standard development approval, began in Southern California in the late 1990s and early 2000s. Within a history of community exclusion and harm from urban development, community advocates began to use their selective support for development projects, rather than resistance, to compel developers and local governments to meet at the negotiating table.[12]

The first widely recognized Community Benefit Agreement was signed in 2001 as part of the $2.5 billion Staples Center redevelopment in Los Angeles. In response to $390 million in public subsidies, a coalition of community organizations negotiated commitments including $1.8 million for job training and affordable housing, as well as provisions for local hiring and living wages.[13] In exchange, the coalition publicly supported the project during hearings and the environmental review process. This perceived success set a national precedent for leveraging CBAs to secure local returns on publicly subsidized development.

Early CBAs were typically "private" agreements between developers and coalitions of community-based organizations, often emerging where local governments were perceived as unresponsive or overly aligned with development interests. These CBAs functioned as grassroots accountability mechanisms, giving communities a direct role in shaping the distribution of development impacts and benefits.[14]

Over time, however, local governments began negotiating similar agreements directly with developers.[15] This shift coincided with the expansion of CBAs from their historic use in real estate development into large-scale energy and infrastructure projects, particularly in the renewable energy sector. The trend may reflect the characteristics of energy infrastructure itself, where benefits like decarbonization and grid reliability are dispersed regionally or nationally, but the burdens (e.g., land use change, noise, habitat disruption) are intensely localized.

This dynamic may explain why benefit-sharing agreements have gained traction in sectors where the benefits are distributed, and costs are particularly localized.

"Public" CBAs negotiated by governments raise important policy questions. Should local governments rely on ad hoc, project-specific agreements to deliver community benefits, rather than embedding such expectations in permitting, procurement, or zoning frameworks?

---

[12] Wolf-Powers, "Community Benefits Agreements and Local Government."
[13] Rosen, "Community Benefits."
[14] Gross, LeRoy, and Janis-Aparcio, "Community Benefits Agreements."
[15] Been, "Community Benefits Agreements."

As CBAs evolve from community-driven negotiations to tools of public governance, their role within broader planning and permitting systems warrants closer scrutiny, particularly in the context of infrastructure development funded or facilitated by the state.

Community Benefit Agreements

Community Benefit Agreements (CBAs) are commonly understood as legally binding contracts between project developers and communities or their designated representatives that outline specific benefits the community will receive in exchange for supporting a proposed project. These benefits often include local hiring commitments, workforce training programs, environmental protections, infrastructure improvements, or the creation of community investment funds. CBAs are frequently framed to secure tangible returns for communities impacted by major development, while simultaneously helping developers build trust and secure approvals.

Despite a commonly accepted definition, the term "Community Benefits Agreement" (CBA) is inconsistently applied and lacks a standardized legal or policy framework. In practice, agreements labeled as CBAs can vary widely in scope, legal enforceability, structure, and the degree of community involvement.[16] This variation reflects the decentralized, project-specific nature of benefit-sharing and poses challenges for consistent policy analysis, implementation, and replication.

Benefit-sharing agreements can generally be grouped into the following categories:

Community Benefits Agreements (CBAs):

Private: These are voluntary but legally binding agreements negotiated directly between a project developer or company and one or more community-based organizations. While terms vary based on community priorities and project impacts, common provisions include local hiring commitments, job training programs, affordable housing investments, infrastructure improvements, and environmental protections.

Community Benefits Plans (CBPs) are a related but nonbinding form of agreement. CBPs outline a developer's proposed approach to community engagement and benefit delivery but typically lack enforcement mechanisms or designated funding. While not legally enforceable, CBPs may lay important groundwork for future CBAs by building relationships and aligning stakeholder priorities early in the development process.[17]

Public: Public CBAs are legally binding agreements between a developer and a public entity, such as a local government or permitting authority, often linked to land use approvals, public subsidies, or other forms of public support. **Host Community Agreements (HCAs)** generally refer to public CBAs. HCAs are negotiated between a developer and the municipality where a project will be located. In some

[16] Wolf-Powers, "Community Benefits Agreements and Local Government."
[17] Mayo, "Policy Reversal."

jurisdictions, such as New York, HCAs are required or incentivized for renewable energy and other large-scale developments.[18]

Project Labor Agreements (PLAs) are pre-hire collective bargaining agreements between a developer, labor unions, and sometimes public agencies. These agreements establish wages, working conditions, and hiring protocols for a specific project, typically requiring union hiring and including provisions to prevent labor disruptions.[19]

PLAs may include other types of **Workforce Development Agreements**, that typically embed local and equitable hiring goals into labor agreements. They may prioritize job access for underrepresented workers, displaced fossil fuel workers, or local small businesses, creating direct economic opportunities for host communities.

Other Agreement Models

Good Neighbor Agreements (GNAs) emerged around the same time as Community Benefit Agreements and share many of the same characteristics, including negotiated commitments between developers and affected communities. However, GNAs are typically more narrowly focused on addressing the direct environmental or resource-related impacts of a project, such as noise, air quality, traffic, or water use, rather than broader economic or social benefits. GNAs are not always legally binding and may function more as memoranda of understanding or voluntary pledges.[20]

Payment in Lieu of Taxes (PILOT) agreements are negotiated arrangements in which a developer or project sponsor agrees to make annual payments to a local government or taxing authority instead of paying traditional property taxes. These agreements are commonly used when a project would otherwise be tax-exempt or qualify for reduced tax liability due to its ownership structure (e.g., public-private partnerships, utility ownership, or nonprofit entities).[21] In some cases, PILOT funds are earmarked for public services, infrastructure improvements, or local economic development, indirectly delivering community benefits.

Stipulations are a distinct form of agreement that typically emerge during contested regulatory or permitting proceedings. In this study, we use the term *stipulation* to describe negotiated legal settlements between project developers and one or more intervening parties, such as state agencies, municipalities, or advocacy organizations, that outline specific terms and conditions under which the project may proceed. These agreements are often used to resolve disputes, avoid litigation, and satisfy statutory requirements like demonstrating "public need." While not always community-facing in origin, stipulations may include provisions that deliver local benefits, mitigate harms, or enforce compliance

[18] Salkin, "Host Community Agreements for Wind Farm Development."
[19] Kotler, "Project Labor Agreements in New York State II."
[20] Lewis and Henkels, "Good Neighbor Agreements."
[21] DeLacy, "Renewables, Tax Credits and Ad Valorem Taxes."

commitments. As such, they occupy a hybrid space between regulatory approval mechanisms and benefit-sharing agreements.

Agreements with Indigenous Communities

In this study, the terms **Community Development Agreement**, **Impact Benefit Agreement (IBA)**, and **Joint Venture Agreement** refer to a class of benefit-sharing arrangements negotiated between project developers and Indigenous communities. While these terms are not consistently defined across jurisdictions or sectors, they commonly appear in the context of resource extraction or infrastructure projects on or near Indigenous lands, particularly in Canada, where IBAs and related agreements have become a widely recognized mechanism for formalizing First Nations' consent. These agreements often include a mix of provisions such as employment commitments, revenue sharing, environmental protections, and cultural safeguards.

Ultimately, the fluid and context-specific nature of these agreements reflects the decentralized and project-specific nature of benefit-sharing agreements.

To illustrate this variation in practice, the table below shows the distribution of agreements collected for this study, categorized by agreement type.

Types of Agreements Collected

Agreement or Plan Type	Count	Share
Community Benefits Plan	210	69.3%
Host Community Agreement	30	9.9%
Community Benefits Agreement	28	9.2%
Stipulation	13	4.3%
Project Labor Agreement	6	2.0%
Payment-in-lieu of Taxes (PILOT) Agreement	5	1.7%
Good Neighbor Agreement	5	1.7%
Community Development Agreement	3	1.0%
Neutrality and Workforce Development Agreement	1	0.3%
Joint Venture Agreement	1	0.3%
Impact Benefit Agreement	1	0.3%
Total	303	100%

Forms of Benefits

Commitments outlined in these agreements represent a wide range of benefit types, reflected in the repository. To support comparative analysis, each agreement in the repository was categorized according to the primary forms of benefits it outlines. The categories below are not mutually exclusive; many agreements include elements from multiple categories.

1. General Community Funds

Unrestricted financial contributions provided by the developer to a local community or governing body, typically as a lump sum or annual payment. These funds are often managed locally, with flexibility in how they are allocated. This is one of the most common benefit types and may be included alongside more targeted commitments.

2. Project-Specific Economic Benefits

These benefits are directly tied to the project's operations and economic returns:

- **Revenue Sharing and Equity Participation:** The community receives a share of project revenues (e.g., royalties in mining) or holds a direct ownership stake. Although not represented in our dataset, equity-based models, such as cooperatives, partial ownership, or community trusts, are increasingly used as tools for community benefits.[22]
- **Workforce and Labor:** Includes commitments related to local hiring, job creation, apprenticeships, training programs, and union or labor agreements. These provisions are often tied to project construction and operations.
- **Direct Economic Development:** Refers to local procurement requirements, support for small businesses, or other efforts to stimulate local economic growth linked to the project's supply chain.

3. Environmental and Infrastructure Enhancements

This category includes both project-specific and broader community investments in the built and natural environment:

- **Project-Specific Enhancements:** Improvements made to directly mitigate the local impacts of the project itself, such as road upgrades, water system improvements, noise buffering, or site-specific environmental protections tied to permitting requirements.
- **General Enhancements:** Investments in public infrastructure or environmental restoration that are not directly linked to project impacts but are intended to benefit the broader community. Examples include regional conservation programs, green spaces, or broadband access.

4. Community Well-Being Investments

Broader social, cultural, and public service investments that are not directly tied to the project's operations but aim to improve quality of life in the host community. Examples include:

- Housing, health services, and childcare
- Educational initiatives unrelated to workforce development

[22] Zeng et al., "Optimal Revenue Sharing Model of a Wind–Solar-Storage Hybrid Energy Plant under the Green Power Trading Market."

- Cultural preservation, recreation, and community programming
- Social services and outreach initiatives

Within our collection of publicly available agreements, we identified the following categories of benefits:

Types of Benefits Identified in Publicly Available Agreements

Category	Benefit	Clean Energy Infrastructure	Clean Technology Manufacturing	Critical Minerals Extraction & Processing
	n =	212	24	12
General Community Funds	Community Funds	34%	0%	58%
Project-Specific Economic Benefits	Education & Workforce Development	53%	92%	50%
	Employee Benefits & Childcare	8%	29%	8%
	Job Creation	31%	17%	67%
	Union Agreements	9%	4%	17%
	Revenue Sharing	12%	0%	42%
	Local Procurement & Business Growth	41%	46%	67%
Environmental & Infrastructure Enhancements	Project-Specific Environmental & Infrastructure Enhancements	23%	0%	58%
	Environmental Protection / Restoration Initiatives	23%	0%	50%
	Public Infrastructure Improvements	21%	0%	17%
Community Well-Being Investments	Community Engagement Initiatives	21%	8%	58%
	Educational Initiatives	22%	4%	42%
	Health Initiatives	6%	0%	17%
	Housing Initiatives	1%	0%	8%
	Social and Cultural Investments	9%	4%	33%

Distribution of Benefit Types in Publicly Available Agreements by Sector

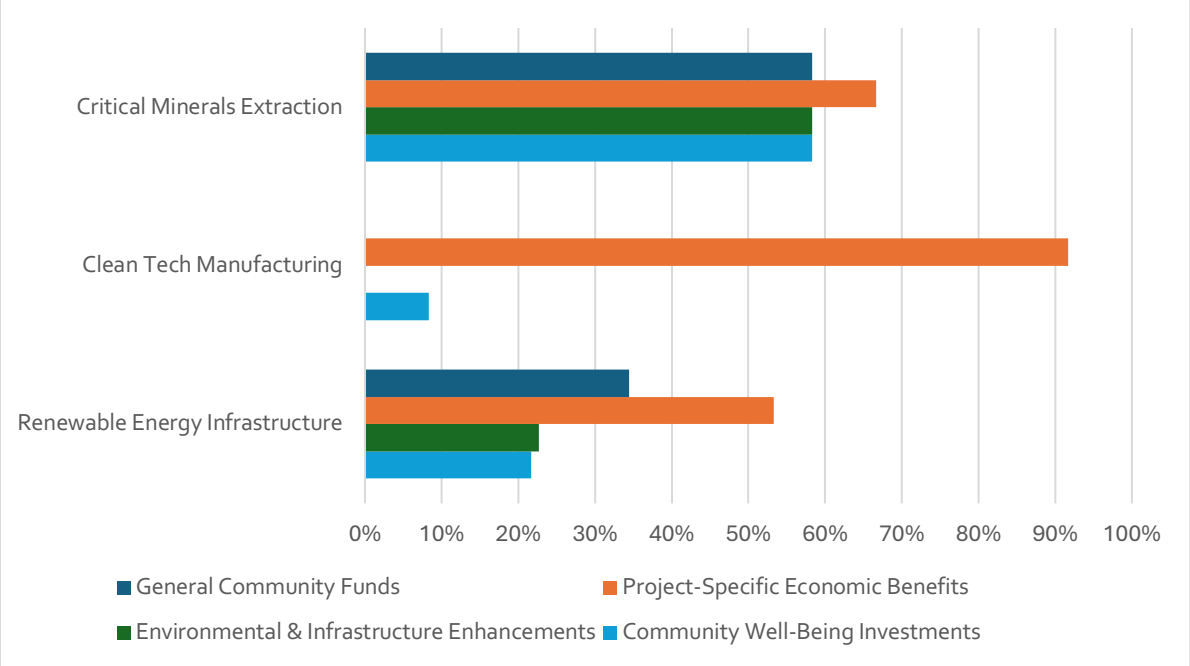

Figure 3. The type(s) of benefit offered by each agreement in the sample was coded into one of 15 distinct categories which have been amalgamated to form the four shown here. This breakdown is based on a limited sample of publicly available agreements and should be interpreted as illustrative rather than comprehensive.

BEST PRACTICES

The best practices outlined in this section were identified through a combination of expert interviews and a review of relevant academic and policy literature. This list is not exhaustive, and the absence of a particular feature does not imply that an agreement or negotiation process was inadequate. Rather, this section highlights approaches that experts associate with stronger outcomes.

These best practices also informed the development of an evaluation framework used to assess the agreements collected for this study (Appendix A). While the evaluation focuses on features that are visible and verifiable within the agreements, this section includes both document-based and practice-based best practices to reflect the full range of factors that contribute to meaningful, community-centered outcomes.

Community Participation and Representation

There is an extensive body of literature around best practices for community engagement. As they relate to community benefit-sharing negotiations and agreements, the literature typically clusters around the following:

Early and inclusive engagement. Research consistently highlights the importance of initiating engagement early in the project development process and maintaining it throughout. Early-stage outreach enables communities to shape project design, rather than merely react to finalized plans. Inclusive engagement, particularly when it involves residents, community organizations, tribal governments, labor, and local officials, has been shown to build trust and uncover locally specific concerns. Trusted intermediaries, including local nonprofits and faith-based organizations, often play a key role in reducing skepticism and elevating diverse community priorities. Early transparency, through plain-language materials, public access to project data, and educational workshops, enables residents to participate on more informed terms.

Representative participation & self-definition. Empowering the right groups and individuals with a "seat at the table" is essential for benefit-sharing processes to be equitable. Those at the negotiating table should genuinely reflect the demographics, interests, and self-identified priorities of the broader community. This may include historically underrepresented groups, including low-income residents, non-English speakers, youth, and elders.[23]

Capacity building and support. Community capacity to engage in negotiations on equal footing is often constrained by disparities in access to legal and technical expertise.[24] Negotiations often go without dedicated resources, such as funding for attorneys and consultants, to help communities understand project implications and engage effectively. In some cases, benefit-sharing agreements have included stipends or funding for community representatives' time, recognizing the labor required

[23] *Just Transitions*.

[24] Been, "Community Benefits Agreements."

to participate meaningfully. Investments in community capacity, such as neutral facilitators or culturally competent intermediaries, are associated with more equitable agreements.[25]

Formal roles in decision-making. Experts suggest that community members should hold structured roles in governance, such as seats on advisory boards.[26] These roles institutionalize community voice beyond one-off consultations and allow for ongoing input, adjustment, and accountability. Some benefit-sharing agreements establish oversight committees that include both community and developer representatives to monitor compliance and guide implementation over time. These arrangements create formal mechanisms for power-sharing.

Contractual Design

Strong contractual design is essential to ensure that community benefits are delivered as promised. The literature emphasizes the use of well written contracts, including features such as:

- **Clear, enforceable terms.** Agreements should specify obligations in measurable terms, with deadlines and performance benchmarks.[27] Vague language weakens accountability. Legally binding contracts, such as those between developers and cities or community entities, enable enforcement if commitments are unmet.
- **Successor and continuity clauses. Successor clauses**, requiring that obligations transfer with the project, help ensure that in cases where a project changes hands, benefits are continued.[28]
- **Dispute resolution mechanisms.** Agreements that include staged resolution processes, such as good-faith negotiation, mediation, or arbitration, provide clear avenues for resolving disputes without litigation.[29]
- **Clarity.** Precise definitions (e.g., of "local hire") help prevent ambiguity. Clearly assigned responsibilities, such as who oversees implementation, support transparency and coordination help ensure accountability.
- **Enforcement provisions.** Legal remedies, financial penalties, or performance bonds can help ensure compliance. Some jurisdictions integrate benefit agreements into permit conditions or tie them to public subsidies.

Monitoring and Implementation

Case studies and expert interviews indicate that how a benefit agreement is implemented over time is as important as what it promises on paper. Strong initial commitments may falter in execution due to limited oversight, lack of transparency, or unclear roles and responsibilities.

---

[25] Eisenson and Webb, "Expert Insights on Best Practices for Community Benefits Agreements."
[26] Bedsworth, Johnson, and Hoff, "Community Benefits Tools and California Clean Energy Projects: Strategies for Project Design."
[27] Gross, LeRoy, and Janis-Aparcio, "Community Benefits Agreements."
[28] Gross, LeRoy, and Janis-Aparcio.
[29] Eisenson and Webb, "Expert Insights on Best Practices for Community Benefits Agreements."

This report's synthesis of literature, case studies, and expert insights highlights a number of strategies that have been used to support implementation and accountability. While these practices vary widely depending on context, they offer insight into the kinds of tools and structures that have been explored to support implementation.

Some of the approaches, synthesized from the literature and expert interviews, include:

Oversight Committees or Implementation Bodies: A dedicated entity can help track progress, address issues, and maintain transparency throughout the life of the agreement. These bodies often include community representatives, project sponsors, and sometimes public officials or independent advisors. Their structure and authority may vary, but their purpose is to create continuity and accountability beyond the initial negotiation.

Regular Reporting and Public Access to Information: Ongoing reporting, often annual or quarterly, is a common mechanism for maintaining transparency. Reports typically summarize key metrics (e.g., funds spent, jobs created, milestones reached) and note any delays or adjustments. Public access to these updates, via websites, community meetings, or public notices, can help build trust and maintain momentum.

Defined Enforcement Mechanisms: To ensure accountability, some benefit frameworks incorporate enforcement provisions or link commitments to permitting or financial incentives. This can clarify what happens if obligations are not met and can support meaningful recourse for communities if terms are not honored.

Strong implementation frameworks can help ensure that agreements remain relevant, transparent, and responsive over time.

Agreement Evaluation Criteria

These best practices also informed the development of an evaluation framework used to assess the agreements collected for this study (Appendix A). These criteria focus on what can be observed in the agreements themselves; however, it is important to note that the framework is based on the content of the documents themselves. As such, it cannot fully capture critical dimensions of practice outlined here, such as early engagement, community governance, or the quality of implementation, which often occur outside of or prior to the agreement's formal documentation. The full proposed criteria are provided in **Appendix A**.

NEEDS AND OPPORTUNITIES BY INDUSTRY

Renewable Energy

Renewable energy development in the United States has accelerated dramatically over the past decade, driven by a combination of technological advancements, declining costs, policy incentives, and growing demand for decarbonization. As of 2023, renewable energy accounted for more than 20% of U.S. electricity generation, with solar representing the fastest-growing source.[30] The passage of the Inflation Reduction Act (IRA) in 2022 provided a historic boost, allocating over $370 billion toward clean energy and climate investments, including long-term tax credits for renewable generation, storage, and domestic manufacturing.[31] Alongside utility-scale projects, distributed energy resources such as rooftop solar, community solar, and battery storage are becoming increasingly prevalent. However, the sector faces persistent challenges, including interconnection bottlenecks, transmission constraints, and local permitting hurdles.[32]

As discussed in early sections of this report, California is a national leader in renewable energy. The state's commitment to climate goals is exemplified by Senate Bill 100, which mandates 100% clean electricity by 2045.[33] California produced an average of 47.3 % of grid electricity demand with renewable electricity from October 1, 2023 to September 30, 2024.[34] The state has also led in battery storage deployment, supporting grid reliability during peak demand. California's policy framework includes initiatives like net energy metering, renewable portfolio standards, and community resilience grants that aim to expand clean energy access and strengthen local energy systems.

California is also investing in decarbonizing its building and transportation sectors through electric vehicle incentives, building electrification programs, and zero-emission mandates. Equity remains central to the state's clean energy vision, with programs such as the Transformative Climate Communities initiative[35] and the Community Energy Reliability and Resilience Investment Program[36] designed to ensure that environmental justice communities share in the benefits of clean energy development.

Despite its leadership, California faces many of the same challenges as the rest of the country, particularly around long timelines for permitting and transmission buildout. As clean energy deployment scales up, effective community engagement will be key to meeting the state's ambitious climate and energy targets.

---

[30] "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis."
[31] "Inflation Reduction Act."
[32] "Queued Up."
[33] Commission, SB 100 Joint Agency Report, 100.
[34] Jacobson et al., "No Blackouts or Cost Increases Due to 100 % Clean, Renewable Electricity Powering California for Parts of 98 Days."
[35] "Transformative Climate Communities (TCC) - Strategic Growth Council."
[36] "Community Energy Reliability and Resilience Investment (CERRI) Program."

Renewable energy projects are expanding rapidly across California to meet clean energy targets, often in rural or disadvantaged areas. These large wind and solar developments can impose local burdens, such as land use change, environmental impacts, and altered community character, while many benefits (like electricity or profits) flow elsewhere. This dynamic can contribute to community pushback. For example, in 2019 San Bernardino County banned big solar and wind farms on over a million acres in response to residents' concerns about "industrializing" their desert communities without local benefit.[37]

Traditionally, community engagement around renewables has been limited to basic consultation and environmental review processes, which residents may find insufficient. There is no standardized approach to share benefits with host communities; any community benefits tend to be ad hoc and voluntary. Developers might point to tax revenue or a handful of construction jobs, but these gains are not always tangible to local residents. Neighboring residents may see few direct benefits – for instance, a landowner might receive lease payments for hosting wind turbines, while surrounding neighbors get no compensation. Inadequate outreach early on can also breed mistrust. By the time formal hearings occur, communities may feel projects are a fait accompli, fueling resentment and resistance. This gap is especially problematic for low-income and tribal communities, which may lack resources to influence project planning and may have historical grievances over land and resource use. In short, many renewable projects have proceeded without robust community buy-in or mechanisms to equitably share their economic gains.

To build local support and fairness, renewable energy development in California must evolve toward "next-level" community engagement that is proactive and mutually beneficial. Experts stress being "smart from the start" – engaging community members from a project's inception to understand local values and needs.[38] This involves moving beyond perfunctory meetings to genuine collaboration.

Benefit-sharing for renewable energy can also include offering discounted energy rates or ownership stakes to nearby residents. Co-ownership models (such as cooperative or community-owned solar farms) give locals a direct economic stake, which can both distribute profits and deepen public support.[39] Likewise, strong local hiring and apprenticeship programs can transform renewable projects into sources of quality employment for host communities. In summary, the renewable energy sector's key opportunity is to expand the use of benefit-sharing, ensuring local people see real advantages (economic, social, and environmental) from the clean energy transition happening in their backyards.

Critical Mineral Extraction and Processing

Critical mineral extraction and processing is foundational to California's and the nation's clean energy transition. These minerals are essential inputs for electric vehicle batteries, grid-scale storage, and renewable energy technologies. As global demand accelerates, the United States is seeking to reduce

[37] Roth, "California's San Bernardino County Slams the Brakes on Big Solar Projects."
[38] Goldfuss, "Not Just Talk."
[39] Moyce, "Indigenous Ownership in Clean Energy Is a Universal Imperative."

its reliance on foreign supply chains, especially China, which the U.S. exclusively relies on for at least 20 critical minerals.[40] Federal efforts, including those under the Trump Administration,[41] have emphasized the strategic, economic, and national security imperatives of developing domestic critical mineral production.

California is poised to play a leading role in this shift. With rich geologic deposits in regions like the Imperial Valley, (referred to by some as "Lithium Valley"), the state has the potential to become a national hub for lithium extraction, as well as midstream processing and refining. In 2020, the state established the Lithium Valley Commission (via Assembly Bill 1657) to explore how development in the Salton Sea region could help meet global lithium demand while supporting local and regional economic and community investment.[42]

The western United States hosts other critical mineral deposits. In Nevada, the Thacker Pass lithium deposit, developed by Lithium Americas, is one of the largest in the country and has received investment from General Motors. Nearby, Ioneer Ltd.'s Rhyolite Ridge project has secured Department of Energy support and is expected to produce both lithium and boron.[43] In Arizona and Oregon, firms like Arizona Lithium[44] and Jindalee Resources[45] are exploring similar opportunities.

However, the expansion of domestic mining raises critical equity concerns. Nationwide, a substantial portion of known mineral resources—89% of copper, 79% of lithium, 97% of nickel, and 68% of cobalt—lie within 35 miles of Native American reservations.[46] New mining operations often spark controversy with local communities, particularly over land use and environmental and cultural impacts.

As mining activity accelerates, there is an urgent need to align critical mineral development with frameworks for equitable benefit-sharing.

The nature of mining and mineral extraction presents unique community benefit-sharing challenges. Extraction is highly localized. Environmental risks include groundwater depletion or contamination, air pollution from processing, and land disturbance.[47]

The environmental and social impacts (noise, dust, water usage, potential contamination) concentrate in communities near mines or wells, whereas the economic benefits (commodity sales, corporate profits, high-level jobs) often accrue elsewhere. Historically, U.S. mining law has not guaranteed local

[40] "Groundbreaking Report."
[41] Trump, Immediate Measures to Increase American Mineral Production.
[42] "Report of the Blue Ribbon Commission on Lithium Extraction in California."
[43] "DOE Announces $996 Million Loan Guarantee to Ioneer Rhyolite Ridge to Advance Domestic Production of Lithium Carbonate, Boost U.S. Battery Supply Chain."
[44] Silversmith, "Hualapai Tribe Sues Feds over Lithium Mining Project near Sacred Spring."
[45] Ehrlich, "Lithium Project in Southeastern Oregon Gets Public Input Extension."
[46] Myles, "Critical Minerals' Tribal Dilemma."
[47] Berthet et al., "Assessing the Social and Environmental Impacts of Critical Mineral Supply Chains for the Energy Transition in Europe."

benefit-sharing; indeed, mining on federal lands is still governed by a 150-year-old law that has "consistently failed to protect and benefit mining communities."[48][49] This legacy means many mining-affected communities have seen little return for decades of resource extraction, aside from boom-and-bust cycles of employment.

In 2022, the Biden Administration launched an Interagency Working Group (IWG), tasked with evaluating and recommending updates to U.S. hardrock mining laws, regulations, and permitting policies.[50] The IWG released its final report in September 2023, outlining reforms including streamlining the permitting process, strengthening early Tribal consultation, and, Drawing from the precedent of revenue-sharing in oil and gas leasing, imposing a new royalty of up to 8% on the net proceeds from minerals extracted on federal lands.[51] While the proposed royalty would return revenue to the federal government, the IWG also recommended allocating a portion of royalty or lease revenue to establish community impact funds, to directly benefit communities most affected by mining operations and mitigate local impacts of mineral development.

However, these proposals remain advisory and have not been enacted into law. With a new administration in office that has expressed opposition to environmental regulations and community benefit mandates, the outlook for federal action is uncertain.

In the context of U.S. critical mineral development, formal CBAs are rare. Our review of publicly available community benefit plans identified 11 projects with some form of benefit mechanism. Of these, only one featured a formal Community Benefit Agreement: Lithium Americas' Thacker Pass project in Nevada, and one included a nonbinding "Community Agreement": Perpetua Resources' Stibnite Gold Project in Idaho.

The Thacker Pass project includes a CBA with the Fort McDermitt Paiute and Shoshone Tribes. Though the agreement is not publicly available, Lithium Americas has reportedly committed to long-term community investments, including construction of a community center and culturally relevant job training programs.[52] Notably, the company has also signed a Project Labor Agreement with North America's Building Trades Unions (NABTU), ensuring union labor for the construction phase.[53]

The Stibnite Mine Community Agreement includes important community engagement structures, such as the Stibnite Advisory Council and the Stibnite Foundation, which aim to support ongoing dialogue and community investment.[54] The community agreement itself does not contain commitments related

[48] Connors, "Mining Laws and Regulations USA 2025."
[49] Haggerty, Rose, and Ruth, "A Framework for Federal Mining Reform."
[50] Connors, "Mining Laws and Regulations USA 2025."
[51] "Recommendations to Improve Mining on Public Lands."
[52] "Lithium Americas Signs Community Benefits Agreement with Fort McDermitt Paiute and Shoshone Tribe."
[53] "NABTU Statement on DOE's Thacker Pass Project Announcement."
[54] "Stibnite Advisory Council About Us."

to workforce development or local hiring, but the company has committed to workforce development and local hiring in separate public project documents.[55]

Communities near proposed critical mineral projects in California (such as lithium extraction sites in Imperial County) rightfully worry that without intentional policies, a mining boom could repeat past injustices, leaving behind pollution, groundwater impacts, or economic disruption once minerals are depleted.[56] Currently, there is a gap in strong, enforceable mechanisms to ensure these communities directly share in the profits and decision-making of mining operations.

However, recent developments in California show recognition of these shortcomings. In 2022 the state enacted a lithium extraction excise tax specifically to channel some revenue back to the region. Eighty percent of the tax collected will go to the county or counties where extraction occurs, and Imperial County must allocate at least 30% of its share to communities directly or indirectly impacted by lithium operations.[57] This ensures a portion of the resource wealth is earmarked for local benefit, as defined by communities themselves. The law also created a Lithium Subaccount for Salton Sea restoration and community projects, funding grants for community engagement and infrastructure in affected areas.[58] Implementation will determine how effective these policies are in practice.

Several elements of strong community benefit design apply well to the mining context, though they must be adapted. Long project timelines make ongoing engagement and adaptive implementation critical. Environmental impacts and cultural land sensitivities suggest the need for Tribal co-management, independent environmental monitoring, and long-term stewardship funding and site rehabilitation terms.

Revenue-sharing could be especially relevant in this sector. Unlike in solar or manufacturing, where profits may be more difficult to trace, mineral extraction has clearly defined production metrics (e.g., tons of lithium extracted) that can be tied to royalties, equity stakes, or performance-based community funds.

In addition, projects in this sector are often multi-phase (exploration, extraction, processing), creating opportunities to stage benefit commitments and build trust over time. Unlike short-term construction-heavy projects, mineral extraction requires decades of sustained local interaction, making relationship-based governance essential.

Canada provides a well-established benchmark with Impact and Benefit Agreements (IBAs), legally enforceable contracts negotiated directly with First Nations governments. IBAs typically include revenue sharing, employment and training programs, and environmental stewardship commitments.

---

[55] "Draft Record of Decision Stibnite Gold Project Valley County, Idaho."
[56] Slattery et al., "What Do Frontline Communities Want to Know about Lithium Extraction?"
[57] "Report of the Blue Ribbon Commission on Lithium Extraction in California."
[58] "The 2024-25 Budget: Salton Sea Management Program."

While not mandated by law in all jurisdictions, IBAs are an expected and common practice in Canada to secure community support and regulatory approval for new mining operations.[59]

Similarly, Australia's Indigenous Land Use Agreements (ILUAs) formalize benefit-sharing between native title groups and other parties, such as mining companies. ILUAs are not legally required in all circumstances under Australian law, but are often required for government approvals as evidence that native title holders have been consulted and have granted consent. While both systems warrant criticism, these formalized frameworks help to ensure that communities are engaged in development decisions and share in mineral wealth.[60]

Building on these measures, California has the opportunity to set a new standard for community benefit-sharing in critical mineral extraction. California's could use CBAs or statutory requirements so that a share of mining profits capitalize community trusts for local residents. Additionally, benefit-sharing could take the form of local hiring and workforce training commitments, supply chain opportunities for local businesses, and improvements to local infrastructure (roads, schools, broadband) funded by mining revenues. Indigenous communities must be full partners in these discussions. Practices aligning with Free, Prior, and Informed Consent (FPIC) are essential to respect tribal sovereignty.

In summary, the critical minerals sector needs to move from an outdated extractive model towards one where local communities are not only consulted but also receive concrete, long-term benefits from mineral development.

[59] Eyford, *Forging Partnerships, Building Relationships - Aboriginal Canadians and Energy Development*.
[60] Campbell and Hunt, "Achieving Broader Benefits from Indigenous Land Use Agreements."

Clean Technology Manufacturing

The clean technology manufacturing sector, including electric vehicles, battery production, and key supply chain components like inverters, semiconductors, and wind turbine parts, is expanding rapidly across the United States, driven by the Inflation Reduction Act (IRA), the Bipartisan Infrastructure Law (BIL), market demand, and shifting global supply chains.

California Clean Tech Manufacturing Jobs by Parent Company

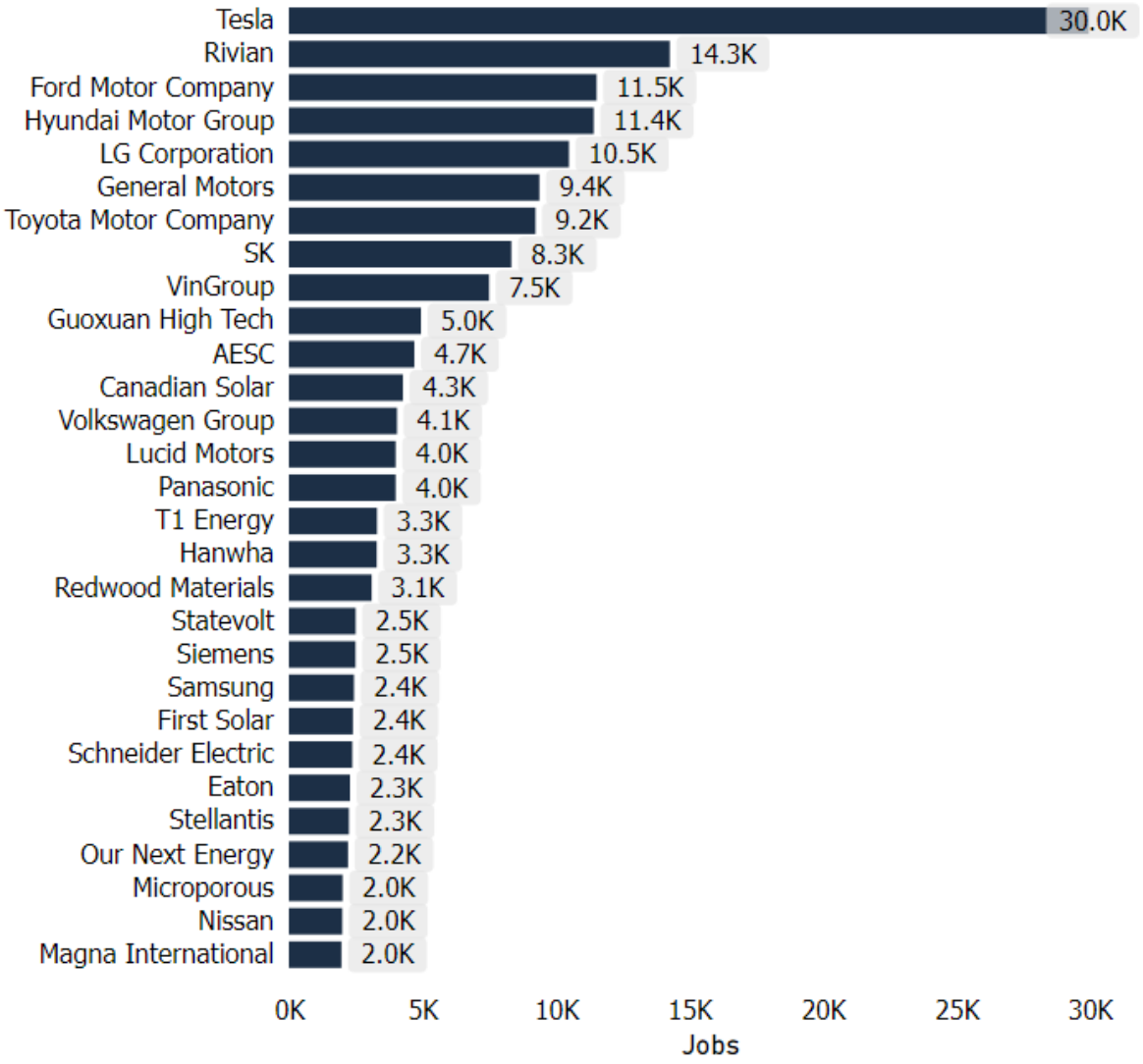

Figure 4. California Jobs Created Since January 1, 2020 in EVs, Battery Manufacturing, and Clean Energy Supply Components (as of April 16, 2025), Source: Clean Economy Tracker

California is emerging as both a key contributor and a test case. The state's innovation ecosystem and growing presence across multiple supply chain stages, including pack assembly, power electronics, and

recycling, position it as a potential national leader in clean tech manufacturing.[61] California also hosts upstream rare earth mineral extraction, deepening its role in the full value chain. However, high land and electricity costs, strict environmental permitting, and labor protections create competitive challenges relative to other states offering cheaper and faster development pathways.

However, the state's industrial policy landscape also presents constraints. High land and electricity costs, rigorous environmental permitting, and strong labor standards make it harder for California to compete with states offering cheaper, faster, and less regulated development.

In response to growing demand for a skilled and inclusive workforce, several new federal and state efforts have emerged. The U.S. Department of Energy's Battery Workforce Initiative (BWI) launched in 2022 to support national training guidelines and workforce development strategies.[62] California's Competes Tax Credit (CCTC) further incentivizes business investment and job creation, particularly in regions targeted for economic development. Yet while these programs lay important groundwork, they do not mandate enforceable benefit-sharing. There is a growing opportunity to pair these incentives with stronger community engagement and benefit commitments.

Historically, American manufacturing has been shaped by ongoing labor struggles. Tools like collective bargaining agreements and prevailing wage standards have played a critical role in securing job stability and pathways into the middle class. However, many new battery and clean tech plants are emerging in a post-industrial context, often in right-to-work states or zones with limited worker protections. This leaves a patchwork of practices, where some projects include strong community and workforce benefits, while others move forward with little to no community engagement or accountability.

We identified 65 benefit-sharing plans related to U.S. manufacturing, nearly all of which were nonbinding Community Benefit Plans tied to BIL/IRA funding. Only two formal Community Benefit Agreements (CBAs) were found, both negotiated by Jobs to Move America with electric bus manufacturers BYD and Proterra in California. These agreements reportedly included commitments to local hiring, workforce diversity, and apprenticeship partnerships. For example, BYD exceeded its goal of hiring 40% of its workforce from priority populations, resulting in a workforce that is 90% workers of color. Proterra's CBA supported a union-led training program funded by the state.

These examples, while rare, demonstrate the potential of CBAs in manufacturing settings, particularly when community, labor, and industry collaborate from the outset. Unlike PLAs, which generally apply only to the construction phase, CBAs can include operational and workforce commitments that extend throughout a facility's lifetime. Public tools like the U.S. Employment Plan, also developed by Jobs to

---

[61] Weber, "Archer Aviation Opens Battery Pack Assembly Line"; Wood, "Mullen's California Facility Completes Phase One of Battery Pack Assembly Line | Automotive Powertrain Technology International"; "Laser-Based Silicon Carbide Wafer Manufacturing for Next-Generation High-Efficiency Power Electronics."

62 "Battery Workforce Initiative."

Move America, offer a template for embedding equity metrics into procurement and manufacturing incentives.

Clean tech and battery manufacturing projects stand out from many other energy-related developments because they offer potentially permanent, year-round employment. Unlike short-term construction jobs associated with power infrastructure buildouts, these facilities can anchor long-term job creation across manufacturing and supply chain roles. When strategically developed, they could also catalyze local industrial ecosystems, attracting suppliers and strengthening regional economic resilience. Over time, these factories can expand the local tax base and provide stable economic anchors for communities seeking durable post-industrial revitalization.

While the potential permanent jobs are significant, this does not guarantee equitable or high-quality employment. Without strong labor standards or targeted equity measures, these roles may bypass underrepresented or frontline communities. There is also the long-term risk of automation, relocation, or offshoring.

Still, the permanence of factory jobs also creates a unique opportunity: these projects can serve as the foundation for inclusive economic development, especially when backed by thoughtful public investment. Local hiring requirements, pre-apprenticeship programs, and training partnerships can turn manufacturing facilities into opportunities for upward mobility.

BENEFIT-SHARING POLICIES

While some developers voluntarily pursue community engagement and benefit-sharing, many do not—especially when these efforts do not clearly align with financial incentives. In the absence of clear financial returns, even well-meaning developers may avoid investing in robust engagement or benefit agreements because the market does not reward them. This gap creates a clear role for public policy: to shape the incentives, expectations, and institutional structures that make equitable community engagement a standard part of project development, rather than an optional add-on.

A few policy intervention options exist to encourage the use of community benefit-sharing mechanisms.

Community Benefits Ordinances (CBOs)

CBOs are municipal laws that mandate community engagement and benefit negotiation for certain projects, typically those receiving public support.

- Detroit's CBO requires large, publicly-supported projects to go through a structured community negotiation process, forming a Neighborhood Advisory Council to identify priorities. While it has delivered real benefits (affordable housing, parks, jobs), critics cite narrow triggers, limited enforcement, and insufficient NAC authority. [63;64]
- Cleveland's CBO uses a lower financial threshold and requires a legally enforceable CBA for any project receiving $250,000+ in city assistance. It includes standardized benefit floors (e.g. local hiring, contracting goals) and a project scorecard, offering greater predictability but somewhat less direct community control. [65]
- Richmond, California, has implemented a comprehensive citywide Community Benefits Policy (CBP) designed to ensure that large-scale development projects deliver tangible benefits to local residents, particularly those in historically underserved communities. This policy establishes a structured, enforceable framework that mandates community benefits when developers receive significant public support.[66]

Federal and State Funding Requirements

Community benefit expectations have been embedded in federal and state funding processes:

- DOE's Community Benefits Plans (CBPs) require applicants for IIJA/IRA funding to outline how they will deliver community and labor benefits. CBPs are evaluated as part of application scoring, and commitments are incorporated into binding agreements between DOE and

[63] "Community Benefits Ordinance."
[64] Saha et al., "Detroit's Community Benefits Ordinance."
[65] "Community Benefits Ordinance | City of Cleveland Ohio."
[66] "Community Benefits Policy Development | Richmond, CA."

awardees.[67] This aligns funding with procedural and distributive justice goals but does not guarantee legal enforcement by communities.

- BOEM's Offshore Wind Lease Credits award bidding discounts to developers that commit to community benefits (such as CBAs with tribes or coastal communities). These commitments are enforceable through lease terms. If not met, developers must repay the credit value.[68] BOEM's approach leverages competitive processes to secure early benefit-sharing.

Public Land Leasing and Permitting Policies

Governments that control access to land or natural resources can embed benefit-sharing in leasing and permitting frameworks:

- California's Lithium Valley is using an excise tax (with earmarks for local communities and environmental restoration).[69] This dual approach ensures public revenues and pushes for private accountability in a new resource sector.
- New York's Host Community Benefit Program for renewable energy requires developers of large projects to fund bill credits for local residents.[70] This provides direct, ongoing benefits administered through utilities.

[67] Pontecorvo, "The IRA's Labor Provisions Look Like They're Working."
[68] Lopez, "First-Ever California Offshore Wind Auction Nets $757 Million."
[69] "Report of the Blue-Ribbon Commission on Lithium Extraction in California."
[70] Salkin, "Host Community Agreements for Wind Farm Development."

RECOMMENDATIONS

The following recommendations are based on an analysis of sector-specific needs, challenges, and opportunities, informed by literature, expert input, and a review of agreements collected in this study. This synthesis identified two overarching needs: (1) to incentivize the use of robust, enforceable benefit-sharing agreements across sectors, and (2) to strengthen the capacity of communities to engage in negotiations and advocate for their priorities. A range of policy options was considered using a structured evaluation matrix (Appendix B), assessing their relative feasibility, effectiveness and contribution to equitable outcomes. The recommendations that follow are designed to address the identified needs and support broader and more consistent implementation of community benefit-sharing.

1. Incentivize the Use of Community Benefit Mechanisms

Tie Public Funding to Robust Community Benefit Commitments

The industry analysis conducted for this research identified significant underuse of formal community benefit agreements, even in sectors receiving substantial public support. Tying public funding to robust community benefit commitments offers a promising approach to increase uptake while preserving flexibility. This structure also allows community-based organizations to remain the primary negotiating parties.

Community benefits should be a prerequisite for receiving public subsidies. Following models like DOE's Community Benefits Plan (CBP) framework under the Bipartisan Infrastructure Law and Inflation Reduction Act, California should prioritize public investment in projects that demonstrate credible plans for local hiring, environmental justice, and shared economic benefits. This keeps benefit-sharing voluntary but highly incentivized, helping ensure that public dollars support community-aligned outcomes.

Consider the Use of Community Benefit Ordinances (CBOs)

This analysis found that community benefit agreements vary widely in enforceability, transparency, and mechanisms for oversight. Community Benefit Ordinances (CBOs) offer one potential policy tool for encouraging more structured engagement between developers and communities. When carefully designed, CBOs can create more predictable and transparent pathways for negotiations. However, the use of such ordinances should be carefully evaluated in conjunction with efforts to improve permitting efficiency, to ensure they support, rather than hinder, timely project delivery. Pilot programs or iterative ordinance models may help clarify how CBOs can be implemented effectively without introducing unnecessary delays.

Promote Co-Ownership and Revenue Sharing Models

This analysis found that many existing agreements emphasize short-term or one-time contributions, such as lump-sum payments, with few mechanisms for building long-term community wealth. At the same time, expert interviews and select case studies pointed to growing interest in models that embed

community participation more deeply into the structure of a project**,** such as equity stakes, community trusts, and profit-sharing arrangements. These approaches align community and developer interests over the life of a project and offer a way to address structural power imbalances by giving communities a lasting financial stake. California should explore ways to support and scale these models, particularly in high-value sectors like renewable energy and mining, where co-ownership and revenue sharing can generate durable, generative benefits.

2. Empower Communities with Tools, Data, and Support

Expand Access to Technical Assistance (TA) and Tools

Interviews with experts and community advocacy groups revealed a persistent gap in access to the legal, financial, and technical expertise needed to negotiate effective and enforceable benefit agreements. These capacity challenges often leave communities at a disadvantage when engaging with well-resourced developers. Without support in areas such as contract law, permitting, and project design, communities may struggle to evaluate proposals or determine whether promised benefits are appropriate for the scale and impact of a project. This can undermine the quality of agreements and reinforce existing power imbalances.

To address this, California should establish a centralized, open-access implementation hub that offers technical assistance resources, connects communities with expert support, and provides training. This infrastructure could build on successful models such as the First Nations Major Projects Coalition (Canada), which offers legal, environmental, and financial due diligence.

A statewide TA network could include:

- A vetted roster of nonprofit, academic, and independent experts
- Toolkits and technical guidance to help communities assess project-specific impacts, including how to interpret environmental reports and other technical materials
- Resources to support communities in identifying appropriate, responsive benefits based on project scale and impact
- Workshops or training sessions to support community-based organizations in understanding negotiation strategies and navigating the agreement process

California Forward could play a leading role in developing or curating this hub, leveraging its position across regions and sectors to ensure statewide alignment and usability.

Establish Regionally Coordinated Needs Assessments

Community benefit agreements are developed on an ad hoc basis in response to individual projects, often without a clear understanding of broader community needs or long-term goals. Regionally coordinated, community-led needs assessments offer a proactive solution, creating clarity for communities and developers, reducing duplication, and aligning project planning with locally defined priorities and environmental justice goals.

California should invest in regionally coordinated, participatory needs assessments that identify local priorities before development occurs. These assessments should be co-led by community-based organizations and grounded in participatory research best practices. For developers, early visibility into community needs offers a roadmap for designing benefit plans that are more likely to gain support. For communities, the process builds civic capacity and clarifies long-term goals beyond single projects. Regional coordination would allow for the pooling of data, shared learning, and improved alignment with environmental justice goals.

Regional needs assessments can be used to create publicly available, community-vetted roadmaps that developers can use to align their benefit proposals with local expectations. These could be layered with other data and community information to create clear visualizations of where and how to invest in community priorities.

CONCLUSION

This report set out to examine how community benefit-sharing mechanisms are being used across California's critical minerals, clean tech manufacturing, and renewable energy sectors, and to identify strategies to strengthen their use and impact. Drawing on a review of over 300 agreements and benefit plans, expert and community stakeholder interviews, and targeted policy analysis, the research highlights key limitations in the current landscape.

Community benefit agreements are often developed on an ad hoc basis, without a clear understanding of long-term community priorities. Despite increasing expectations around benefit-sharing, formal agreements remain underused, even in sectors that receive substantial public investment. Where agreements do exist, they frequently prioritize short-term or one-time contributions, such as lump-sum payments, with limited provisions for long-term wealth-building or enforceable implementation. Interviews underscored a persistent challenge: many communities lack access to the legal, technical, and financial expertise needed to negotiate strong, lasting agreements, while developers face little structural incentive to engage early or comprehensively.

Together, these findings point to the need for a more coordinated policy approach that builds community capacity, aligns developer incentives, and supports transparent, durable benefit structures. Public funding conditions, regionally led needs assessments, and accessible technical assistance are key tools that can help ensure California's infrastructure and energy investments deliver lasting, equitable value for the communities they affect.

REFERENCES

"2024 California Green Innovation Index." Next 10. Accessed May 15, 2025. https://www.next10.org/2024-gii.

Barnett, Julie, Kate Burningham, Gordon Walker, and Noel Cass. "Imagined Publics and Engagement around Renewable Energy Technologies in the UK." *Public Understanding of Science* 21, no. 1 (January 1, 2012): 36–50. https://doi.org/10.1177/0963662510365663.

Bedsworth, Louise, Malcolm Johnson, and Katherine Hoff. "Community Benefits Tools and California Clean Energy Projects: Strategies for Project Design," October 2024.

Been, Vicki. "Community Benefits Agreements: A New Local Government Tool or Another Variation on the Exactions Theme?" *University of Chicago Law Review* 77, no. 1 (January 1, 2010). https://chicagounbound.uchicago.edu/uclrev/vol77/iss1/2.

Berthet, Etienne, Julien Lavalley, Candy Anquetil-Deck, Fernanda Ballesteros, Konstantin Stadler, Ugur Soytas, Michael Hauschild, and Alexis Laurent. "Assessing the Social and Environmental Impacts of Critical Mineral Supply Chains for the Energy Transition in Europe." *Global Environmental Change* 86 (May 1, 2024): 102841. https://doi.org/10.1016/j.gloenvcha.2024.102841.

California Energy Commission. "Community Energy Reliability and Resilience Investment (CERRI) Program." California Energy Commission, current-date. https://www.energy.ca.gov/programs-and-topics/programs/community-energy-reliability-and-resilience-investment-cerri-program.

California Energy Commission. "Transforming Transportation." California Energy Commission, current-date. https://www.energy.ca.gov/about/core-responsibility-fact-sheets/transforming-transportation.

Campbell, Danielle, and Janet Eileen Hunt. "Achieving Broader Benefits from Indigenous Land Use Agreements: Community Development in Central Australia." *Community Development Journal* 48, no. 2 (2013): 197–214.

City of Detroit. "Community Benefits Ordinance," December 3, 2024. https://detroitmi.gov/departments/planning-and-development-department/community-benefits-ordinance.

Commission. SB 100 Joint Agency Report (current-date). https://www.energy.ca.gov/sb100.

"Community Benefits Ordinance | City of Cleveland Ohio." Accessed May 9, 2025. https://www.clevelandohio.gov/city-hall/departments/law/divisions/office-equal-opportunity/cba.

"Community Benefits Policy Development | Richmond, CA." Accessed May 9, 2025. https://www.ci.richmond.ca.us/4126/Community-Benefits-Policy-Development.

Connors, Meaghan. "Mining Laws and Regulations USA 2025." Text. Mining Laws and Regulations. International Comparative Legal Guides, September 17, 2024. United Kingdom. https://iclg.com/practice-areas/mining-laws-and-regulations/usa.

Cowell, Richard. "The Role of Place in Energy Transitions: Siting Gas-Fired Power Stations and the Reproduction of High-Carbon Energy Systems." *Geoforum* 112 (June 1, 2020): 73–84. https://doi.org/10.1016/j.geoforum.2020.03.009.

DeLacy, P. Barton. "Renewables, Tax Credits and Ad Valorem Taxes: Are Policies Aligned?" *Real Estate Issues* 39, no. 1 (March 1, 2014): 50–58.

"Draft Record of Decision Stibnite Gold Project Valley County, Idaho." U.S. Department of Agriculture Payette National Forest, September 2024.

Ehrlich, April. "Lithium Project in Southeastern Oregon Gets Public Input Extension." *Oregon Public Broadcasting (OPB)*, April 1, 2025. https://www.opb.org/article/2025/04/01/lithium-project-in-southeastern-oregon-gets-public-input-extension/.

Eisenson, Matthew, and Romany Webb. "Expert Insights on Best Practices for Community Benefits Agreements." *Sabin Center for Climate Change Law*, September 1, 2023. https://scholarship.law.columbia.edu/sabin_climate_change/206.

Energy.gov. "DOE Announces $996 Million Loan Guarantee to Ioneer Rhyolite Ridge to Advance Domestic Production of Lithium Carbonate, Boost U.S. Battery Supply Chain," January 17, 2025. https://www.energy.gov/lpo/articles/doe-announces-996-million-loan-guarantee-ioneer-rhyolite-ridge-advance-domestic.

Eyford, Douglas R. *Forging Partnerships, Building Relationships - Aboriginal Canadians and Energy Development: Report to the Prime Minister*. Ottawa: Natural Resources Canada, 2013.

Goldenberg, Suzanne. "Barack Obama's Green Stimulus Plan Fails to Deliver the Money." *The Guardian*, November 10, 2010, sec. Environment. https://www.theguardian.com/environment/2010/nov/10/barack-obama-green-stimulus.

Goldfuss, Christy. "Not Just Talk: Next-Level Community Engagement in Renewable Energy." *NRDC*, July 12, 2024. https://www.nrdc.org/bio/christy-goldfuss/not-just-talk-next-level-community-engagement-renewable-energy.

Gross, Julian, Greg LeRoy, and Madeline Janis-Aparcio. "Community Benefits Agreements: Making Development Projects Accountable." Good Jobs First and the California Partnership for Working Families, May 15, 2005. https://goodjobsfirst.org/community-benefits-agreements-making-development-projects-accountable/.

"Groundbreaking Report: U.S. Reliant on China, Russia, Other Foreign Nations for Many Critical Minerals | U.S. Department of the Interior." Press Release, December 19, 2017. https://www.doi.gov/pressreleases/groundbreaking-report-us-reliant-china-russia-other-foreign-nations-many-critical.

Haggerty, Mark, Jackson Rose, and Toni Ruth. "A Framework for Federal Mining Reform: Impact Planning, Benefits Sharing, and Asset-Based Revenue Management." Center for American Progress, June 22, 2023. https://www.americanprogress.org/article/a-framework-for-federal-mining-reform-impact-planning-benefits-sharing-and-asset-based-revenue-management/.

Jacobson, Mark Z., Daniel J. Sambor, Yuanbei F. Fan, Andreas Mühlbauer, and Mark A. Delucchi. "No Blackouts or Cost Increases Due to 100 % Clean, Renewable Electricity Powering California for Parts of 98 Days." *Renewable Energy* 240 (February 15, 2025): 122262. https://doi.org/10.1016/j.renene.2024.122262.

Just Transitions: Social Justice in the Shift Towards a Low-Carbon World. Pluto Press, 2020. https://doi.org/10.2307/j.ctvs09qrx.

Kotler, Fred B. J. D. "Project Labor Agreements in New York State II: In the Public Interest and of Proven Value," May 1, 2011. https://hdl.handle.net/1813/74333.

"Laser-Based Silicon Carbide Wafer Manufacturing for Next-Generation High-Efficiency Power Electronics." California Energy Commission, June 2024. https://www.energy.ca.gov/publications/2024/laser-based-silicon-carbide-wafer-manufacturing-next-generation-high-efficiency.

Lewis, Sanford, and Diane Henkels. "Good Neighbor Agreements: A Tool For Environmental and Social Justice." In *Environmental Victims*. Routledge, 1998.

Lithium Americas News. "Lithium Americas Signs Community Benefits Agreement with Fort McDermitt Paiute and Shoshone Tribe," October 20, 2022. https://lithiumamericas.com/news/news-details/2022/Lithium-Americas-Signs-Community-Benefits-Agreement-with-Fort-McDermitt-Paiute-and-Shoshone-Tribe-10-20-2022/default.aspx.

Lopez, Nadia. "First-Ever California Offshore Wind Auction Nets $757 Million." *CalMatters*, December 6, 2022, sec. Environment. http://calmatters.org/environment/2022/12/california-offshore-wind/.

"Managing Unprecedented Electricity Demand Growth on the Path to Net Zero Emissions." EFI Foundation, April 2024.

Mayo, Evelyn. "Policy Reversal: How Executive Orders Are Attempting to Reshape DOE's Community Benefit Plans." *Initiative for Energy Justice* (blog), February 20, 2025. https://iejusa.org/policy-reversal-how-executive-orders-are-attempting-to-reshape-does-community-benefit-plans/.

Moyce, Mel. "Indigenous Ownership in Clean Energy Is a Universal Imperative." *Berkeley Energy & Resources Collaborative* (blog), August 11, 2024. https://berc.berkeley.edu/news/indigenous-ownership-clean-energy-universal-imperative.

Myles, Danielle. "Critical Minerals' Tribal Dilemma." fDi, February 26, 2024. https://www.fdiintelligence.com/content/cf820c9d-ed3d-574c-bc60-4a66f68cb79a.

NABTU. "NABTU Statement on DOE's Thacker Pass Project Announcement," March 14, 2024. https://nabtu.org/press_releases/nabtu-statement-thacker-pass-project-announcement/.

netl.doe.gov. "Battery Workforce Initiative." Accessed April 16, 2025. https://netl.doe.gov/bwi.

Nilson, Robi, Joseph Rand, Ben Hoen, and Salma Elmallah. "Halfway up the Ladder: Developer Practices and Perspectives on Community Engagement for Utility-Scale Renewable Energy in the United States." *Energy Research & Social Science* 117 (November 1, 2024): 103706. https://doi.org/10.1016/j.erss.2024.103706.

Pontecorvo, Emily. "The IRA's Labor Provisions Look Like They're Working." *Heatmap* (blog), August 16, 2024. https://heatmap.news/economy/ira-anniversary-labor.

"Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection | Energy Markets & Policy." Accessed April 25, 2025. https://emp.lbl.gov/queues.

"Recommendations to Improve Mining on Public Lands." Press Release. Biden-Harris Administration's Interagency Working Group on Mining Laws, Regulations, and Permitting, September 12, 2023. https://www.doi.gov/pressreleases/biden-harris-administration-report-outlines-reforms-needed-promote-responsible-mining.

"Report of the Blue Ribbon Commission on Lithium Extraction in California." California Energy Commission, December 1, 2022. https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/geothermal-energy/lithium-valley.

Resources for the Future. "Inflation Reduction Act." Accessed April 25, 2025. https://www.rff.org/topics/federal-climate-policy/inflation-reduction-act/.

Rosen, Jovanna. "Community Benefits: Developers, Negotiations, and Accountability." In *Community Benefits*. University of Pennsylvania Press, 2023. https://www.degruyterbrill.com/document/doi/10.9783/9781512824148/html.

Roth, Sammy. "California's San Bernardino County Slams the Brakes on Big Solar Projects." *Los Angeles Times*, February 28, 2019, sec. Business. https://www.latimes.com/business/la-fi-san-bernardino-solar-renewable-energy-20190228-story.html.

Saha, Devashree, Catherine Fraser, Grace Adcox, Charlotte Scott, Evana Said, and Margo Kenyon. "Detroit's Community Benefits Ordinance: Lessons Learned About the Community Engagement Process and Its Outcomes," November 21, 2024.

https://www.wri.org/research/detroits-community-benefits-ordinance-lessons-learned-about-community-engagement-process.

Salkin, Patricia. "Host Community Agreements for Wind Farm Development." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, April 2009. https://papers.ssrn.com/abstract=1410904.

Silversmith, Shondiin. "Hualapai Tribe Sues Feds over Lithium Mining Project near Sacred Spring." *Arizona Mirror*, August 19, 2024. https://azmirror.com/2024/08/19/hualapai-tribe-sues-feds-over-lithium-mining-project-near-sacred-spring/.

Slattery, Margaret, Alissa Kendall, Nadiyah Helal, and Michael L. Whittaker. "What Do Frontline Communities Want to Know about Lithium Extraction? Identifying Research Areas to Support Environmental Justice in Lithium Valley, California." *Energy Research & Social Science* 99 (May 1, 2023): 103043. https://doi.org/10.1016/j.erss.2023.103043.

Stibnite Advisory Council. "Stibnite Advisory Council About Us." Accessed April 15, 2025. https://stibniteadvisorycouncil.com/about-us/.

Stokes, Leah C., Emma Franzblau, Jessica R. Lovering, and Chris Miljanich. "Prevalence and Predictors of Wind Energy Opposition in North America." *Proceedings of the National Academy of Sciences* 120, no. 40 (October 3, 2023): e2302313120. https://doi.org/10.1073/pnas.2302313120.

Susskind, Lawrence, Jungwoo Chun, Alexander Gant, Chelsea Hodgkins, Jessica Cohen, and Sarah Lohmar. "Sources of Opposition to Renewable Energy Projects in the United States." *Energy Policy* 165 (June 1, 2022): 112922. https://doi.org/10.1016/j.enpol.2022.112922.

"The 2024-25 Budget: Salton Sea Management Program." Accessed May 9, 2025. https://lao.ca.gov/Publications/Report/4859.

"Transformative Climate Communities (TCC) - Strategic Growth Council." Accessed May 9, 2025. https://www.sgc.ca.gov/grant-programs/tcc/.

Trump, Donald J. Immediate Measures to Increase American Mineral Production (2025). https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/.

"U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." Accessed April 4, 2025. https://www.eia.gov/state/analysis.php?sid=CA#3.

Weber, Austin. "Archer Aviation Opens Battery Pack Assembly Line." *Assembly* (blog), May 8, 2024. https://www.assemblymag.com/articles/98562-archer-aviation-opens-battery-pack-assembly-line.

Wolf-Powers, Laura. "Community Benefits Agreements and Local Government." *Journal of the American Planning Association* 76, no. 2 (March 22, 2010): 141–59. https://doi.org/10.1080/01944360903490923.

Wood, Izzy. "Mullen's California Facility Completes Phase One of Battery Pack Assembly Line | Automotive Powertrain Technology International." *UKI Media* (blog), April 26, 2024. https://www.automotivepowertraintechnologyinternational.com/news/facility-development/mullens-california-facility-completes-phase-one-of-battery-pack-assembly-line.html.

Zeng, Zhuo, Xiang Gao, Baling Fang, Tao Zhang, and Ying Zhu. "Optimal Revenue Sharing Model of a Wind–Solar-Storage Hybrid Energy Plant under the Green Power Trading Market." *Frontiers in Energy Research* 12 (August 13, 2024). https://doi.org/10.3389/fenrg.2024.1459090.

APPENDIX A:

BENEFITS-SHARING COMMITMENTS EVALUATION CRITERIA

Appendix A: Community Benefits Sharing Agreements Evaluation Criteria

Category	Criteria	Description
Workforce and Economic Benefits	Wage Standards	Are there living wage or prevailing wage requirements to ensure that jobs created through the project provide fair compensation?
	Workforce Training & Apprenticeships	Does the developer commit to investments in workforce development to support career ladders?
	Local Hiring Commitments	Does the developer agree to local hiring?
	Childcare & Worker Support Services	Does the developer agree to provide services like childcare that remove barriers to employment?
	Revenue Sharing / Equity Stake	Does the community gain a share of project revenue, rather than just one-time payments?
Monitoring and Oversight	Dedicated Oversight for Monitoring the Delivery of Benefits	Is there a mechanism specifically dedicated to overseeing the delivery of benefits?
	Clear Compliance Metrics / Milestones	Are there clear measurable benchmarks like jobs created, or deadlines met?
	Independent Technical Assistance	Does the developer agree to provide the community access to independent technical and legal assistance?
	Public Reporting & Transparency Requirements	Can residents monitor progress and performance? Is there a project website? Is it required to update regularly?
Enforceability and Remedies	Dispute Resolution	Are there clear protocols and mechanisms for dispute resolution?
	Accountability for Non-Compliance	Are there provisions to hold parties accountable for non-compliance?
	Successor / Assignment Obligations	Will the benefits survive project sale or transfer?
	Decommissioning Plan & Financial Security	Is the community protected from cleanup or abandonment costs?

Category	Criteria	Description
Governance and Engagement	Community Advisory Mechanism	Is there a community advisory mechanism that provides community representatives the opportunity to inform benefits delivery, oversight, and allocation? Does the agreement outline a process for the advisory mechanism to engage in agreement monitoring and compliance?
	Role of Community in Benefit Delivery	Is the community responsible for the dispersal and allocation of funds?
	Ongoing Community Engagement / Mechanism for Two-Way Communication	Does the agreement include requirements for ongoing community engagement / outreach, other than the public reporting listed above? Is there a clear communication channel between the community and the developer?

APPENDIX B:

POLICY COMPARISON MATRIX

Appendix B: Policy Comparison Matrix

The policy interventions were compared using a simple 1 (low) to 3 (high) scale. The criteria for assessing the policy interventions were as follows:

- Equity (Community Self-Governance):
  The degree to which the policy empowers communities, particularly historically marginalized ones, to shape decisions, negotiate terms, and oversee implementation. High equity implies formal roles for community representatives and shared governance.

- Effectiveness (Strength of Outcomes):
  The likelihood that the policy will result in robust, enforceable community benefit agreements that deliver meaningful and proportionate benefits aligned with community priorities.

- Feasibility (Practical Implementation):
  How readily the policy can be implemented given legal, political, financial, and administrative constraints.

Policy Intervention	Equity		Effectiveness		Feasibility	
Community Benefit Ordinances	1	Community has limited direct negotiating power	2	Public process formalizes engagement, but weak enforcement	2	Cities can adopt, but political will and legal design vary
Public Funding Requirements	2	Can require strong plans, but community not party	3	Federal/state leverage produces detailed commitments	3	Already in use (e.g. DOE), easily replicated in state grants
Co-Ownership / Equity Models	3	Gives communities a direct economic stake	3	Aligns developer and community interests, durable impact	2	Innovative, but complex to implement and finance
Needs Assessments	3	Rooted in community leadership and input	3	Sets foundation for future negotiations and trust	2	Requires upfront time/resources, but scalable regionally

Policy Intervention	Equity		Effectiveness		Feasibility	
Technical Assistance Expansion	2	Enables community to engage on equal footing	3	Increases quality of agreements across contexts	3	Logistically feasible with state/foundation support