The following is an abbreviated version of our full work. For additional info or the full report, please reach out to takashi.yokokura@berkeley.edu and emilygacheri@berkeley.edu.

Executive Summary:
A Community Benefits Framework for Lithium Valley

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for
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Introduction

Quantitatively evaluating and monitoring direct community benefits arising from the development of California's Lithium Valley requires a robust benefit framework. A capable framework holistically reflects the state of resident livelihoods and is accessible to all stakeholders, especially to local residents and Tribes. Furthermore, the same framework should be applicable across a portfolio of Lithium Valley projects to consistently determine community benefits, providing the statuses and trends directly attributed to a particular project.

Here, a Community Benefits Framework ("Framework", illustrated in Figure 1 and detailed in Tables 1–4) is proposed tailored for the use by the California Energy Commission (CEC) and other state agencies operating in Lithium Valley. The Framework draws from internationally recognized best practices to ensure its metrics are holistic, accessible, transferable, and attributable. To ensure its conclusions are holistic and transferable, the Framework balances the five capital assets of the Sustainable Livelihoods Framework (SLF): human, physical, natural, financial, and social. To ensure its results can be effectively communicated to all stakeholders, the Framework contains the straightforward themes of Industry Practices, Investment, Community, and Health/Ecosystem. Finally, to ensure its determined community benefits are directly attributable to a given project, the Framework evaluates metrics using Standards from the Global Report Initiative (GRI).

In addition to the community benefits framework itself, recommendations to the CEC on the implementation of the framework are also presented, including how to effectively establish a Lithium Valley Dashboard.

Community Benefit Frameworks

A framework is defined as a structured approach which can be applied to a variety of situations to provide a consistent outcome, e.g., the determination of community benefits. Frameworks should be inherently and straightforwardly modifiable for different applications. While Community Benefit Agreements (CBAs) usually include monitoring mechanisms to keep project developers accountable to the community, benefit frameworks can also be applied broadly to provide a snapshot of direct impacts from a project to surrounding communities.

Regardless of their purpose, effective frameworks should foremost holistically capture the experience of community members. The Sustainable Livelihoods Framework (SLF) has long been utilized by organizations such as the United Nations and features five, encompassing capital assets to characterize communities. (1) Human capital includes the skills, knowledge, health, and abilities of individuals that enable them to participate in economic and social activities. (2) Natural capital includes the environmental resources and ecosystem services that support livelihoods and community well-being. (3) Financial capital represents monetary resources that enable investment and access to goods and services. (4) Physical capital comprises infrastructure,

tools, and facilities that improve living standards and productivity. (5) Social capital encompasses the networks, relationships, and trust that enable collective action and social cohesion. Frameworks with metrics balancing these assets should be holistic evaluation tools.

Metrics and Evaluation Methods

Despite multiple state and local agencies promising to ensure community benefits from the development of Lithium Valley, a unifying framework for monitoring and evaluating impacts on local residents is lacking. Industry best practices have been codified through international standards such as those of the Initiative for Responsible Mining Assurance (IRMA). Of these, only the Global Reporting Initiative (GRI) provides specific metrics. However, the CEC seeks to minimize barriers of entry for incoming Lithium Valley projects, disqualifying a direct application of the GRI Standards and their lengthy disclosure processes.

The GRI Standards provide Topic Standards which provide specific metrics and evaluation methods a project must disclose in relation to a given Topic. These Topics are chosen based on the sector (e.g., Mining) and the impacts a project is expected to have on its surroundings (e.g., waste management). For the Mining Sector (GRI 14), Topic Standards to evaluate all five capitals can be found. However, several important aspects unique to Lithium Valley are not captured by the GRI Standards: the excise tax distributed to groups affected by Lithium Valley development,[1] community network and strength, accessibility of social services, accessibility of credit, and accessibility of physical services. These additional aspects were incorporated into the recommended community benefits framework for Lithium Valley.

Modifying the metrics of a framework should be treated much more carefully than changing the evaluation methods of the metrics. Metrics are key components of the Framework chosen to represent an SLF asset. However, if metrics are deemed irrelevant or unproductive by the CEC or the community, alternatives should be determined. On the other hand, methods of evaluating the metrics should be determined based on data availability. Although the methods proposed in the recommended framework are largely adapted from the GRI Standards, alternative methods can be utilized instead if other datasets or collection procedures are more convenient.

Recommendation 1:

Adopt a Community Benefits Framework as shown in Figure 1 and as detailed in Tables 1–4.

The Framework is structured as follows:

1. Themes (Industrial Practices, Investment, Community, Health/Ecosystem) which provide overviews of the constituent metrics;

[1] Senate Bill 125, Committee on Budget and Fiscal Review, Chapter 63, Statutes of 2022

2. Metrics which each provide a quantitative indicator of community benefits and chosen to represent an aspect of community members' livelihoods; and

3. Evaluation methods for the metrics. Tables 1–4 adapt methods from GRI Standards and public policy best practices. However, evaluation methods should be ultimately chosen based on the availability of data to the CEC.

Recommendation 2:

Develop an online Lithium Valley Dashboard to provide a unified vehicle for CA state agencies for communicating community benefits arising from Lithium Valley development.

The presentation of the Dashboard will be instrumental in how accessible the information is to community members. The Dashboard should utilize the visual motifs of the United Nations Sustainable Development Goals (UN SDGs) to provide digestible metric statuses and trends. An example fact sheet using these motifs with the Framework is shown in Figure 2.

To effectively establish a Lithium Valley Dashboard, the CEC should further

1. Determine which of its internal divisions or other state agencies is best suited to collect and evaluate each metric;
2. Determine targets and target-dates for each metric with political, project, and community stakeholders; and
3. Provide sufficient infrastructure to continually update and maintain the Dashboard's website and datasets.

Recommendation 3:

Incorporate the Framework into existing state and local programs.

Community Benefits Agreements (CBAs) are often accompanied by mechanisms for monitoring and disclosing benefits. To ensure community benefits from projects in Lithium Valley and beyond are uniformly presented, the CEC should require projects of the Opt-in Certification Program to also disclose relevant metrics of the Framework in their CBAs. Likewise, Imperial County should incorporate the Framework into their Good Neighbor CBA Program.

Recommendation 4:

Utilize the Framework in future applications for relevant federal funds.

Their production of critical minerals is a key opportunity for Lithium Valley projects to receive federal funding. In applications for funding, the CEC should use the Framework to provide evidence of workforce and infrastructure development. Furthermore, the Framework should be incorporated into any Community Benefits Plans required by the Department of Energy to receive funding.

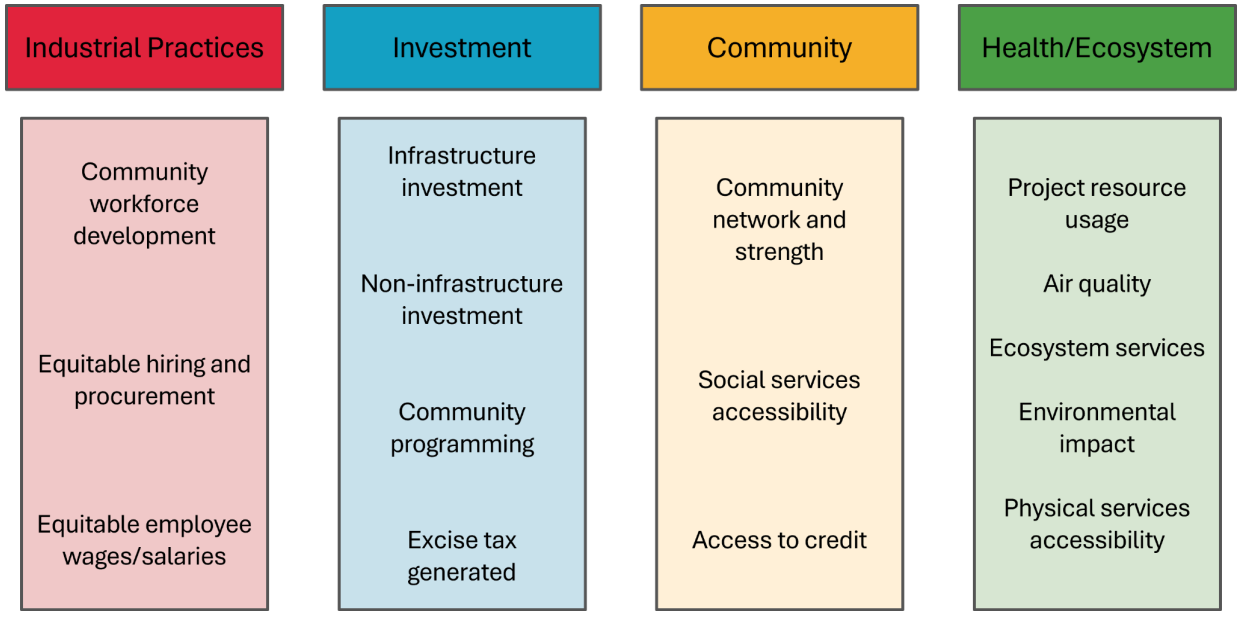

Fig. 1: A Community Benefits Framework for Lithium Valley.

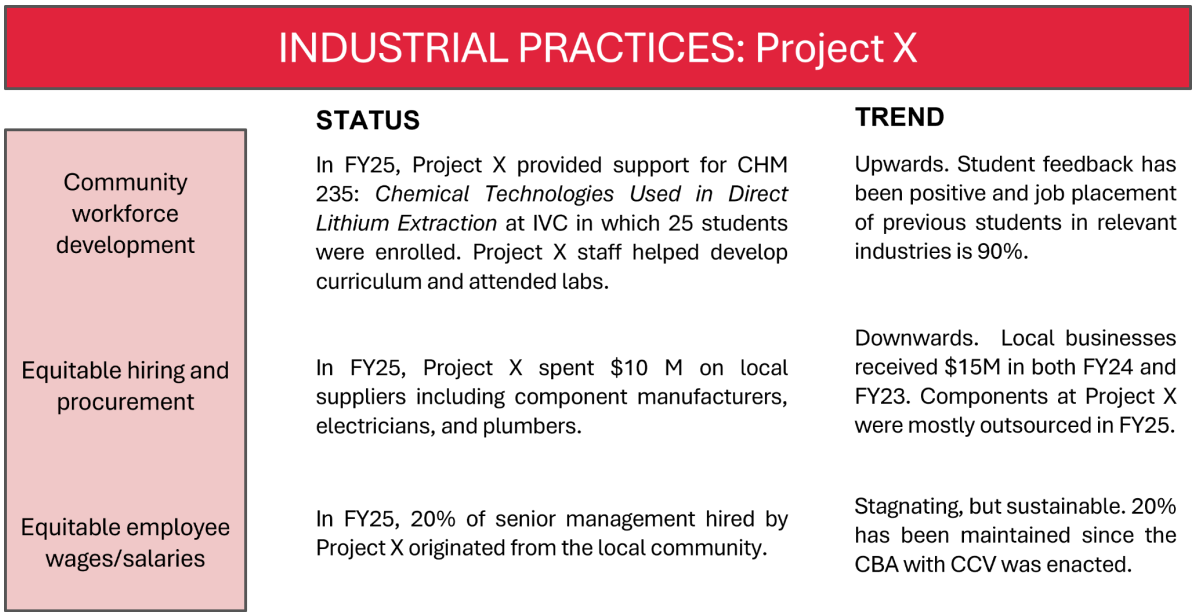

Fig. 2: Example fact sheet for Industrial Practices of the proposed Framework. Sample data of a "Project X" used for illustration purposes only.

Table 1: Industrial Practices Metrics of the proposed Community Benefits Framework. *Recommended standalone methods are underlined.*

Metric	SLF Asset	Evaluation Method	Source
Community workforce development	Human	GRI 404-2*: Number, type, and scope of training programs and type of support provided. Programs cannot directly support the operation of the project.	Project disclosure
Equitable hiring and procurement	Human	GRI 204-1: Proportion of spending on local suppliers. GRI 401-1: Number and rate of employees hired and employee turnover, by group. GRI 414-1: Percentage of suppliers screened by social criteria.	Project disclosure Project disclosure Project disclosure
Equitable employee wages/salaries	Financial	GRI 202-2: Percentage of senior management hired from the local community. GRI 405-2**: Ratios of basic salary and remuneration of different groups to that of men.	Project disclosure Project disclosure

* Adapted from original GRI Standard to specify non-operational training programs

** Adapted from original GRI Standard to include groups other than women, such as Tribes and other historically excluded groups

Table 2: Investment Metrics of the proposed Community Benefits Framework.
Recommended standalone methods are underlined.

Metric	SLF Asset	Evaluation Method	Source
Infrastructure investment	Financial, Physical	GRI 203-1*: Extent of development of significant infrastructure investments and services supported. Infrastructure cannot directly support the operation of the project.	Project disclosure
Non-infrastructure investment	Financial	GRI 201-1: Voluntary donations and investment of funds in the broader community.	Project disclosure
Community programming	Social, Human	GRI 201-1: Voluntarily incurred costs of social programs, including arts and educational events.	Project disclosure
Excise tax generated	Financial, Physical, Natural	Amount of tiered, volume-based tax paid (SB 125) by a project. Amount of a project's excise tax distributed to affected groups and Imperial County public safety and quality of life projects.	Project disclosure Imperial County disclosure

* Adapted from original GRI Standard to specify non-operational infrastructure

Table 3: Community Metrics of the proposed Community Benefits Framework.
Recommended standalone methods are underlined.

Metric	SLF Asset	Evaluation Method	Source
Community network and strength	Social	People's Participation Index (Bagdi 2002) in meetings where the project is discussed.	Survey as presented in literature
		Attendance by community meetings in which the project is discussed.	Project, County, or CBO disclosure
Social services accessibility	Social	Average proximity to social welfare offices, health centers, schools, etc.	Survey or mapping linear distance or avg. commute time
Access to credit	Financial	Percentage of residents with access to credit services.	Survey or bank disclosure
		Number of local businesses accessing credit for growth or operations.	Survey or bank disclosure

Table 4: Health/Ecosystem Metrics of the proposed Community Benefits Framework. *Recommended standalone methods are underlined.*

Metric	SLF Asset	Evaluation Method	Source
Project resource usage	Natural	GRI 303-3 and 303-4: Total water withdrawal and discharge.	Project disclosure
		GRI 306-3: Total weight of waste and breakdown by composition.	Project disclosure
Air quality	Natural	GRI 305-7*: NOx, SOx, POP, VOC, HAP, PM levels near project roads and facilities.	Project disclosure
Ecosystem services	Natural	GRI 411-1: Number of violations involving the rights of Tribes.	Project disclosure
		GRI 101-7: Changes to the state of biodiversity	Project disclosure or CNRA
Environmental impact	Natural	GRI 101-6: Size of natural ecosystem converted	Project disclosure
		GRI 306-3: Total number and volume of recorded spills.	Project disclosure
Physical services accessibility	Physical	Average proximity to roads, health centers, hospitals, schools; road density, water/sanitation, etc.	Survey or mapping linear distance or avg. commute time

* Adapted from original GRI Standard to specify project-impacted areas (roads and facilities)