

**Comparative Analysis of Stakeholder Discourses in
the Hell's Kitchen Lithium Project (HKL1): Framing
a Contested Energy Transition in Imperial County,
California**

**Safiya Zavala Sweet
Occidental College
2026**

Table Of Contents

Introduction:	4
Background:	6
History and Degradation of the Salton Sea and Community Impacts	6
Industrial Development and Environmental Pressures in the Salton Sea Region	8
Labor and Local Economy	9
Salton Sea Geothermal Region: Lithium and Energy Resource Base	13
Policy and Permitting Context: FAST-41, CEQA, and Federal Energy Strategy	14
Controlled Thermal Resources: Investment, Partnerships, and Project Development	14
Community Opposition and Environmental Justice Concerns	16
Literature Review:	17
Political Participation and Community Exclusion in the Salton Sea Region	19
Equity and Justice in the Green Energy Transition in Lithium Valley	20
Policy and Political Paradigms Pushing Lithium Industries	22
The Political Economy of Lithium Extraction: Corporate Interests, State Power, and Resource Governance	24
Technology, Environmental Justice, and Land Use	28
Green Extractivism and Community Impacts	31
Research Design and Methodology:	32
Theoretical and Methodological Rationale	32
Contextual Background: Hell's Kitchen Case & CEQA	34
Data Coding and Analysis Methods	34
Regulatory and Legislative Context	36
Stakeholders, Public Engagement, and Data Sources	36
Document Analysis and Legislative Review	38
Framing Within Environmental Justice and Community Resilience	39
Data Analysis/Results	40
Competing Visions of the Energy Transition	43
CTR's Framing of Lithium Extraction	43
Embedding Lithium in Geopolitical and Economic Narratives	45
ESG, "Greenhushing," and Corporate Governance Trends	47
Regulatory Context and State-Federal Tensions	48
Geothermal Integration and Technological Framing	49
Local Government Support and Community Framing	51
Industry-Government: Strategic Alignment	52
Governance, Participation, and Legitimacy	53
Procedural Barriers in Administrative Participation	54
Judicial Standards and the Privileging of Technocratic Discourse	58
Narrative Framing and the Construction of Legitimacy	60
Governance Through Procedure and Discourse	65

Distribution of Risks and Benefits.....	69
Structure of the Lithium Excise Tax and Distributional Justice.....	69
Revenue Distribution and Community Allocation.....	70
Structure of the Lithium Excise Tax.....	71
The Imperial County website highlights that revenues from the lithium excise tax will be placed in a dedicated fund separate from the county’s general budget, ensuring that the funds are used for their intended purpose. These percentages are calculated from the total tax collected from lithium extraction companies.....	72
Competing Institutional Narratives: RAND Report and Workforce Strategy.....	72
Employment Projections as Contested Knowledge and Framing Conflict.....	73
Framing of Opportunity, Urgency, and Risk in Lithium Development.....	74
Project Approval and Urgency Narratives.....	75
Transparency, Trust, and Community Knowledge Production.....	76
Policy Recommendations.....	76
Recommendation #1: Improve Communication of Employment Projections.....	76
Provide Phase-Specific Employment Projections and Development Timelines.....	77
Partner with Trusted Local Organizations and Community Platforms.....	77
Coordinate Employment Messaging to Reduce Confusion and Misaligned Expectations.....	79
Recommendation #2 : Enhance Water Governance Coordination and Public Accessibility in Imperial Valley.....	82
Background and Rationale.....	82
Policy Context: Basin-Wide and Regional Water Scarcity.....	84
Industrial Development and Water Demand Pressures.....	85
Salton Sea Conditions and Community Impacts.....	85
Lithium Valley Water Planning, the Water Master Plan, and IID Coordination.....	86
Implications for Water Governance and Recommended Actions.....	87
Recommendation #3 : Increase Transparency and Community Participation in Lithium Excise Tax Allocation.....	90
County Allocation Framework and Revenue Distribution Model.....	90
Allocation Methodology: Directly Affected vs. All-Affected Communities.....	91
Limitations of Current Revenue Projection Scenarios.....	91
Community-Level Allocation Outcomes Under the Current Framework.....	91
Governance Structure, Uneven Administrative Capacity, and Equity in Lithium Excise Tax Allocation Across Communities.....	92
The Board of Supervisors’ Oversight, Centralized Decision-Making, and the Need for Institutional Accountability.....	93
Community Engagement Through the Quality of Life Advisory Committee (QLAC).....	93
Public Perception Regarding Allocation Fairness.....	94
Implications for Policy Reform and Recommended Actions.....	97
Conclusion:.....	97
Resources.....	100

Land Acknowledgment

To begin this project, I acknowledge that the Imperial Valley sits on the traditional and cultural lands of many Indigenous peoples, including the Quechan, Cahuilla, Cocopah, Pai Pai, and Kumeyaay. The Kumeyaay and their ancestors have lived on and stewarded this land for over 9,000 years (Imperial Valley Desert Museums). Their deep and enduring presence has shaped the landscape, traditions, and history of the region. As an outsider to these communities, I approach this research with awareness of my positionality, striving to honor their land, histories, and consultation amidst ongoing industrial development on their landscapes and homes.

Introduction:

As California accelerates its transition to electric vehicles and reduces fossil fuel use, residents have increasingly adopted clean transportation options, with more than 124,700 zero-emission vehicles or plug-in hybrids purchased between July and September 2025, marking the highest quarterly sales since 2008 (Briscoe, 2025). This shift has been strengthened by federal tax credits that encourage consumers to pursue clean transportation. While the state positions itself as a leader in sustainable energy, federal climate policy under the Trump administration has moved in the opposite direction, repealing the United States Environmental Protection Agency's (EPA) 2009 endangerment finding and rolling back emissions regulations. The endangerment finding was a decision concluded in 2009 by the EPA, which determined that carbon dioxide, methane, and other greenhouse gas emissions (GHGs) threatened public health and welfare, leading to strict regulatory standards for vehicles, power plants, and industry.

This finding provided the legal basis for regulating GHGs under the Clean Air Act and became a foundational element of U.S. climate policy (Jordan, 2025). On February 12th, 2026, the EPA issued its final rescission of the 2009 Greenhouse Gas Endangerment Finding, reversing a regulatory doctrine that had guided federal greenhouse gas oversight for over a decade (EPA, 2026). This action has been described as one of the largest federal climate deregulatory moves in U.S. history, reshaping the political and regulatory context governing climate policy and industrial regulations in the United States. These tensions form the political and regulatory backdrop for the Hell's Kitchen lithium extraction project in Imperial Valley, California. Among several key governance and planning instruments shaping lithium development in the Imperial Valley, the County's Program Environmental Impact Report (PEIR) is one of the primary procedural ways the County has incorporated public comment and communicated its intentions to the public, shaping how lithium development is evaluated and justified in the region.

Within the border context of shifting climate governance and industrial regulation, the Hell's

Kitchen lithium and geothermal project, led by Controlled Thermal Resources (CTR), has been promoted as essential for national energy security and critical mineral production. Its selection as a FAST-41 priority project has further advanced its development. CTR frames the project as a necessary step toward securing domestic mineral supply, expanding the clean energy transition, and creating economic opportunities. However, community-based organizations such as Comité Cívico del Valle and Earthworks have challenged the project's environmental review, raising concerns about water quality, air pollution, inflated job claims, insufficient tribal consultation, cumulative impacts, and the risks associated with Direct Lithium Extraction (DLE). These tensions reflect broader contradictions in the U.S. energy transition, where fossil fuel expansion continues even as demand for minerals identified as critical for clean energy transitions intensifies.

HKL1 refers to the lithium extraction and processing phase of the larger Hell's Kitchen development and the legal entity created by Controlled Thermal Resources. It includes the initial lithium extraction and processing infrastructure that is currently permitted, covering the construction and operation of facilities designed to produce lithium hydroxide, silica, and other products for commercial sale. This terminology clarifies the specific component under analysis in this study, which focuses on lithium extraction and the discourse among stakeholders concerning minerals identified as critical for clean energy transitions and community concerns. Although the Hell's Kitchen development includes both geothermal power generation and lithium extraction, this study focuses on HKL1, which has been a central site of stakeholder discourse, regulatory debate, and community responses.

In this project, I focus on discourse analysis and procedural communication between the community, state, industry, and national stakeholders, using HKL1 as a case study. However, I also expand the analysis to evaluate the County's and industry's broader vision beyond just the Hell's Kitchen Controlled Thermal Resources project. Specifically, I consider Imperial County's framework for long-term land use, critical mineral extraction, geothermal energy, and other green energy initiatives through the Lithium Valley Specific Plan, which serves as a baseline for future development projects related to these industries. While the study centers on the CTR HKL1 project, it also examines broader implications of the Lithium Valley vision. HKL1 is one of the first lithium-related developments to move forward in the region, making it a particularly visible and influential component in shaping local and regional decision-making.

My project aims to examine, through a comparative media and textual analysis, how stakeholders, specifically Comité Cívico del Valle, Earthworks, and Controlled Thermal Resources, frame lithium extraction, climate change, and the energy transition in Imperial Valley, CA, and how local communities are engaging with, responding to, or resisting these framings in the context of the Hell's Kitchen project. By focusing on this single case within a rapidly shifting political and regulatory environment, this study illuminates how energy infrastructure is debated, justified, and challenged, and what these tensions reveal about just

transitions, environmental justice, and the evolving politics of critical mineral extraction in the United States.

Background:

History and Degradation of the Salton Sea and Community Impacts

The Salton Sea has existed as a natural basin for thousands of years, but its current form reflects significant human impact, making its history crucial for understanding the environmental and social context of Imperial Valley. Historically, the Colorado River, which normally flows southward into the Gulf of California, would occasionally create sandbars that caused its waters to flow north into the Salton Sink. Over hundreds of thousands of years, the basin alternated between being a freshwater lake and a dry desert basin, depending on river inflows and evaporation (Singer, 1998). The current Salton Sea was formed during massive Colorado River floods from 1905 to 1907, which overwhelmed early irrigation channels designed to supply Imperial Valley farm fields (Crider, 2020). After the flood, it was considered one of "man's largest accidental bodies of water in the United States," and people began settling around the area with the idea of a California Riviera. The Salton Sea became a popular destination for boating, jet skiing, and fishing, once "speckled with sophisticated yacht clubs, country clubs, and spas" (Coachella History Museum). Much of the planned development was halted and left unfinished, leaving behind ghostly remnants of projects that were never fully realized. The bustling vacation spot it once was now stands in stark contrast to the deserted buildings, abandoned piers, and remnants of yacht clubs.

According to the Coachella History Museum, the Salton Sea is 376 square miles and the largest lake in California, and it has continually fallen further below sea level. At the height of its filling, it is said to have been 195 feet below sea level, and is currently 226 feet below sea level. The Salton Sea has been used as a dump for agricultural runoff, making it a toxic and salty body of water with severe environmental and public health concerns. Water entering the sea from the Colorado River carries high salinity, both naturally and from agricultural practices and poor irrigation management. According to the Imperial Irrigation District (IID) "current salinity concentrations are significantly higher than ocean water" (IID, 2026). The Coachella Valley Association of Governments estimates that 5 million tons of salt enter the sea's inflow annually (Coachella History Museum). Algae blooms deplete oxygen in the water, killing wildlife, and have caused thousands of fish to wash ashore, and migrating birds that consume them to become sick and die. As the sea continues to shrink, toxic dust from the exposed lakebed affects nearby communities, contributing to asthma rates above the national average. A study published in Environmental Research (Johnston et al., 2024) found that 24% (1 in 4) of 722 children living near the northern Imperial Valley and the Salton Sea had asthma at the start of the study in 2017. Restoration efforts are ongoing, but collaboration with the community has been limited. Drying

areas also increase the risk of sandstorms, further exposing communities and agricultural crops.



Figure 1

Salton Sea, Taken from North Shore Beach: Exposed Playa and Receding Waterline Illustrating Ongoing Environmental Degradation. Note: Photograph by Safiya Zavala Sweet (2025).

The Salton Sea is a heavily degraded terminal lake whose current conditions are closely tied to water management decisions within the Colorado River system. The primary source of inflow is agricultural runoff from the Imperial and Coachella Valleys, whose irrigation water originates from Colorado River allocations. As a result, the Salton Sea's condition is directly connected to broader regional water distribution decisions. As water demand continues to increase across competing sectors, including agriculture, environmental management, and emerging industrial development in the region, community and concerned stakeholders have grown apprehensive about whether sufficient water will continue to reach the Salton Sea, in addition to the pressure of incoming lithium extraction and processing projects, in a region where water vulnerability and scarcity are already major concerns. Reductions in inflow accelerate shoreline retreat and expose previously submerged lakebed, creating significant environmental and public health risks. As the Salton Sea continues to shrink, exposed playa generates toxic dust that impacts nearby

communities along its shoreline, contributing to elevated respiratory health issues, including asthma rates above national averages. In addition to public health concerns, ecological degradation has disrupted habitat conditions for migratory birds and other wildlife that rely on the lake.

Many community members are advocating for restoration of the area, but these efforts have not resulted in substantial relief to the underlying issues or in the development of actionable collaborative plans. As the Salton Sea continues to dry, exposed lakebed will increase the risk of dust storms that affect nearby communities and agricultural crops. Community members are already living alongside a heavily degraded ecological environment and are exposed to the ongoing impacts of a drying body of water, including sulfuric odors from algal blooms and industrial runoff. These conditions are part of the daily lived experience of residents who are increasingly aware of the rapidly changing shoreline of the Salton Sea and deteriorating environmental conditions in their immediate communities, highlighting the impacts of climate change and fostering heightened sensitivity to concerns about future water supply and environmental change in the region, leading community members to be particularly invested in the implementation and construction of new industrial projects such as HKL1, which could potentially alter local environmental conditions or reduce water inflow.

Community members have expressed concern about how future water policy may need to account for the interconnected nature of agricultural reliance, environmental preservation, and industrial water demand in order to support long-term regional sustainability in a cumulative and long-term context, particularly in light of water reductions associated with climate change.

Industrial Development and Environmental Pressures in the Salton Sea Region

Emerging industrial projects, such as the Hell's Kitchen lithium project, underscore tensions inherent in this water allocation system, particularly considering the cumulative impacts of multiple industries seeking to capitalize on the green energy transition and critical mineral development in the Salton Sea geothermal field, alongside Controlled Thermal Resources, within overlapping and rapidly accelerating development timelines. Although proponents emphasize economic development, national security, and energy independence, lithium extraction at the Hell's Kitchen project is promoted by Controlled Thermal Resources (CTR) as a less water-intensive approach. CTR argues that its direct lithium extraction (DLE) technology operates as a closed-loop system, reinjecting brine back into the subsurface after minerals are recovered, and therefore represents a more sustainable alternative to traditional mining methods. However, despite its potential as a less intensive option is recognized, it still remains water-intensive, raising concerns about cumulative impacts on local water availability, the ecological health of the Salton Sea, and long-term community well-being.

Agricultural and tribal communities in the region have highlighted issues of procedural justice and equitable participation in decision-making, noting that water scarcity exacerbates existing environmental vulnerabilities. Many have noted that increasing water scarcity exacerbates existing environmental vulnerabilities and raises concerns about the long-term sustainability of regional water use, particularly given the heavy reliance on agricultural employment.

The Salton Sea geothermal field, which has been found to be rich in lithium, is situated within Indigenous ancestral homelands and forms part of a broader cultural landscape in which water systems, including the historical Lake Cahuilla system, are integral to tribal cultural identity, land stewardship, and cultural continuity. Access to water and culturally relevant land is therefore not only a resource issue but also a foundation of cultural survival, supporting the continuation of traditional practices and the cultural vitality of tribal communities, particularly when evaluating the HKL1 project and other related development projects in this region. Tribes have historically been excluded from planning processes, and meaningful engagement with Native communities in the region has been limited. This pattern extends across decision-making on issues of sustainability and governance, with long-term implications for communities whose cultural and environmental futures are directly affected.

Labor and Local Economy

The Hell Kitchen lithium project is located along the southern edge of the Salton Sea in Imperial County. According to the United States Census, the County has a total population of about 179,702 people with about 153,027 people being of Hispanic or Latino race and ethnicity according to the 2020 Decennial Census (US Census Bureau). The per capita income is approximately \$24,065, roughly half the amount in California at \$49,934 and below the national average of \$45,256 (ACS 2024, Census Reporter). About 19.6% of people living in Imperial County are categorized as living below the poverty line, with about 28% of this population being children under the age of 18 and 19% being 65 years and over (ACS 2024, Census Reporter). In addition to this when looking at education opportunities and outcomes in the region, it is clear that there are barriers inhibiting the attainment of higher educational opportunities, with only 18.9% of the population with a bachelor's degree or higher, about half the rate in California at 38.1% (ACS 2024, Census Reporter). In December 2025, of Imperial County's 75,200 people categorized in the labor force, 14,000 individuals were unemployed, leading to an exorbitant unemployment rate of 18.6%. This rate is disproportionately higher than California's unemployment rate of 5.5% in December 2025, and the national average of 4.4% for unemployment rates since February 2026 (Employment Development Department State of CA (EDD) and Trading Economics). These economic conditions provide important context for understanding why lithium development is frequently framed by county officials and developers as an urgent economic opportunity for the region.

The Imperial County's demographic composition is composed of a substantial immigrant population. Approximately 31.5% of residents are categorized as foreign-born, of whom about 96% were born in Latin America (ACS 2024, Census Reporter). Of the entire Imperial County population, approximately 45.3% of residents are not naturalized or recognized as U.S. citizens, highlighting an additional vulnerability in participating in decision-making spaces where individuals can voice concerns about incoming industrial projects, including their potential environmental impacts, labor opportunities, public health effects, and related issues (2024 American Community Survey 1-Year Estimates, U.S. Census Bureau). This demographic context is important because many immigrant communities face systemic vulnerabilities, including barriers to accessing services, limited labor opportunities, fear of participating in legal or decision-making spaces, and limited access to networks or resources that facilitate such participation, factors that effectively exclude a large portion of the community from decision-making processes, environmental reviews, and legal procedures, resulting in disproportionate underrepresentation and increased risk of adverse impacts without adequate support.

Understanding labor dynamics in Imperial Valley, alongside demographic and socioeconomic data, provides essential context for analyzing the region's workforce, economic dependencies, and community vulnerabilities. Imperial Valley's local economy has long been rooted in agriculture, dating back to the early 1900s. Early developers diverted water to the region, and by 1915, thousands of acres were under cultivation, producing vegetables, crops, and livestock to supply the nation (UCEC Imperial County). Today, Imperial County remains one of the major agricultural hubs in the United States, highlighting the region's long-standing reliance on farming.

According to a 2024 Imperial County report on the economic contributions of the agricultural industry in 2022, the sector employed 14,537 direct workers and generated an additional 5,275 jobs through company and employee expenditures, accounting for a total of 19,812 jobs, with about one in six jobs in the county attributed to the agricultural industry (Imperial County Agricultural Commissioner and Sealer of Weights & Measures, 2024, p. 5).



Figure 2

Honey Balls Packaging and Shipping Materials. Note:

Photograph received by the Examiner Reference Library (April 26, 1935). Courtesy of the USC Archive Collection for Imperial Valley, Box 111, Ca IV Agg, 111:5.

On November 24th, 2024, the California Employment Development Department (EDD) reported that “EDD estimates there were approximately 17,579 migrant and seasonal farmworkers employed in Imperial County over the year from 2023–24, compared to 784,279 employed statewide during the same timeframe” ((Employment Development

Department, 2024), highlighting the importance and concentration of agricultural labor in the region.

Imperial County's agricultural economy is closely tied to a transnational labor force that reflects the region's demographic composition. The transnational seasonal agricultural labor system shapes the demographic composition of Imperial Valley, which in turn structures the lived realities and vulnerabilities of the region's population. "Most of the 15,000–18,000 seasonal farmworkers employed during the peak harvest season in January–February live in Mexicali and commute daily to Imperial Valley farm jobs. Farm labor contractors recruit these daily commuters at the port of entry early each day and transport workers to the fields by bus between 5 and 6 am" (Martin, 2001).



Figure 3

Border Patrol Detention Line in El Centro, California (1943).

Photograph by E. C. Willis (1943). **Note:** Courtesy of the USC Archive Collection for Imperial Valley, Box 298, Labor Mexican 298:14. Original caption read: "El Centro: Others in line represent one day's bag of wetbacks in the Indio area. From El Centro they will be flown to Guadalajara. U.S. taxpayers pay \$40 for each 'luxury' plane ride back to Mexico."

This cross-border labor dynamic underscores the central role of immigrant communities in sustaining the region's agricultural economy. "Most harvest workers are paid hourly wages that are close to the California minimum wage, \$5.75 an hour in 2000, and \$6.25 an hour beginning January 1, 2001; some farm employers pay \$0.50 to \$1 more per hour, especially for more difficult jobs such as harvesting cauliflower" (Martin, 2001). Very few workers are employed under union contracts" (Martin, 2001), highlighting the economic vulnerability of this workforce. Although this data reflects conditions from 2000–2001, detailed contemporary figures are limited, making these historical statistics valuable for understanding the structural challenges historically faced by seasonal farmworkers and the ongoing reliance of Imperial Valley agriculture on immigrant labor. Seasonal employment patterns also shape economic stability in the region, with unemployment fluctuating significantly throughout the year, ranging from approximately 19–20% in peak months to as high as 27% during off-season periods (Martin, 2001).

This image represents the impact that agriculture has had on the region and how the immigrant population has historically comprised a large portion of the agricultural workforce. The photograph and newspaper caption also highlight the severe discrimination that many immigrant laborers faced and the stigmatization they endured. The use of derogatory language, such as "wetbacks," framed immigrants as a burden on taxpayers, reinforcing divisions between domestic nationals and migrant workers. These narratives provide important historical context for understanding the labor force and illustrate how similar dynamics can persist in contemporary contexts.

This population is also important to highlight, as farmworkers and immigrant communities are likely to be among the most directly impacted by new industrial projects in Imperial Valley, alongside other local residents, with potential effects on work environments, health outcomes, and economic opportunities. These groups may also face structural challenges, including limited support for undocumented workers, language barriers, and restricted access to decision-making processes, often compounded by fears of participating. They may also encounter uneven dissemination of information about proposed industrial developments. Together, these barriers can constrain their ability to engage meaningfully in planning and governance. This analysis evaluates how the Hell's Kitchen lithium project fits within an extractivist framework, considering the ways in which the project may reproduce dynamics and impacts on frontline communities similar to those associated with more traditional mining practices, and, together, the mechanisms through which harm is reproduced.

Salton Sea Geothermal Region: Lithium and Energy Resource Base

The Salton Sea geothermal field, which has been found to be rich in lithium and is situated along the San Andreas Fault, is located within Indigenous ancestral homelands and forms part of a

broader cultural landscape in which water systems, including the historical Lake Cahuilla system, are integral to tribal cultural identity, land stewardship, and cultural continuity. The Salton Sea geothermal field is situated along the San Andreas Fault, making the region prime for geothermal activity. The region's brines are mineral-rich, concentrated over time through evaporation. CTR's Hell's Kitchen lithium project would employ technology that generates baseload geothermal energy while extracting lithium from geothermal brine pumped to the surface from underground reservoirs. This technology is called Direct Lithium Extraction (DLE) process, capturing lithium from brine before reinjecting it underground in a closed-loop system.

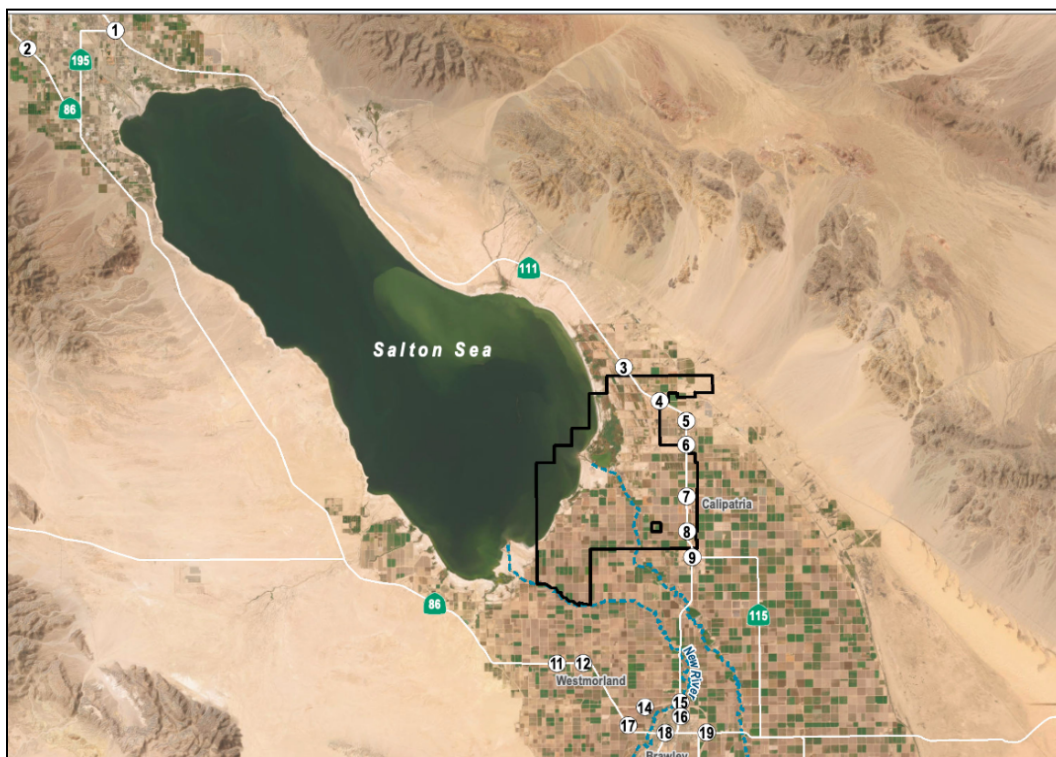


Figure 4

Lithium Valley Specific Plan: Proposed Development Areas Including Hell's Kitchen LithiumCo 1 (HKL1) Note. Adapted from Draft Lithium Valley Specific Plan Environmental Impact Report (SCH# 2023120104) (Imperial County, December 2025, p. 151).

Policy and Permitting Context: FAST-41, CEQA, and Federal Energy Strategy

The project itself has been designated a FAST-41 covered project by the federal permitting council. The lithium extraction and processing component of the project, formally designated as Hell's Kitchen LithiumCo 1 (HKL1) in California Environmental Quality Act (CEQA) and regulatory documents, is central to permitting and environmental review processes. FAST-41, established under Title 41 of the Fixing America's Surface Transportation (FAST) Act of 2015, creates expedited processes for the review of federal environmental evaluations and authorization processes for covered infrastructure projects. Its purpose is to improve timelines and create more predictable, standardized procedures for large infrastructure projects. This designation applies to large infrastructure projects across a variety of sectors, including energy, renewables, manufacturing, mining, and transportation. The Hell's Kitchen project's designation reflects the federal government's support and its effort to streamline the review process.

The CTR website states that "The project's inclusion on the FAST-41 permitting dashboard marks a major step forward for one of the most strategically important developments in the United States. "Hell's Kitchen will deliver two essential pillars of national security: domestically sourced critical minerals for defense and domestic manufacturing, and reliable 24/7 renewable baseload power to support the growing demands of hyperscale data centers and AI infrastructure" (CTR, 2025). Permitting Council Director Emil Domenech also stated that the Hell's Kitchen lithium project would "unlock our country's vast energy and mineral resources and reduce our reliance on China" (CTR, 2025).

Controlled Thermal Resources: Investment, Partnerships, and Project Development

This section outlines the key investments and partnerships CTR has established to secure financial support and advance the development of its lithium extraction project.

Controlled Thermal Resources (CTR) is a U.S. company specializing in renewable energy through geothermal techniques, lithium and critical mineral extraction, and battery material projects. While officially established in 2012, CTR has been working in the Salton Sea region for the past 30 years. Investors in CTR include major automakers General Motors, Stellantis, and Baker Hughes, who have invested to secure lithium for electric vehicle production. In 2024, GM held 17% and Stellantis 8% shares of the U.S. automotive market, demonstrating the scale and commercial significance of the industry supporting the lithium projects in Imperial Valley.

CTR signed a power purchase agreement with the Imperial Irrigation District in 2020. This agreement is part of its broader geothermal development in the Salton Sea region that underpins the Hell's Kitchen project and is tied to CTR's energy production goals in the development of the Hell's Kitchen project.

In 2021, CTR executed investment and offtake agreements with General Motors. GM wrote on their website: “As an anticipated part of its \$35 billion global commitment to EVs and autonomous vehicles, GM will be the first company to make a multi-million dollar investment in CTR's Hell's Kitchen project. As the first investor, GM will have first rights on lithium produced by the first stage of the Hell's Kitchen project, including an option for a multi-year relationship,” highlighting the financial support behind the project and strategic investments and partnerships at play in this project.

In 2023, Stellantis invested over \$100 million in CTR. On Stellantis' website, a published statement notes that “CTR today announced a major investment of over \$100 million from Stellantis to advance the development of CTR's Hell's Kitchen project, the world's largest geothermal lithium project with a total resource capacity to produce up to 300,000 metric tons of lithium carbonate equivalent each year. Lithium produced at Hell's Kitchen will support Stellantis vehicles' BEV eligibility for consumer incentives under the U.S. Inflation Reduction Act (IRA).”

Agreements such as these establish contractual arrangements that secure priority access to CTR's lithium production, as these automobile companies seek to increase their capacity to produce higher-mileage, reliable electric vehicles. This expanded agreement builds on the original lithium supply agreement signed by both companies in June 2022 for up to 25,000 metric tons of battery-grade lithium hydroxide monohydrate (LHM) per year, increasing the total contracted supply to up to 65,000 metric tons annually over a 10-year contract term.

In 2025, CTR and Baker Hughes entered into definitive agreements establishing a partnership aimed at developing 500 MW of geothermal power and advancing initial lithium extraction. Maria Cluasias Borrás, Chief Growth and Experience Officer at Baker Hughes, stated: “Baker Hughes is proud to work with CTR on this pioneering project to provide the technologies, advanced drilling systems, digital services, and subsurface expertise to help ensure geothermal is available at an industrial scale” (CTR, 2025). This partnership further demonstrates the scale and commercial significance of the industry supporting the lithium projects in Imperial Valley. “CTR has raised more than 285 million US dollars in private capital to date” (CTR, 2025).

It is also important to note that, while I continue to refer to the Hell's Kitchen Lithium Project (HKL1), in November 2025, CTR announced a business combination with Plum Acquisition Corp IV (Plum IV), a transaction that established American Critical Resources (ACR) as its own subsidiary and a publicly traded entity that will manage the Hell's Kitchen lithium and geothermal project in the future in the Imperial Valley. The merger serves as a mechanism to accelerate the construction of Stage 1 of the Hell's Kitchen project, allowing for a faster rate of capital raising. As CTR shares, “ACR will include the Stage 1 assets of CTR Hell's Kitchen lithium project and three additional critical mineral projects in Imperial County, California (2025).” I include this to provide context for why I continue to refer to the project as the Hell's

Kitchen Lithium Project or HKL1 in my research, as I began this work before this merger and because the community and many stakeholders in discourse analysis have not referred to the project as ACR or adopted this new terminology when discussing the CTR lithium industrial development in their community. This information illustrates the mechanisms and stakeholder partnerships occurring, as well as company decisions that influence the push for industrial commencement.

Community Opposition and Environmental Justice Concerns

The Hell's Kitchen project has generated backlash from local communities and environmental justice organizations concerned about its potential environmental and social impacts. While the County has supported CTR's plans and allowed Stage One construction to proceed, ongoing legal proceedings and advocacy efforts led by community groups and Tribal leaders, and supported by researchers and academics, continue to address potential risks to ecosystems, cultural landscapes, frontline communities, and the environment.

Earthworks and Comité Cívico del Valle are nonprofit organizations that have raised concerns about the project's potential environmental and public health impacts in the Imperial Valley. Their work focuses on protecting overburdened communities, public health, and fragile ecosystems. Both organizations have submitted reports and participated in legal proceedings related to the project's approval, advocating for meaningful community consultation throughout the process. While not opposed to renewable energy transitions, they frame their work within broader environmental justice concerns related to extractive development.

Earthworks and CCV are challenging the County's approval of the Hell's Kitchen project under the California Environmental Quality Act (CEQA), arguing that the project's Environmental Impact Report (EIR) did not adequately assess environmental impacts, including air quality, water supply, hazardous waste, tribal consultation, and culturally significant landscapes, as well as broader risks to already vulnerable communities, in a manner consistent with sustainable development.

Comité Cívico del Valle is a local nonprofit organization focused on civic engagement, community education, and capacity building related to public health and related issues. Founded in the Imperial Valley, CCV emphasizes centering community knowledge and informed participation and fosters partnerships between community members and research institutions. Earthworks is a U.S.-based nonprofit that works globally to hold the oil, gas, and mining industries accountable for their environmental and social impacts, advocating for stronger regulatory protections and extending these principles to energy industries involved in the renewable transition.

Through this analysis and research, I gained insight into community concerns and perceptions of the developing lithium industry, many of which center on apprehension regarding public health implications, environmental degradation, exclusion from decision-making processes and spaces, limited local employment opportunities, and concerns about the distribution of tax benefits and compensation associated with industrial development in the region related to lithium extraction.

Summary:

In summary, Imperial County's socio-economic challenges, environmental vulnerabilities, and rich agricultural and indigenous history, combined with the Salton Sea's ecological risks, create a unique context for the Hell's Kitchen lithium project. The project's designation as a FAST-41 covered infrastructure project, along with major investments from automakers like GM and Stellantis, underscores the scale and significance of this emerging industry. Understanding these factors is essential for situating research on the potential impacts of lithium extraction in the region and provides the necessary context for examining the interactions between industry, policy, and local communities, as well as nonprofit organizations such as Comité Cívico del Valle and Earthworks.

Literature Review:

This literature review situates my research on the Hell's Kitchen lithium project (HKL1) within key analytical frameworks used by scholars to study extractive industries, frontline communities, and environmental governance. It draws primarily on environmental justice principles and the Critical Environmental Justice (CEJ) framework through an interdisciplinary approach that examines how economic and social power dynamics shape environmental change, communities' lived experiences, and the ways in which environmental and social harms, particularly for socially disadvantaged communities, are produced and reproduced through decision-making processes and discursive narratives.

David Naguib Pellow's concept of Critical Environmental Justice (CEJ) centers state-sanctioned violence and offers a framework for evaluating systems that normalize environmental and social harm. CEJ identifies environmental injustices and inequities by examining how marginalized communities experience ecological change and institutional harm. Pellow (2016) distinguishes CEJ from conventional environmental justice (EJ) scholarship by emphasizing the interconnectivity of multiple forms of oppression and inequality, the inclusion of non-human species in justice considerations, attention to multiple spatial and political scales, and an expanded understanding of injustice as it evolves into new forms. He also highlights the role of state power in reinforcing social inequality, and the recognition that marginalized populations are often treated as expendable within planning, governance, and decision-making processes (Pellow, 2016).

David Naguib Pellow's four pillars help contextualize the CEJ framework, building on previous generations of EJ concepts. He categorizes his pillars as such. First, this pillar emphasizes a holistic understanding of intersecting axes of difference and how they shape and influence one another, particularly in relation to environmental justice challenges involving race, gender, class, sexuality, and species. This approach allows for a comprehensive understanding of cumulative vulnerabilities and the ways these intersecting structures shape people's lived experiences and communities. Second, it emphasizes actors that influence multiple spatial and social scales, while drawing on perspectives from ecofeminism, political ecology, critical race theory, ethnic studies, the environmental humanities, and critical animal studies, allowing for a more comprehensive understanding of environmental justice issues. Third, accounting for social inequities that are reinforced and perpetuated by state power and social and institutional mechanisms allows for the evaluation of environmental issues within and beyond the state, as well as the actors that maintain these policies, structures, and mechanisms of power and influence. Fourth, it emphasizes the concept that all humans and non-human existence are vital in the present and in the construction of a sustainable, just, and resilient future, while also situating this idea within the history of sacrifice zones, as discussed in environmental justice and planning literature (Pellow, 2016).

Pellow further draws on scholarship that shows how "people of lower socioeconomic status, Indigenous and immigrant populations, and other marginalized communities are disproportionately affected by ecologically harmful infrastructures, such as landfills, mines, incinerators, polluting factories, and destructive transportation systems, as well as by the negative consequences of ecologically harmful practices, such as climate change/disruption and pesticide exposure" (Ringquist, 2005, as cited in Pellow, 2016, p. 2). These harms are understood as deeply connected to broader systems of social inequality. Pellow describes these environmental justice inequities as "assaults" on communities (Pellow, 2016).

I draw on this framework to situate my analysis of Imperial County within intersecting environmental injustices and structural pressures. These include vulnerable demographic and migrant populations, ecological conditions such as those linked to the Salton Sea, and limited procedural inclusion in decision-making processes. Together, these conditions contribute to what Pellow describes as systemic assaults on communities of color, reinforced by county, industrial, and governmental power structures that position local communities as expendable and subject to the burdens of industrial development.

By reviewing these perspectives, this literature review provides a foundation for evaluating how the Hell's Kitchen project may reflect broader extractivist dynamics, engaging in larger discussions of just transitions within energy transitions. It also draws on scholarship that further explains how power dynamics and community engagement and participation are shaped. Through this project, I provide a specific case that highlights these dynamics at play in a large industrial project, while also exploring the lithium industry's position within competing political

paradigms and stakeholder narratives around lithium energy and extraction. In doing so, I aim to place this project within a broader discussion of how, in this case, local, state, national, and even international actors are interacting with and responding to the lithium opportunity in the Salton Sea.

Building on these environmental justice foundations, Méndez extends EJ analysis into the realm of climate governance and planning, focusing on tensions between technocratic, environmentally green-framed policies such as carbon-focused reductionist climate policies and grassroots environmental justice approaches in California that take on a more bottom-up framework. In his book *Climate Change from the Streets*, Méndez centers community-based knowledge that prioritizes equity, health, and participation, while critiquing tools and governmental policies such as cap-and-trade for often neglecting frontline communities. He argues that these state-led approaches can reproduce harm by failing to acknowledge intersecting vulnerabilities that shape the interconnected well-being of communities and environmental systems, instead narrowing the scope of climate action to the reduction of carbon alone.

His work shows how policies that are presented as green can often fall short in fully encompassing or holistically addressing ecological and social inequalities that fuel climate change and produce disproportionate impacts on marginalized communities of color. He examines how communities of color are unevenly burdened and exposed to climate-related risks and environmental harms, and argues that EJ principles must be embedded into adaptation and resilience policy in ways that center community worldviews and lived environmental experiences. Méndez utilizes his concept of climate embodiment, the idea that the body serves as testimony to climate change, environmental harms, and structural and political inaction, reinforcing the need for planning systems to move beyond technocratic approaches and to validate lived experiences of climate vulnerability in order to implement just policies (Méndez, 2020, pg. 24).

Political Participation and Community Exclusion in the Salton Sea Region

Buck's research, published in 2020 in collaboration with the University of California, Los Angeles, Institute of the Environment and Sustainability, *Understanding Inaction in Confronting Ecosystem Collapse: Community Perspectives from California's Salton Sea*, provides insight into how communities in the Salton Sea region understand environmental decline and institutional inaction. Buck evaluates ecosystem collapse as it is experienced firsthand by local communities, exploring how residents perceive the Salton Sea's decline and potential responses to these challenges. The study included 30 interviews with residents across agriculture, science, environmental NGOs, business, government, community organizations, and education, providing insight into perceptions of inaction, power inequalities, and systemic challenges. The research addresses a gap in the literature by centering the experiences of communities living through environmental change.

Buck's findings emphasize persistent exclusion from decision-making processes, where local knowledge is often invalidated and residents are effectively sidelined from shaping environmental policy and solutions. Political peripherality is evident, as many communities are small and located in unincorporated areas with limited local governance structures and reduced electoral influence. These unincorporated regions have to rely on county-level governance and decision making to represent their priorities. Even in incorporated areas, structural inequalities and vulnerable demographics contribute to reduced representation in decision-making processes. Socio-economic peripherality further limits participation, as many residents live in disadvantaged communities where political engagement is constrained by immediate survival needs.

Buck states that “the sense of peripherality that people experience seems to have less to do with the nature of the Salton Sea itself, and more to do with the basic social dynamics of inequality and constraints on participating in decision-making” (Buck, p. 5). This highlights that exclusion, local political power, and mobilization in decision-making spaces are not solely attributed to physical peripherality due to geography or ecological challenges, but rather are sustained power imbalances driven by broader structural inequalities.

A community advocate similarly reflects on the barriers to local participation: “We could get elected into positions, but we can only push so hard and then we'll get stomped on big time” (Buck, p.5). Community members face barriers due to immediate survival needs, such as securing clean drinking water, illustrating one example of how such conditions can reduce political engagement. Buck highlights how professionalized forms of expertise often displace local knowledge, noting that decision-makers prioritize external consultants over lived experience (Buck, p. 6). Buck further identifies how governance structures restrict tribal autonomy and limit Indigenous-led environmental management, reinforcing long-standing systems of exclusion and erasure, actively preventing Indigenous communities from implementing their own conservation efforts, and having access to their lands.

These dynamics contribute to ongoing frustration and distrust in governance processes and help contextualize how historical patterns of exclusion may shape local responses to new industrial developments, including lithium extraction projects such as Hell's Kitchen.

Equity and Justice in the Green Energy Transition in Lithium Valley

Additionally, I build on the work of Chris Benner and Manuel Pastor's, whose book *Charging Forward: Lithium Valley, Electric Vehicles, and a Just Future* offers a critical framework for understanding the “green transition” and the challenges of achieving an equitable energy transition. They center their analysis of this green transition in Lithium Valley, examining lithium extraction in the Imperial Valley as a key source for meeting the growing demand for

electric vehicle and energy grid materials. They situate their work within the broader context of the shift to renewable energy and the push to secure domestic critical minerals.

Recent reports published by the authors in October 2025 reflect on their book and the present-day dynamics in the region. They show how rapidly conditions are changing and highlight communities' desire to secure community benefit agreements and gain a meaningful role in decision-making as well as the stakeholders invested in the success of the project's fruition. The authors emphasize that community opposition to industrial projects does not stem from a rejection of the industry itself, but from a desire for community members to feel respected and to benefit from these developments in ways that protect long-term trust and well-being. They center their argument on the need to prioritize environmental justice and green transitions in ways that do not replicate the harms of past extraction or negatively impact frontline communities.

In Benner and Pastor's *Charging Forward* book, they argue that a truly just transition must connect local organizing to global movements that resist extractivism and support communities, cautioning that "not everything that is green is good" (2024, xiii). Their critique of the region's rebranding as "Lithium Valley" points to cultural erasure, as it overlooks the communities living there. Instead, the region is framed as a terrain for extraction, with lithium, coined "white gold," marking the Imperial Valley as ground zero in California's new mineral rush (p. 3). Building on this critique, Benner and Pastor draw a direct parallel between California's 19th-century gold rush and today's lithium boom, raising questions about who will benefit from development and how political decisions, global supply chains, and federal policies will shape the region's future. They also show how climate change reveals persistent racial and environmental inequities, questioning the plausibility of an equitable transition in communities where local participation has historically been limited and residents' experiences overlooked.

Benner and Pastor explore power dynamics among governments, industry, tribal governments, and local communities, the legacy of colonial land use, Indigenous dispossession, and the long-standing framing of the region as a site for industrial and mineral extraction. They argue that the Salton Sea and Lithium Valley are representative of the broader climate challenges the world is facing and emphasize the importance of examining Lithium Valley as the future of energy transitions, environmental sustainability, and holistic community well-being and health. Benner and Pastor examine the issues arising from lithium extraction in the region within the context of the area's history of labor exploitation, environmental degradation, racial injustice, migration, and movement politics in order to critically assess the impacts of this new industry on surrounding communities. They also examine the way that the Salton Sea fits within broader discussions of the global energy transition, climate goals, and lithium markets in relation to ongoing dynamics of colonial extraction. Benner and Pastor argue that historical patterns of social, political, and economic inequality in the Imperial Valley create significant obstacles to achieving a just and equitable energy transition. They examine how longstanding economic

inequality, political exclusion, and environmental degradation have shaped contemporary lithium development. They argue that a clean energy transition can only happen if the risks and benefits are understood within the broader historical context of colonial resource extraction and structural marginalization, where environmental risks and social burdens often impact communities of color disproportionately.

Policy and Political Paradigms Pushing Lithium Industries

Riofranco's research argues that governments are increasingly pivoting toward lithium onshoring, including the domestic extraction and processing of lithium and other critical minerals, through a novel “security–sustainability nexus.” This nexus is shaped by interlocking policies, narratives, and justifications that promote lithium extraction while reinforcing the legitimacy and necessity of Global North mining industries’ participation in this activity as a matter of national priority, framed in terms of energy independence and national advancement (Riofrancos, 2023, p. 22). She argues that this nexus reflects a broader alignment and collaboration between state and corporate interests. As Riofrancos explains, “For public officials, onshoring policies counter China’s ‘dominance’ over battery supply chains. For mining and auto firms, onshoring translates into lucrative incentives, supply security, and reputational benefits” (Riofrancos, 2023, p. 22). This highlights how lithium development is framed through geopolitical logics, where sustainability narratives are closely tied to state strategies and corporate incentives that facilitate and promote the expansion of these industries.

Drawing on Riofrancos’ analysis of the security–sustainability nexus, this study examines how similar narratives are constructed in the case of the Hell’s Kitchen project, focusing on the overlapping messaging between industry actors and the county, as well as broader federal regulatory frameworks that support the project. These narratives similarly frame lithium development through themes of national security, energy independence, and economic advancement.

Riofrancos traces the roots of this nexus to key political moments, such as when policy attention to critical minerals accelerated in the wake of COVID-19 supply chain disruptions, alongside intensifying climate concerns and China’s rise in energy technology manufacturing. Riofrancos describes how the interests of mining companies, EV manufacturers, and state officials align with the security–sustainability nexus, positioning them strategically in global markets. In these situations, renewable energy systems exist at the intersection of fossil fuel industries and emergent green capitalism, between a greener status quo and a just transition. The fusion of “security” and “sustainability” becomes a novel policy paradigm (Riofrancos, 2023, p. 23).

The United States contains significant lithium reserves (USGS, 2022), but its only currently operating domestic lithium mine, the Silver Peak Mine in Nevada, accounts for a very small portion of U.S. critical mineral production. As a result, the United States continues to rely

heavily on imports, primarily from South America, for lithium supply. The Trump and Biden administrations have both pushed to expand domestic production, placing even more political pressure on Imperial Valley, now viewed as the United States' largest untapped lithium reserve.

Riofrancos outlines how this moment builds on earlier narratives of energy insecurity, beginning with the 1970s energy crisis, when U.S. dependence on foreign oil was framed as a national weakness (Huber 2013, pg 97-127, as cited by Riofrancos, 2023, pg 7). These narratives persisted through Obama's expansion of fracking under "energy independence" and Trump's "energy dominance" agenda (Sica and Huber 2017, p. 338, as cited by Riofrancos, 2023, pg 7).

In 2019, Senator Lisa Murkowski introduced the American Mineral Security Act to reduce U.S. dependence on foreign minerals, framing this dependence as a threat to U.S. competitiveness and geopolitical power (Riofrancos, 2023, pg. 9). This rhetoric was further reinforced in 2020 when Trump issued Executive Order 13953: *Addressing the Threat to the Domestic Supply Chain from Reliance on Critical Minerals from Foreign Adversaries and Supporting Domestic Mining and Processing Industries*, directing agencies to accelerate the permitting and completion of projects related to critical mineral supply chains (Riofrancos, 2023, p. 9). President Biden echoed this in his Executive Order on America's Supply Chains, stating: "More secure and resilient supply chains are essential for our nation's security and technological leadership" (White House 2021, as cited in Riofrancos, 2023, pg. 10).

Riofrancos warns of the consequences of pressuring and fast-tracking lithium projects to meet growing demand, noting that U.S. and European governments increasingly deploy corporate- and industry-friendly policies that prioritize dominance in green technology sectors over truly equitable and sustainable outcomes. Her framework highlights how lithium development is shaped by broader national security and supply chain strategies, demonstrating how policy priorities and corporate interests influence the political and economic landscape of critical mineral extraction in the U.S., providing a framework that this study applies to examine lithium development in Imperial Valley. Building on Riofrancos' analysis of the security-sustainability nexus, this study examines how these broader geopolitical priorities are translated into local policy discourse and contested by industry, government agencies, environmental and community advocacy organizations, and local residents. In doing so, it analyzes how these competing perspectives shape debates surrounding the Hell's Kitchen project and the broader expansion of lithium development and extraction in Imperial Valley, one of the first large-scale projects advancing the County's long-term vision for Lithium Valley.

The Political Economy of Lithium Extraction: Corporate Interests, State Power, and Resource Governance

Bravo (2023) evaluates Chile as a "Mineral State," a nation whose economic development has long been tied to raw material exports, including lithium. He argues that state actors are deeply influenced by "narratives of national development and progress" and historical processes in which minerals are portrayed as essential to national identity, sovereignty, and economic development. As a result, Bravo argues that environmental, social, and governance (ESG) indicators should extend beyond internal firm structures to evaluate how companies interact with governments and the broader political and economic contexts in which they operate. He further contends that the Chilean government portrays minerals as central to national identity to position the nation within the global economy, leading to governance assessments that often overlook raw material politics and allow corporate ownership structures and market dynamics to shape the stability and equity of national governance. He emphasizes the impact that political moments and tensions of a nation are tied to the regulation of contractual regimes in mining industries. He uses Chile as a case study, evaluating how lithium supply in Chile has been impacted by political unrest and global market positioning.

Bravo (2022) explains that Chile's mining identity was historically shaped by the nitrate industry, which was later followed by copper and lithium. The source highlights the geographical and structural continuity of the corporate evolution in the Atacama Salt Flat, Chile's largest salt deposit, located in the northern region of the state. The locations where nitrate mining companies were constructed in the early 1900s are the exact areas where land is currently being leased for lithium extraction. This historical grounding demonstrates how the enduring presence of mining corporations in the region's mineral-rich areas, together with the continued use of these sites, has shaped the modern mineral extraction landscape. Consequently, modern "lithium supply structures" were "formed on the back of acquisition and concentration of private equity of nitrate and copper firms," leading to extraction on the same land and territories that once dominated the previous mineral booms and industries (Bravo, 2022, p. 335). By continuing to operate in these same mineral-rich areas, companies like Sociedad Química y Minera de Chile (SQM) have maintained historical control over the region's mineral ventures. This process has continued to define Chile as a "Mineral State," a term describing an economy whose economic developmental path, position within geopolitical spheres, and national identity remain deeply "bound to raw material export" (Bravo, 2022, p. 334). Bravo's analysis also offers a useful framework for examining similar processes emerging in the Imperial Valley. The promotion of a region's identity as being directly linked to a mineral and its commodification parallels similar patterns seen in the Imperial Valley in the way that the region has begun to be coined "Lithium Valley." This terminology depicts how regional, demographic, and cultural identity can be displaced to illustrate a framing centered around extractivism and a site whose economies are largely "bound to raw material export" (Bravo, 2022, p. 334).

The structural and historical continuity of mining and the extractive industry in Chile is not merely economic or geographic; it is also deeply psychological and physically embodied, as the modern “lithium imaginaries” that guide current policy are inextricably linked to the historical trauma of previous resource cycles (Bravo, 2022, p. 336). As Bravo (2022) observes:

Resentments to resource extraction as an economic development model has followed in Chilean general society, mostly due to nitrate industries in saltpetre extraction and processing. Memories of domestic economic failures from nitrate exports are embedded in lithium imaginaries. These memories triggered a desire to protect spaces and their intellectual groundings for resource making (p. 336).

Political and economic dynamics in Chile have shaped the distribution of political power, as alliances between private mining actors and government institutions have enabled corporations to gain significant influence within national resource governance. These relationships have affected the transparency of how mining policies are developed and whose interests are prioritized in decisions surrounding industrial expansion. According to Bravo (2022), following the Pacific War (1879–1884) (p. 343), private interests, including the Chilean oligarchy, landowning elites, and foreign firms like the Guggenheims and the Anglo Lautaro Company (p. 338), manipulated politics to secure “fiscal advantages” and tax breaks in nitrate-rich areas (p. 336). This allowed Chilean elites to frame their private holdings as “nation-making projects” while attracting foreign investment by “marketing the image of the country as a stable and governable sovereign nation” (O'Brien, 1982, as cited in Bravo, 2022, p. 336). Ultimately, these laws formally created avenues for stakeholders and interested parties to participate in the formation and decision-making processes of resource management, shaping Chile’s development and creating a lasting “blurring between making a nation and making a corporation” (Bravo, 2022, p. 336).

Bravo researched how the public domestic perception of the mining corporation SQM, a major lithium supplier in Chile, is strongly “tied with politics, power, and injustice” due to the company’s background with U.S. investments, the country’s former military dictatorship, and justice processes linking it to political corruption (Galaz-Mandakovic 2018; Bravo, p. 336). This case highlights how historically, foreign mineral extractive companies and energy suppliers have been strongly tied to political power and injustice within nations, showing the impact and influence these companies hold.

According to the sources, Bravo described the history of SQM and how it transitioned from a state-partnered entity to a privately controlled corporation with deep political influence. SQM was established in 1968 as a joint venture between the Chilean government, through the Chilean Development Agency (CORFO), and external support from the Guggenheim’s Anglo Lautaro Company. In the beginning of SQM’s inception, the state maintained a direct presence in the

company's operations in the Atacama Salt Flat and decisions around resource extraction and management.

Bravo explains how, during the dictatorship of Augusto Pinochet (1973–1990), an era highly characterized by the privatization of state-owned companies, strategic nepotism allowed individuals connected to the regime and their networks to gain control of state assets. Bravo notes that to the present day, SQM has been “antagonized in broad society and general politics as a backlash of Pinochet” because its privatization “signified the company passing into the hands of Pinochet’s son-in-law, Julio Ponce Lerou” (Bravo, 2022, p. 338). Ponce Lerou’s control over SQM demonstrates how political and economic networks established during the dictatorship continued to influence the governance and ownership structures of Chile’s mining sector.

Even as recently as 2018, CORFO and Ponce Lerou demonstrated overlapping interests regarding foreign investment from Tianqi, a Chinese lithium company and one of the world’s largest lithium producers, after the company sought to acquire a significant ownership stake in SQM. This alignment reflected broader concerns surrounding control over SQM and Chile’s strategic position in global lithium markets, further illustrating Bravo’s argument that political actors and individuals connected to networks established during past political regimes have continued to influence the governance and control of mining resources. By framing foreign investment as a potential challenge to domestic control over a resource viewed as strategic for the country’s economic future and national identity, this case highlights broader tensions surrounding ownership and governance in Chile’s mining sector. These dynamics reflect how domestic companies with longstanding influence have remained connected to broader patterns of political and economic power.

Although formal state interventions and legal settlements have sought to limit his public-facing role, Bravo (2022) identified Ponce Lerou as the “practical head” (p. 344) of SQM at the time of his analysis, maintaining influence through his control of “Kowa” (p. 342), the corporate group that dominated the company’s internal governance. While Ponce Lerou resigned from his formal leadership role at SQM in 2015, he continued to maintain significant influence over the company through the ownership and control structures associated with the Cascadas and Pampa groups, which were major stakeholders in SQM. These structures allowed Ponce Lerou to maintain influence over the company beyond his formal leadership position. In June 2025, Ponce announced his departure from the companies through which he maintained control over his stake in SQM, transferring control of these entities to his family, particularly his daughter Francisca Ponce (Reuters, 2025). In announcing his departure, Ponce stated, “I have decided to announce that I will no longer be a protagonist in this story” (Reuters, 2025). Although this marked his exit from the ownership structures through which he influenced SQM, the transition highlights the enduring role of political and economic networks in shaping corporate control and resource governance within Chile’s mining sector.

These dynamics in Chile, particularly in lithium-rich regions like the Puna de Atacama desert, highlight how extractive pressures can spark resistance and raise critical questions about consent, environmental harm, and justice in so-called green development. In the Puna de Atacama desert, Indigenous leaders and community members have engaged in direct action protests, roadblocks, and hunger strikes in response to mining companies like SQM, one of the world's largest suppliers of lithium raw materials. They argue that they have not been granted prior and informed consent, as required by the Declaration on the Rights of Indigenous Peoples (UNDRIP). These issues underscore how consent, participation, and community consultation have become central concerns in lithium-producing regions, which will be important to consider when evaluating how Indigenous tribes of the Imperial Valley and local residents have been engaged in the early stages of planning.

Building on Bravo's analysis of corporate influence, resource governance, and conflicts over whose voices shape decision-making in lithium-producing regions, these dynamics provide an important lens for examining how similar concerns are negotiated within the Imperial Valley context, despite significant differences in historical and political conditions.

In relation to my research in Imperial Valley, despite historical relations being drastically different, this case study provides an example of how historical precedents can shape concerns when corporate and political leaders become collaborative partners in advancing economic and political ideologies and initiatives. This can often lead to community concerns regarding democratic decision-making and community consultation, where economic and individual gain can be prioritized over community well-being and environmental concerns. These concerns provide an important lens for examining my discourse analysis, where community members have questioned the collaboration between corporate leaders involved in lithium development and their city council members, whom they rely on as their governing body, particularly when local officials are perceived as aligning with industry development plans.

Controlled Thermal Resources (CTR), operating solely in the Imperial Valley, exemplifies how corporate actors navigate domestic and regional political and market pressures while engaging in broader global supply networks. CTR's partnerships with companies such as Baker Hughes, an energy technology firm that straddles both fossil fuel and renewable energy sectors, illustrate the blurred boundaries within the energy transition. This partnership is not related to the Hell's Kitchen lithium project but concerns an energy project for a data center using geothermal capacities in the region. The partnership and proposed plan demonstrates CTR's active role in the Imperial Valley and highlights the importance of considering multiple concurrent developments and their potential environmental and social effects. It also illustrates how local projects are often connected to broader global energy strategies. Baker Hughes continues to operate extensively in oilfield services while simultaneously investing in renewable technologies, positioning itself as a partner in green development transitions.

These collaborations demonstrate the political and economic dimensions of the energy transition, reflecting Bravo's argument that corporate interests often shape the landscape and direction of resource governance. Bravo cautions that corporate messaging around sustainability does not always align with practices on the ground, underscoring the need to critically examine how companies frame their engagement in green transitions. This vigilance ensures that the expansion of renewable energy opportunities does not become merely a capital-driven venture for corporations to profit from, but rather engages with genuine sensitivity to the region, centering community voices so that local populations maintain influence over decisions that affect their environment and daily realities.

Technology, Environmental Justice, and Land Use

The Imperial Valley has experienced a variety of interconnected renewable energy projects and transitions. Its lithium-rich, geothermal-heated brines, extensive flat agricultural lands, and terrain with intense sunshine have made it a site of interest for solar energy, geothermal energy, wind energy, and lithium extraction. It is now being positioned as a key contributor to the U.S. transition to renewable electric vehicles, reinforcing narratives around gaining independence from foreign nations and advancing the nation's energy grid, while remaining tied to regional and global markets.

In the arid Southwest, these types of energy projects are common. Mulvaney et al. (2025) situate energy developments within broader issues of water rights and water precarity, as well as tribal sovereignty and cultural resources. They evaluate historical dynamics of other renewable energy projects in the Imperial Valley, including solar initiatives, lithium extraction pathways, and technologies for greener energy, such as Direct Lithium Extraction (DLE) lithium recovery methods from geothermal brines. Mulvaney et al. also discuss how other renewable energy sectors, like solar, have impacted communities and ecosystems in the Imperial Valley, noting that:

These impacts, though not inevitable or intrinsic to solar power installations, are often the result of failing to consider how the development process can affect interconnected socio-ecological systems that communities value or rely on for their livelihood (Sareen and Kale, 2018; Stock, 2021, 2022, as cited in Mulvaney et al., 2025, p. 1).

Energy sprawl from renewable energy projects also has implications for ecosystems, cultural resources, and livelihoods (Trainor et al., 2016, as cited in Mulvaney et al., 2025, p. 1). Mulvaney emphasizes how:

In the American West, hydrosocial factors (Linton and Budds 2014) intersect with solar development places, as solar projects on arid landscapes may require new sources of water for cleaning and dust control, or may be sited on agricultural land because of land fallowing due to declining water availability. Solar development

in some places may reflect the political ecology of water (p. 2).

This is an important consideration, as building new lithium facilities and using direct lithium extraction (DLE) from brines will demand significant water, a scarce and precarious resource in the region. While DLE is often promoted as less water-intensive than traditional mining, it remains a major concern for the community. Both solar energy and DLE require water, and in this arid region, limited supplies heighten local fears. Even if DLE uses less water, the severity of the shortage makes its true impact uncertain.

Mulvaney poses the interesting question: can opposing a solar project with significant impact ultimately delay climate change action, or should these questions be considered through the lens of trade-off denialism? This concept is often used by companies to criticize opponents of projects, claiming they are:

Failing to understand that the land requirements of renewables make ‘green sacrifice zones’ inevitable even if they are held important to the environmental community (Zografos and Robbins, 2020, as cited in Mulvaney, 2024, p. 2).

The other side frames this perspective as economist-driven and inhumane, creating “disposable people,” while advocating for alternative approaches to achieve a more equitable transition. These debates remain central in discussions surrounding the proposed Hells Kitchen Lithium Mining Project and are reflected in social media posts and literature produced by stakeholders such as CTR, Earthworks, and Comité Cívico, all of whom engage with proposed lithium mining projects.

In Mulvaney et al.’s research on solar projects, their “approach seeks to uncover the underlying motivations, values, politics, and norms that drive differing viewpoints in environmental conflicts, with the aim of informing more equitable and sustainable socio-technical futures. By adopting a critical political ecology framework, researchers can move beyond simplistic binaries such as fossil fuels versus renewables” (Mulvaney et al., 2025, p. 3). This political ecology perspective is complex and reveals the intertwined dynamics of industries, showing that energy transitions are much more than technological shifts; they are shaped by social, political, and economic forces that influence both place and community experiences. I include Mulvaney’s work on solar in the Imperial Valley because it illustrates how the region has experienced renewable energy industries and broader industrial developments. When I refer to political ecology, I draw from the work of Hitch et al., who explain how political ecology allows researchers to “explore stakeholders within a politically charged environment. The key players include the government, NGOs focused on grassroots interests, and profit-driven industrial entities” (Hitch et al., 2025). Each stakeholder possesses their own political ecological interests, along with distinct tools, resources, and levels of political influence. “The relationships among these actors can be visually depicted, illustrating power dynamics and interpretations of outcomes” (Hitch et al., 2025).

Mulvaney further highlights how “renewable and fossil energy systems are better understood as entangled and overlapping geographies—layers of infrastructure, resources, and social relations that shape energy landscapes in complex ways” (Harlan and Baka, 2024, as cited in Mulvaney, 2024, p. 3). This prompts us to consider how many energy enterprises work in tandem with sectors like solar while also maintaining extractivist stakes in fossil fuel industries, which must be evaluated as industries seeking to capitalize on new energy transitions. It is essential to critically examine how these industries may view the green transition as a new “capitalist frontier,” rather than as an opportunity to genuinely work with communities and ensure the well-being of ecosystems and people. Mulvaney’s work is important because it holds companies accountable for being transparent about their partnerships and environmental impacts, highlighting that industries involved in energy transitions are not always fully “clean” or genuinely “green,” and may still cause harm.

Mulvaney also examines community and tribal relations, focusing on consultation, participation, and the impacts on livelihoods as land use transitions shift employment opportunities. While renewable energy projects are often framed as catalysts for rural economic revitalization, these economic promises have historically fallen short, as new opportunities are frequently constrained by existing unequal power structures and may extend only to jobs related to site construction. Tribal lands and sacred landscapes are frequently targeted by solar projects in the Imperial Valley. This has generated mistrust among Native American tribes, as expedited development timelines limit meaningful participation and fail to adequately protect culturally significant resources. Mulvaney notes:

“Solar development has boomed as a direct result of the water diversions shrinking the Salton Sea. Imperial Irrigation District (IID) compensates farmers with the revenue from the water districts to either fallow fields through agreements for long-term drought planning or sell their land to renewable energy developers. In the last decade, Imperial County has approved nearly 24,000 acres of solar development, primarily on agricultural land” (Roth, 2023, as cited in Mulvaney, 2024, p. 5).

Mulvaney et al. note that these developments have brought in more than \$30 million for Imperial County, but they have also coincided with the elimination of jobs for field laborers and associated California agriculture businesses. They observe that money distributed through subsidized water conservation programs has not been directed toward mitigating impacts on farmworkers and environmental justice communities who have lost employment and have been disproportionately affected by air pollution. Solar farms have been operating in the Imperial Valley for over a decade, and geothermal plants since the 1980s. With new technology, the Hells Kitchen Project now proposes a direct lithium extraction method to expedite mineral acquisition from brines. Mulvaney et al. highlight that both solar and lithium mining discussions revolve around similar concerns: the protection of community well-being, cultural heritage, livelihoods, ecosystems, and biodiversity, as well as the sustainable use of resources. Even after hosting decades of “green” development, Mulvaney notes that promises of rural economic revitalization through jobs and infrastructure have not materialized in ways that significantly benefit

farmworkers, Indigenous communities, and residents most affected by these transitions. Instead, residents frequently experience diminished land access, heightened environmental burdens, and reduced trust in energy developers and local governance structures.

Green Extractivism and Community Impacts

Understanding lithium extraction in the Imperial Valley requires examining the intersection of green extractivism, local community impacts, and environmental justice frameworks. When defining and using “green extractivism” in my research, I will account for Janubová’s definition of extractivism as “the appropriation of large volumes of natural resources in order to export raw materials to global markets” (2023, p. 3). Janubová notes that while “greening” creates the impression of fairer outcomes, it often opens new frontiers of mining (Tornel, 2023, as cited in Janubová, 2023, p. 4). Similarly, Batel (2022) observes that “the acceptance of so-called ‘renewables’ tends to ignore and render invisible the extraction, labor and fossil energy required to build, install, operate and dismantle this infrastructure” (as cited in Janubová, 2023, p. 4). Green extractivism can therefore be understood as a structural and intensive, and continuous process that has the potential of justifying environmental and social harm in the name of sustainable development also be understood as a concept that justifies the destruction of the environment and social structures in order to achieve sustainable development (Tornel, 2023; Isla, 2021). Like Manuel Pastor and Chris Benner, Janubová urges continued vigilance toward all extractive industries, including those framed as “green,” because they can still cause harm despite their sustainable branding.

Blair highlights the localized impacts of lithium extraction, noting that communities are “suffering from the slow violence of ‘extractivist droughts’ in an ongoing water crisis” (Nixon, 2011; Acuña & Tironi, 2022, as cited in Blair et al., 2023, p. 8). Many residents in the Imperial Valley are experiencing these austere conditions, including declining water availability. Blair also points out that “the lithium sector has applied conventional business practices, including flawed Western science-based impact agreements that ignore the millennia of experience gained by communities that have deep knowledge of local ecology,” emphasizing the necessity of deeper engagement with Indigenous knowledge to ensure that green extractivism is implemented justly (Li, 2015; Lawrence & Kløcker Larsen, 2017; Perreault, 2020, as cited in Blair et al., 2023, p. 12). These observations underscore the importance of centering community voices and experiences when assessing the impacts of renewable energy transitions.

Together, the work of Janubová and Blair illustrates that addressing green extractivism in the Imperial Valley requires a holistic approach, acknowledging systemic extraction and localized community impacts while also ensuring transparent, inclusive decision-making processes that protect ecological well-being and the people who will be directly impacted by policy efforts. Collectively, the literature demonstrates how environmental justice, green extractivism, and political ecology frameworks intersect to reveal the uneven social, political, and environmental impacts of energy transitions. Across these perspectives, scholars emphasize

how extractive infrastructures are shaped by power relations that influence both decision-making processes and the distribution of environmental harms. These dynamics can be examined through development contexts such as the Hell's Kitchen lithium project in the Imperial Valley.

Research Design and Methodology:

My project aims to examine, through a comparative media, textual, and digital media analysis, how stakeholders, specifically Comité Cívico del Valle, Earthworks, and Controlled Thermal Resources, frame lithium extraction, climate change, and the energy transition in Imperial Valley, CA, and how local communities engage with, respond to, or resist these framings in the context of the Hell's Kitchen project.

Theoretical and Methodological Rationale

Discourse analysis is a valuable tool in environmental policymaking, where narratives and interpretations play a critical role in shaping outcomes. As Feindt explains, policy debates often involve multiple, contested interpretations rather than a single authoritative one. When events are framed as part of broader systemic or anthropogenic issues, they enter the realm of environmental discourse, and how a problem is articulated influences whether, and how, it is addressed (Feindt, 2005, p. 162). Environmental policy discourse is not homogeneous; it is marked by contested meanings and uncertainties. As Feindt notes, “basic concepts, such as ‘nature,’ ‘progress,’ or ‘sustainability’ are contested. Moreover, the knowledge base of environmental policy remains fragile and contentious” (Feindt, 2005, p. 162). These foundational disagreements shape how problems are framed and addressed. Additionally, “environmental problems are not self-evident; they imply complex and systemic interdependencies, they often build up over long time intervals and large spatial areas” (Feindt, 2005, p. 162).

Discourse analysis draws on sociocultural meaning structures and examines how text and speech can function as symbolic actions, where terminology can be used strategically to leverage specific reactions or align with particular meanings. For example, terms like “climate change” or “energy security” carry specific connotations and can trigger distinct reactions for certain demographics. Through this project, I examined the discourse among stakeholders and the texts each produced either independently or in response to the other, determining whether there were patterns in the themes that emerged.

Scholars such as Leipold et al. emphasize that the discourse analysis methodology does not seek a universal or objective truth, whether for a policy decision or a lived experience, but rather serves as a means of “understanding how (multiple, sometimes competing) ‘truths’ are produced

through discourses in historical and spatial contexts” and how this impacts policy in relation to environmental planning issues (Leipold et al., 2019, p. 4). The methodology allows the researcher to understand key themes in an arena where there are competing discourses on the environment and claims about policy solutions. As an example, critical discourse analysis has been used by researchers “motivated by an ambition to unmask hidden... ideological agendas as drivers of political texts,” allowing an evaluation of organizational power within the public sphere in decision-making (Leipold et al., 2019, p. 4).

Through this project, I evaluated the publicized dialogue of various stakeholders in Imperial Valley to examine how it may influence policymaking and shape the relationship between industry and community in the context of renewable energy transition. Drawing on an environmental justice framework, I also analyzed the dynamics surrounding the development of lithium extraction and industry development in the region, including the discursive framings and stakeholder sentiments associated with the project.

I analyzed environmental impact reports containing public comment and social media posts from local residents, county and CTR social media accounts, as well as legal documents and local newspaper articles, along with other textual and media sources outlined in the graph provided in the methods section, to examine how stakeholder perspectives were framed and mediated within regional media narratives surrounding the project.

Historically, California jurisdictions have caused harm not only through their actions but also by failing to “include the voices of the most marginalized communities in the urban planning process” (Goldsmith et al., 2022, as cited in Zuñiga et al., 2024, p. 4). Legal scholars such as Pannu have argued that unincorporated regions are often “identified as a burden for local government” (Pannu, 2012, p. 4, as cited in Zuñiga et al., 2024). Pannu also documents historical cases in California, including Tulare County, where low-income communities of color in unincorporated areas were classified as “non viable” (areas incapable of developing successfully) in official planning processes, reflecting broader patterns of institutional neglect and exclusion (Pannu, 2012, p. 4, as cited in Zuñiga et al., 2024). Tulare, like Imperial County, contains several unincorporated communities, reflecting broader environmental justice concerns about vulnerability in planning and decision-making processes.

In this analysis, the environmental justice (EJ) framework allows for a critical evaluation of procedural processes and community participation in decision-making, as well as the ways in which public protections and community concerns are addressed. This framework also helps assess the extent to which county and industry actors prioritize or marginalize community concerns, revealing the ways in which certain narratives and interests are positioned as more valuable or necessary for technological and energy advancement than the concerns of local residents. This situates the study within an environmental justice approach that centers power, exclusion, and uneven decision-making.

Contextual Background: Hell's Kitchen Case & CEQA

The central environmental legislation shaping the debate in Imperial Valley is the California Environmental Quality Act (CEQA). CEQA requires that local and government agencies disclose all impacts that could potentially occur in large-scale proposed projects. This ensures that information is disclosed with the public and plans are created to mitigate risks, prompting industries to consider environmental consequences before projects are granted approval.

To contextualize stakeholder discourse, it is important to note that the Hell's Kitchen project was approved by Imperial County in January 2024 and subsequently faced a lawsuit from CCV and Earthworks. Although the lower court ruled against the NGOs, an appeal is currently ongoing in the California Fourth District Court of Appeal. This ongoing legal process shapes the timing, content, and framing of stakeholder communications, which in turn informs the textual evidence collected and analyzed in this study. Earthworks and CCV are challenging the County's approval of the Hell's Kitchen project on the grounds that the county violated CEQA, arguing that the project's Environmental Impact Report (EIR) failed to adequately analyze environmental impacts such as air quality, water supply, tribal consultation, hazardous waste, and other potential risks to already vulnerable communities. Luckily, many of these briefs, reports, and response statements are easily accessible through their websites, social media platforms, the county, or other publicly available channels. Legislation that I will draw on is also accessible online, as these laws are often used as guidelines for industrial projects and environmental safeguard measures.

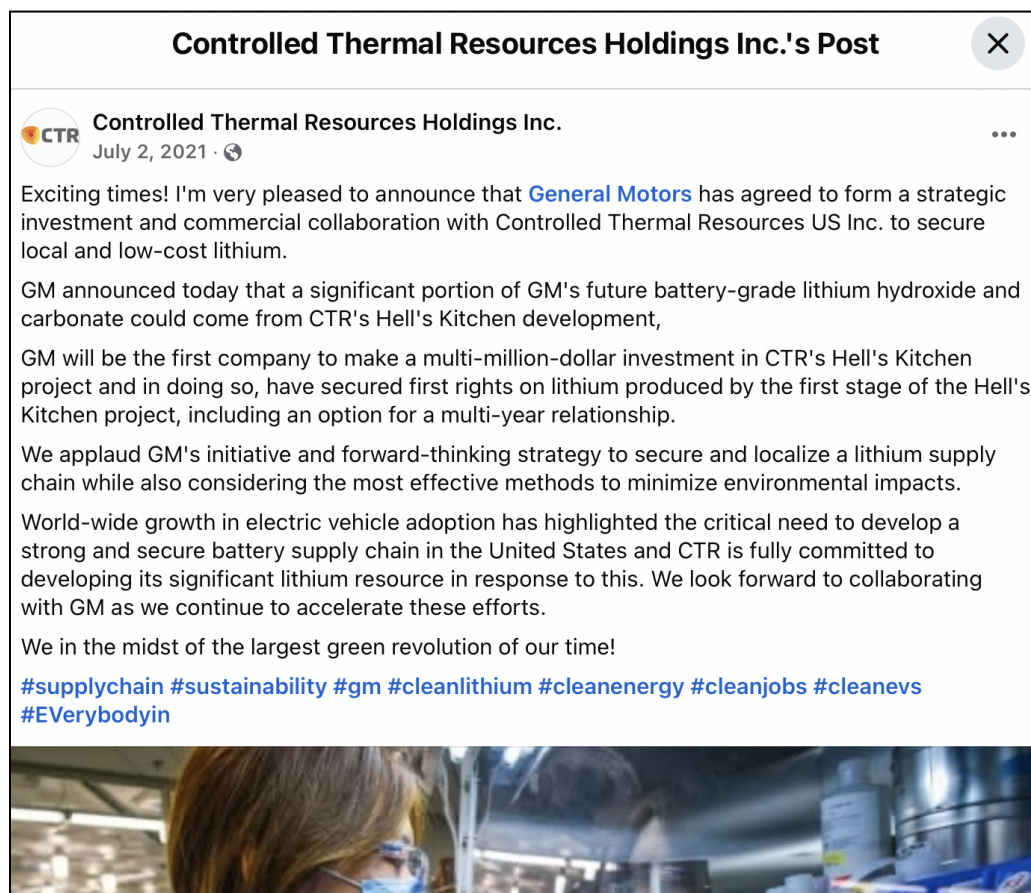
Data Coding and Analysis Methods

I conducted manual discourse analysis by reviewing and interpreting recurring narratives across social media posts, policy documents, public comments, and official statements. This involved reading and manually highlighting relevant sections, identifying repeated ideas, and organizing them into thematic categories. This approach enabled me to distinguish connections across texts and broader patterns in messaging, allowing for further comparison and analysis. I identified key themes and examined both the stakeholder positions and the intent behind the messaging.

A code in qualitative research is most often a “phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data...a researcher-generated construct that symbolizes or ‘translates’ data” (Vogt et al., 2014, as cited in Saldaña, 2016, p. 8). Saldaña (2016, p. 8) further explains that it “thus attributes interpreted meaning to each individual datum for later purposes of pattern detection,

categorization, assertion or proposition development, theory building, and other analytic processes.”

For example, in my work, a Facebook post such as this could be coded as follows:



In this post, I could code/extrapolate a few themes, including:

Green transition narrative

This code comes from: “largest green revolution” and “electric vehicle adoption”

Energy transition urgency and national security narrative

This code comes from: “has highlighted the critical need to develop a strong and secure battery supply chain in the United States”

By analyzing the data in this way, it allows for the extrapolation of stakeholder narratives, priorities, and framings that help promote their interests.

Regulatory and Legislative Context

In order to develop a strong understanding of lithium projects and renewable energy transitions, I will examine environmental legislation related to these technologies and their impacts on regions where traditional lithium extraction has been conducted. I will also review information about piloted direct lithium extraction (DLE) projects in other states and abroad that leverage geothermal brines, similar to the approach planned for the Imperial Valley.

I gained an understanding of the Clean Air Act, Clean Water Act, the Inflation Reduction Act (IRA), the National Environmental Policy Act (NEPA), the Mining Law of 1872, international human rights law, and the Fixing America's Surface Transportation (FAST-41) Act. To supplement this legal knowledge, I researched the history of mining and extractive industries both regionally and internationally, with a focus on the dynamics between communities, Indigenous peoples, and environmental degradation in relation to industrial activity.

These laws and historical insights supported my understanding of the terrain and stakeholder dynamics, as well as why local communities may be apprehensive or concerned about the industry. While not all of these laws explicitly focus on lithium, their frameworks guide lithium extraction policy and are applied in projects such as this one, representing the regulatory standards that govern industry practice. In addition, I conducted background research on the direct lithium extraction (DLE) technological process, exploring its proposed implementation in the Imperial Valley as well as its potential benefits and drawbacks.

Stakeholders, Public Engagement, and Data Sources

I analyzed various perspectives through a range of platforms, ranging from legal documents, briefs, impact assessments, legislative documents, social media, court filings, and other channels to understand the relationships between stakeholders as well as their sentiments about the project. This allowed me to understand how they used these platforms to disseminate their views and gain insight into each stakeholder's mission, as well as gather information about community concerns and the industries' and county's priorities. It also enabled an analysis of the intended audiences that stakeholders were appealing to through their publications and discourse strategies.

Stakeholders and Associated Materials

Stakeholder	Associated Materials / Work
Academic Institutions (SDSU, IVC, UCR, researchers)	- <i>CRISIS AT THE SALTON SEA: The Vital Role of Science</i> (July 2021) - Social media posts tagging academic programs (e.g., SDSU engineering campus, IVC LIFT program) - UC San Diego Labor Center & CCV workforce development plan
Community & Environmental Advocacy Non-Profits (CCV, Earthworks)	- <i>Devil in the Details</i> (CCV, supported by Earthworks) - Social media posts from CCV and Earthworks highlighting public concerns - <i>Verified Petition for Writ of Mandate and Complaint for Injunctive and Declaratory Relief</i> (petitioners: CCV & Earthworks) - <i>High Road Training for Lithium Valley: Opportunities and Challenges</i> (Nov 2025, CCV & SDSU collaboration)
Community (Public / Local Residents)	- Public comments submitted to the county - Social media posts and shared comments by NGOs and local organizations (e.g., Imperial Valley Equity and Justice)
Federal Government	- U.S. Department of Labor funding for RAND workforce report: <i>Empowering Imperial County: A Comprehensive Workforce and Economic Development Strategy for Harnessing the Lithium Opportunity</i> (Nov 25, 2025)
Industrial Partners / Investors (Baker Hughes, General Motors)	- Social media posts tagging partnerships with CTR (Baker Hughes, General Motors) - Project announcements and press releases regarding Hell's Kitchen and co-located developments
International Environmental & Governance Organizations	- WWF & AJET webinar/report on Indigenous Peoples and Just Energy Transition (COP27, in partnership with UNDP, FSC Indigenous Foundation)
Local Government (Imperial County)	- <i>Lithium Valley Excise Tax Funding Plan</i> and county allocation materials - Public comments received on draft plans - Imperial County reports and public statements on Hell's Kitchen - Public hearings and ICPDS project documentation
Private Industry / Lithium Developer (CTR)	- <i>Final Environmental Impact Report for the Hell's Kitchen PowerCo 1 and LithiumCo 1 Project, Imperial County, California</i> - CTR website statements and social media posts with project updates - Press releases on ACR and co-located development plans
State Government (California)	- California Natural Resources Agency webinar: <i>What's Happening on the Colorado River? Securing Water Sustainability across Seven States</i> (including submitted questions)

The Hell's Kitchen project generated extensive media attention and prompted responses from both the local community and national organizations, raising concerns about a just transition and environmental racism, particularly the creation of sacrifice zones, while also being positioned as a resource that could supplement both the U.S. and global lithium supply. This mass attention allowed me to gather data from a variety of sources and outlets. To provide an example through social media, I examined a variety of content, including infographics, photographs of project plans, community meetings, and ribbon-cutting ceremonies. I also analyzed which politicians or leaders supported different stakeholders, as well as the dialogue and rhetoric used in each post. Preliminary research revealed targeted messages posted by stakeholders in response to the actions of others, providing a useful lens for analyzing the dynamics and relationships among the parties. I focused on Facebook and Instagram as the main platforms for this aspect of the project. I analyzed posts from social media platforms, treating them as media sources and textual documents to be examined alongside more traditional policy and research texts. While my focus was not solely on social media I found it important to note I viewed social media as a broader form of text, one that conveys narratives through images, captions, rhetoric, and framing. By analyzing these posts in conjunction with legal documents, press releases, and stakeholder publications, I aimed to build a more comprehensive understanding of public sentiment, stakeholder messaging, and the ways in which narratives are constructed and circulated.

Document Analysis and Legislative Review

In addition, I reviewed and analyzed recent press releases from the county level, legal documents, petitions, and news reports commissioned by Comité Cívico del Valle and Earthworks, along with reports published by the geothermal company itself. I will heavily review *The Devil is in the Details: Environmental Health Impacts of the Hell's Kitchen Lithium and Power Project*, released by Comité Cívico del Valle and Earthworks, detailing the ways in which the Hell's Kitchen project poses threats to community well-being and may pose serious risks with a lack of oversight and safeguards in place. In addition, I reviewed and analyzed recent press releases from the county level, legal documents, petitions, and news reports commissioned by Comité Cívico del Valle and Earthworks, along with reports published by the geothermal company itself. I will examine the appeal to the Fourth District Court of Appeals in California, filed by CCV and Earthworks challenging the county's 2024 approval of the Environmental Impact Report, which highlights concerns about water and air quality, hazardous waste, and tribal and cultural resources.

I also plan to review documents released by Imperial County, including official statements on the Court of Appeals case, which outline how the project is expected to benefit the local economy and the national energy supply. Another document I will evaluate is the *Final Environmental Impact Report for the Hell's Kitchen PowerCo 1 and LithiumCo 1 Project*, prepared for the County of Imperial and published by the Planning and Development Services Department in December 2023. I also plan to analyze the *Verified Petition for Writ of Mandate and Complaint for Injunctive and Declaratory Relief filed to the Superior Court of California* by the County of Imperial.

In addition, I reviewed recently published articles from local newspapers, such as the *Calexico Chronicle*. One article published on January 15, 2025, by Everwine served as an example of the types of sources I analyzed, as it brought together statements from multiple stakeholders. In this article, Imperial County officials, including District 4 Supervisor Ryan Kelly and Deputy County Executive Director of Natural Resources Bari Bean, offered direct comments on the project, and the same piece also included statements from Comité Cívico del Valle Executive Director Luis Olmedo and Jared Naimark. I referenced this example to illustrate the kind of material I drew on to examine stakeholder positions, communication strategies, and the ways different groups articulated their perspectives in the public sphere.

Despite pushback from stakeholders, CTR has announced that it will begin construction within a few months. I plan to evaluate how stakeholders' discourse themes progressively change or remain consistent as this construction approaches its initial stages of development.

Framing Within Environmental Justice and Community Resilience

I centered my findings within environmental justice frameworks and the concept of holistic community resilience, critically engaging with how power dynamics shape community access to decision-making processes. Additionally, I examined how institutional structures privilege certain stakeholders over others. This research employs a multidimensional interpretive approach, primarily utilizing framing analysis informed by critical discourse studies.

Framing, as van Hulst et al. (2024, p. 7) explain, is the process by which actors construct meaning; frames are the specific narratives and interpretations that shape how issues are understood and communicated. This concept has gained traction across diverse fields, including decision-making, political science, negotiation studies, communication, and public administration. Framing analysis serves as both a conceptual and methodological tool to "analyze processes of meaning and to capture differences between actors in how they construct meaning in policy processes or to understand how frames emerge or become dominant" (Dewulf and Bouwen 2012, as cited in van Hulst et al., 2024, p. 7). Importantly, this methodology acknowledges the "less visible expression of power through language," which is central to interpretive approaches in policy studies and evaluation (van Hulst et al., 2024, p. 3).

Frames allow us to see how actors promote particular narratives and understandings of problems or solutions, highlighting specific factors while excluding others. They can influence problem definitions and moral evaluations, as well as the proposed treatment or response to issues. The public, including both the public and policymakers, are susceptible to such frames, emphasizing the strategic effects framing can have on decision-making. Framing can be used to advance commercial or political goals by omitting certain narratives and realities while uplifting particular messages (van Hulst et al., 2024, p. 8).

Van Hulst et al. (2024,p.7) draw a useful distinction between frames and framing: "framing relies on establishing a relation between a cue and a frame, in which a cue is a piece of information, notion or event that is framed in a certain way. For example, news about increased oil drilling in the Arctic Sea, which can be framed as an environmental problem, economic opportunity for the region or the answer to global energy demands" (van Hulst et al., 2024, p. 7). This framing shapes how issues influence public opinion, priorities, and policymaking (Entman 1993, as cited by van Hulst et al., 2024, pp. 7).

Framing entails the process of selecting certain “aspects of a perceived reality” and communicating them to promote a problem in a particular definition, creating a communicable interpretation that often conveys a moral evaluation or alludes to particular recommendations (van Hulst et al., 2024, pp. 7). Within this study, this concept enabled me to evaluate messages such as those about job promotion, economic development, environmental justice, climate change, and renewable energy, through the lens of framing, assessing how these messages are constructed to support or oppose specific policy decisions.

Through a comparative media and textual analysis, I was able to examine how various stakeholders and actors, such as CCV, Earthworks, local community members, Tribal leaders, members of the Imperial County Board of Supervisors, industrial advocates, and CTR affiliates, discuss the development of the lithium industry in Imperial Valley, particularly in relation to the Hell’s Kitchen lithium project, as well as the broader goals for the county in the transition to this new industrial development. This approach allowed me to analyze how local communities are engaging with, responding to, or resisting these framings, and to identify patterns in concerns alongside diverse perspectives within the community. In this analysis, I sought to understand where these perspectives emerge from and to examine the discursive interactions between stakeholders, including how the framing of issues and the discourse about one another influence whose voices and lived realities are most valued within decision-making and procedural processes, potentially inhibiting equitable participation. Framings and narrative patterns effectively become conversations between actors that produce hierarchies and dominant narratives surrounding lithium mining in the region.

Data Analysis/Results

This section examines how stakeholders frame lithium extraction, climate change, and the energy transition in Imperial Valley through a case study of the Hell’s Kitchen project. Drawing from the coded themes identified across media posts, public comments, policy documents, reports, and legal filings, this section is organized around three overarching themes that emerged, highlighting the tensions and messages advanced and circulated by each stakeholder.

The analysis is organized into three major sections:

1. **Competing visions of the energy transition**, including CTR and local government framing of lithium extraction, climate change, and economic growth.
2. **Governance, participation, and legitimacy**, including procedural justice, legislative standards, and the consideration of technocratic knowledge alongside community responses.
3. **Distribution of risks and benefits**, including evaluation of public health and environmental impacts, as well as the lithium excise tax plan.

Rather than analyzing stakeholders separately, this structure allows for a comparative examination of how Comité Cívico del Valle, Earthworks, Controlled Thermal Resources, local government actors, and community members construct and contest narratives surrounding industrial development in Lithium Valley. The accompanying chart maps each stakeholder, their role, and the analytical framing they employ, drawing from the types of documents listed above. Together, these themes illuminate how lithium extraction and the energy transition are debated, justified, and contested within a rapidly evolving political and regulatory landscape.

The debates and dynamics unfold at a localized scale, highlighting the needs and concerns of the Imperial Valley community, making it both a unique case with area-specific issues and an example that reflects broader themes around energy transitions. I have organized this analysis section as follows: the County and industry are examined together, as they support one another's positions and often share similar messaging and themes; Earthworks and Comité Cívico del Valle are examined together, as these are the two nonprofits in joint litigation against the County and industry; and the community is treated as a separate category, as it includes individual community members, online platforms supporting or opposing the project, and captures multiple perspectives. Each of these stakeholder groups is analyzed through the three themes outlined above.

While this project does not conduct an extensive evaluation of power, it examines the dynamics of procedural participation in decision-making as a way to highlight imbalances in planning processes. It also explores tensions around whose knowledge is valued and incorporated into planning, as this further reveals how power shapes political and governmental decisions. In addition, evaluating corporate interests and partnerships helps identify forms of monetary and political influence, particularly in contrast to the demographics of the region, where communities often have disproportionately less influence and economic power. As well as this, the evaluation of narratives around energy transitions illustrates how stakeholders leverage policy and procedures to their own benefit, highlighting systems that advantage certain stakeholders over others. Through tables provided in this analysis, the roles of stakeholders, their framing strategies, and their influence on the project and lithium development in the region are illustrated, highlighting patterns of inclusion and exclusion.

Stakeholder Roles & Analysis – Hell’s Kitchen Lithium Project (HKL1)

Stakeholder	Description (Role)	Analytical Framing
Academic Institutions (SDSU, IVC, UCR, researchers)	Core Function: Knowledge production and workforce development. Conduct research on socioeconomic disparities, including health inequities, air quality, water systems, environmental degradation, and Salton Sea collapse. Provide scientific data on environmental conditions and impacts of lithium and mineral development, focusing on labor opportunities and geothermal capacity. Their work informs policy, mitigation, and stakeholder advocacy. SDSU has invested in an Imperial Valley engineering campus, while IVC’s LIFT program supports workforce pipelines. The UC San Diego Labor Center has also partnered with CCV to create a workforce development plan highlighting barriers and opportunities in lithium industries in Imperial Valley.	Knowledge producer and legitimizer of environmental and economic development narratives; workforce promoter, scientific legitimizers
Community & Environmental Advocacy Non-Profits (CCV + Earthworks)	Core Function: Environmental justice advocacy, legal action, and community mobilization. Advocate for environmental justice, procedural transparency, and community-centered decision-making. Challenge regulatory compliance and mobilize public participation. Filed CEQA litigation against CTR and Imperial County over environmental, water, tribal, cultural resource, and hazardous waste review processes.	Environmental justice advocates; accountability actors; legal challengers
Community (Public / Local Residents)	Core Function: Expression of public sentiment and lived experience. Share concerns and perspectives on environmental health, economic opportunity, and project impacts, reflecting both support and opposition through public comments and social media.	Public sentiment and lived experience; impacted population; social pressure source
Federal Government	Core Function: Policy direction, funding, and regulatory oversight. Shapes energy transition priorities, sets national goals for critical mineral extraction, and supports projects through policies like FAST-41.	National agenda setter; funding authority; regulatory enabler
Industrial Partners / Investors (Baker Hughes, General Motors)	Core Function: Strategic investment and industrial collaboration. Baker Hughes collaborates with CTR on co-located energy and data projects. General Motors invested early in Hell’s Kitchen, securing priority rights to lithium for future EV battery production. Their involvement signals industrial backing for the project.	Strategic investors; industrial collaborators; market demand drivers
International Environmental & Governance Organizations	Core Function: Global norm-setting and discourse shaping. Promote climate, Indigenous rights, and just energy frameworks, shaping broader narratives and standards influencing projects.	Norm leaders; discourse influencers; indirect legitimacy actors
Local Government (Imperial County)	Core Function: Local governance, regulatory approval, and oversight. Oversees land use, permitting, and development through the Board of Supervisors. Approved the Hell’s Kitchen L1 project and leads implementation and legal processes. Imperial County Planning & Development Services (ICPDS) manages project review and operations, making the county central to decision-making in unincorporated communities.	Regulatory authority; decision-maker; institutional gatekeeper

Private Industry / Lithium Developer (CTR)	Core Function: Project development and technological implementation. Leads the Hell's Kitchen lithium and geothermal project through integrated extraction technologies. Operates via ACR and is expanding development and funding strategies. Central actor driving progress and engaged in litigation.	Project driver; technology developer; primary economic actor
State Government (California)	Core Function: State-level policy making and resource governance. Supports renewable energy and net-zero goals while regulating water resources critical to project viability. Colorado River negotiations introduce uncertainty affecting long-term sustainability.	Policy authority; resource regulator; long-term risk determinant

Competing Visions of the Energy Transition

(Green Growth vs. Just Transition)

CTR's Framing of Lithium Extraction

Controlled Thermal Resources (CTR) and the Imperial County Board of Supervisors actively use social media, press releases, and interviews to shape public narratives surrounding the Hell's Kitchen Lithium Project and the broader vision of "Lithium Valley." Across Facebook and Instagram posts, news articles, and official statements, their framing consistently emphasizes job creation, national security, energy independence, economic opportunity, technological sophistication, and the urgency of utilizing what they describe as an untapped resource.

Rather than positioning lithium extraction as a site of environmental trade-offs, CTR frames the project as a necessary and strategic component of the global energy transition. CTR's CEO Rod Colwell has repeatedly described the project as a non-invasive process that recovers lithium and critical minerals through a closed-loop system with minimal water use and claiming it produces "no byproducts." Colwell contrasts this approach with the evaporation ponds used in the lithium triangle of the Atacama Desert in Argentina, framing Hell's Kitchen as a cleaner, safer alternative. CTR emphasizes that recovery and processing will occur "in one secure US location," reinforcing the national security and domestic supply narrative.

In a February 4, 2026 Facebook post, CTR wrote:

We are in Prague this week meeting with a major European automotive OEM on future lithium and critical mineral supply. The message from Europe is consistent with Washington: clean, secure supply chains are now a national security and industrial policy priority. From 2027, Europe's Battery Passport will require clear visibility into where

materials come from and how much carbon is involved in producing them. Carbon is no longer just a sustainability metric, it is becoming a real factor in pricing, supplier selection, and trade policy. This is exactly where American Critical Resources is focused: geothermal-powered net zero carbon lithium and critical minerals procured in the United States. At current EU carbon prices, the majority of lithium extraction and processing carries a significant embedded cost. Geothermal critical minerals effectively remove that penalty, creating a cleaner supply chain and commercial advantage (CTR, 2026).

This emphasis on carbon reduction and secure domestic supply chains can be interpreted through Riofrancos's (2025) critique of green transition discourse. As Riofrancos argues:

In most cases, the 'green' mandate is understood very narrowly as 'reducing carbon' or 'reducing greenhouse gas emissions'—a form of reductionism that risks locking in technological solutions that reduce greenhouse gas emissions while exacerbating other environmental crises (Riofrancos, 2025, p. 11).

While the CTR DLE and geothermal lithium extraction closed-loop system and technology offer the potential for less environmentally impactful outcomes due to the reduction of fossil fuel use, it is essential that we do not immediately categorize these technologies as 'green' or harmless to the environment, as they still have the potential to alter natural habitats and must be evaluated for their capacity to exacerbate vulnerabilities within already fragile ecosystems.

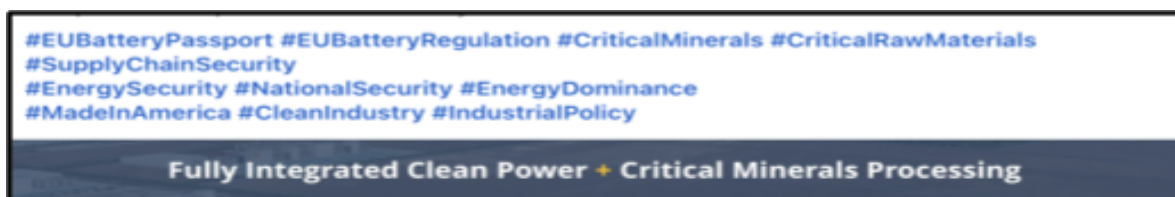


Figure 5

*Controlled Thermal Resources Facebook Post (February 4, 2026):
Hashtags Related to Lithium, Geothermal Energy, and Domestic Supply
Chains. **Note.** Screenshot from a February 4, 2026 Facebook post by
Controlled Thermal Resources (CTR).*

Building on this critique, Méndez's concept of "carbon reductionism" offers a complementary perspective by examining the policy logic and ethical assumptions that can produce narrow or harmful approaches to climate action. While Riofrancos (2025) critiques how the "green" transition can become narrowly defined through carbon reduction alone, overlooking broader environmental and social consequences, Méndez (2020) examines how climate policy decisions can become guided by efforts to achieve the "greatest good for the greatest number" (p. 15). Méndez utilizes "carbon reductionism" to describe an approach broadly based on utilitarianism,

illustrating how climate policy is often constructed through ethical assumptions about what constitutes the greatest societal benefit and how the state should prioritize competing interests. This concept suggests that climate policy is often guided by efforts to “maximize utility for the greatest number of people in society,” frequently through a focus on cost-effectiveness and market-based solutions (Méndez, 2020, p. 15). However, this approach can create tensions regarding whose interests and lived experiences are recognized within definitions of the greater good, potentially resulting in certain communities and forms of harm being overlooked.

In this framework, the idea of the greater good essentially creates a separation between frontline communities and those who will reap the benefits of industrial development. The energy production and critical mineral extraction of lithium can then be framed by the county, state, and industry as a process and project for the greater good, while invoking narratives such as “supply chain security,” “national security,” and “energy dominance,” as well as broader national energy consumption needs, reinforcing the idea of its importance for the safety and well-being of the nation. This promotes lithium development as essential to the national interests and the idea of the greater good, a framing that CTR actively adopts and strategically capitalizes. This idea remains consistent with Méndez’s critique of climate policies, which creates space for corporate interests to disproportionately impact communities of color and marginalized populations, who are often treated as expendable in the pursuit of the greater good.

CTR is able to promote the idea of “clean industry” because it is not using technological extraction methods that produce significant amounts of carbon emissions, thus falling under the umbrella of green and climate-friendly industry in the eyes of state and governmental policies and corporate regulations. However, by pushing this framing, it serves as a tool to dismiss other harmful effects it may cause on the environment and the people living nearby.

Embedding Lithium in Geopolitical and Economic Narratives

Along with this post was a picture of the Lithium Valley Campus concept image, Hell’s Kitchen. In the distance, there are buildings for potential co-location developments. Here, lithium extraction is embedded within a geopolitical and economic narrative: supply chains are framed as matters of national security, and carbon accounting becomes a competitive advantage rather than a regulatory burden. CTR is essentially stating that, as a geothermal company planning to implement a closed-loop system that does not produce a carbon footprint, it can navigate financial limitations created by policies moving toward greener regulations. This framing makes their products more viable in a market that is increasingly climate-focused. The motivation does not appear to prioritize the shift away from extractive processes toward a green energy transition; rather, it promotes their business model as an economic incentive, suggesting that their lithium will be cheaper to purchase and provide a trade advantage. Here, decarbonization and extraction are presented as mutually reinforcing rather than contradictory.



Figure 6

Controlled Thermal Resources Facebook Post (January 26, 2026). Note. Screenshot from a January 26, 2026 Facebook post by Controlled Thermal Resources (CTR).

CTR also frequently references “ESG” (Environmental, Social, Governance) and their company’s role in making this information public. On January 26th, 2026, CTR stated in a Facebook post: “Sustainability is shifting from loud ESG promises to quiet execution, often described as ‘greenhushing’.” Statements such as these align with increasing CEO governance sentiment trends in the United States, as described in ESG governance literature, where industrial executives perceive such requirements as regulatory burdens and hurdles rather than mechanisms of accountability, contributing to a shifting regulatory landscape amid changing political priorities and the formation of new corporate strategies (Tonello, 2025). Colwell, like other executives, emphasizes private management, asking the public to trust the company’s intentions despite less visible disclosure. This rhetorical shift toward private management is not occurring in isolation but instead coincides with broader changes in the U.S. regulatory landscape surrounding ESG reporting and climate and social impact disclosures.

ESG, “Greenhushing,” and Corporate Governance Trends

This framing interacts with ongoing federal and state regulatory trends. In 2025, the United States Securities and Exchange Commission (SEC) formally withdrew proposed rules concerning ESG fund disclosure and shareholder submission reforms, signaling a move away from climate-related accountability. According to ESG News Editorial Team (2025), this withdrawal means that “ESG-labeled funds will not face new anti-greenwashing disclosure requirements,” leaving companies with greater discretion in reporting their climate and social impacts.

The SEC’s decision to withdraw these proposed ESG rules in June 2025, which were regulatory initiatives developed during the Biden administration, demonstrates a broader political transition and growing pressure from the current administration to reshape climate-related regulations. Colwell’s discourse mirrors this trend: “loud” ESG is unnecessary, and “quiet execution” is sufficient, placing greater trust in corporate intent rather than external verification.

CTR framed this topic as a means of reframing its internal processes as efficient pathways toward sustainability, emphasizing practices that remain less visible to external audiences. By framing this “quiet” approach as an effort to focus on results rather than public verification, CTR is navigating a period of reduced climate disclosure requirements, as the SEC has indefinitely suspended its climate disclosure rule, reducing immediate federal compliance pressure (Tonello, 2025). As Figure 7 illustrates below, this pivot toward “quiet execution” reflects a fragmented landscape in which anti-ESG backlash (25%) has become a prominent business concern for U.S. CEOs, alongside concerns about federal regulatory burdens (23%). CTR’s positioning suggests an effort to capitalize on this increased regulatory flexibility while maintaining a sustainability-oriented public narrative. By emphasizing efficiency over public ESG signaling, CTR reframes reduced disclosure as a pragmatic business strategy rather than an abandonment of sustainability goals. This framing privileges corporate self-governance, positioning future technological efficiency and anticipated operational performance as indicators of environmental responsibility in place of public ESG reporting, potentially mitigating criticism associated with anti-ESG sentiment while maintaining the company's sustainability narrative.

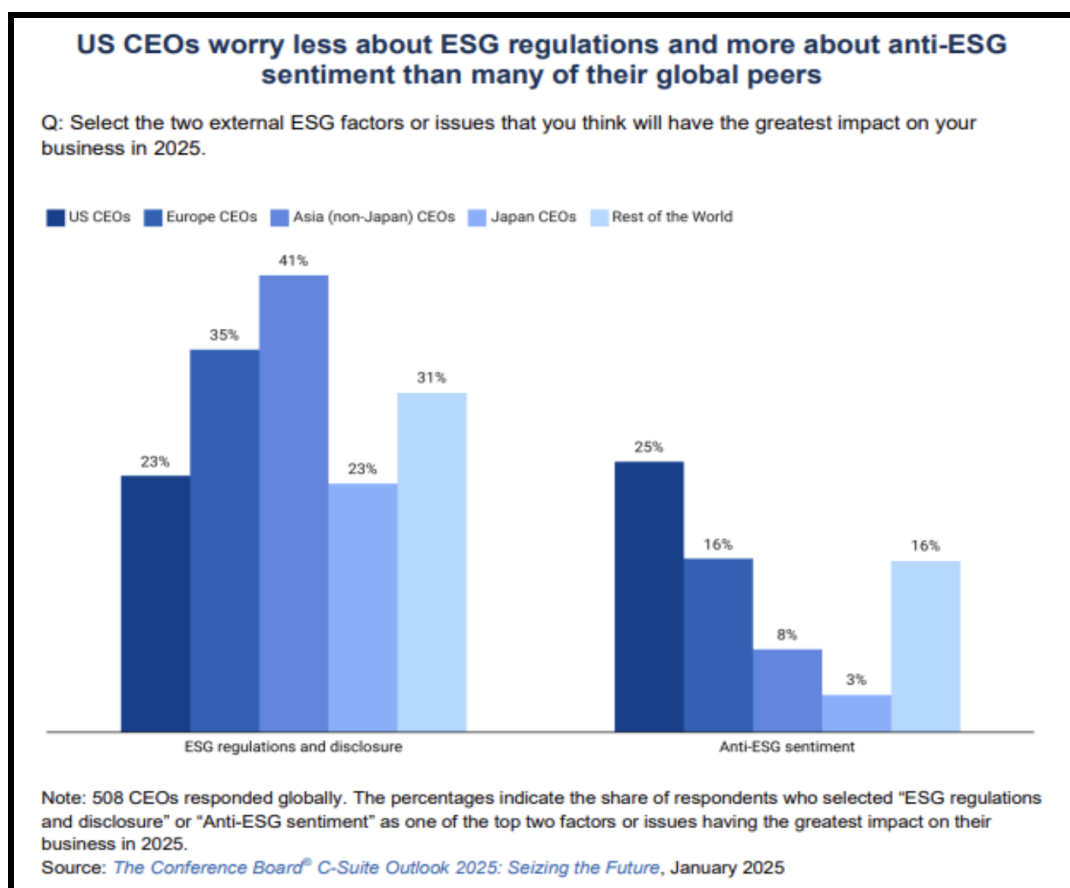


Figure 7.

Comparison of CEO Concerns Regarding ESG Regulation vs. Political Backlash (2025).

Note. This chart illustrates that U.S. CEOs (25%) are the only group globally to rank anti-ESG sentiment (backlash) as a higher business concern than ESG regulations and disclosure (23%). For U.S. firms, there is an increasingly fragmented landscape, the risk of political backlash now outweighs the risk of federal regulatory non-compliance.

Source: *The Conference Board® C-Suite Outlook 2025: Seizing the Future*, January 2025, as cited in Tonello (2025) via the *Harvard Law School Forum on Corporate Governance*

<https://corpgov.law.harvard.edu/2025/04/12/regulatory-shifts-in-esg-what-comes-next-for-companies/>

Regulatory Context and State-Federal Tensions

Since there is a federal move away from climate protections and social accountability, state-level political stances and policy work become vital in shaping companies' responsibilities. California is often a state that leads climate initiatives and sets precedents for the country, and its legislation is actively shaping ESG expectations. SB 261 (Climate-Related Financial Risk Act) requires

large companies to report climate-related risks, while SB 253 requires greenhouse gas disclosures. CTR promotes the Hell's Kitchen lithium critical mineral project as having a net-zero carbon footprint through a closed-loop system and therefore argues that it would not be impacted by SB 253. However, SB 261 affects lithium extraction projects in California by requiring companies to report climate-related financial risks and mitigation measures, focusing specifically on risk disclosures.

I have not evaluated or seen comments from CTR regarding these bills; however, I find it essential to note the context of the federal policy push away from these reporting requirements alongside the state's more proactive stance, highlighting a tension in potential future requirements if these bills are passed. This also demonstrates that CTR appears more aligned with the federal approach. Both bills are temporarily halted due to lawsuits, including one from ExxonMobil challenging the state's authority to supplement federal reporting standards. This context is important for understanding both the national landscape and the regional regulatory environment, and it emphasizes how CTR can frame its operations as responsible without fully disclosing details to the public.

Geothermal Integration and Technological Framing

Similarly, CTR's website repeatedly emphasizes that recovery and processing will occur "in one secure US location," reinforcing a domestic "security-sustainability nexus" that reflects the broader tensions analyzed by Riofrancos (2023, p. 1). This framing connects to Riofrancos' evaluation of the political economy of mineral extraction and the designation of certain resources as "critical minerals" in the name of energy development. Riofrancos highlights the contradictions of "green capitalism" and the pursuit of dominance over global mineral supply chains that are becoming increasingly important as demand for new energy sources grows. Her work demonstrates how the Global North frames the expansion of mineral production as necessary for energy security and social progress while simultaneously reinforcing its influence over global mineral markets, which can inevitably perpetuate harms caused by more traditional extraction practices that have historically occurred (Riofrancos, 2023, p. 1). Riofrancos examines the contradictory way that the United States has historically offshored mining while now shifting toward the domestic extraction and processing of lithium in the name of supply chain security and energy independence.

Riofrancos further evaluates the interconnected alignment in framings and narratives surrounding state and corporate interests and posits that corporate-friendly industrial policies are being deployed in ways that enable firms to capitalize on the energy transition under the language of sustainability and national energy independence, thereby intensifying competition with countries such as China, which are often depicted as threats to national security and energy independence (Riofrancos, 2023, p. 2).

The company highlights its vertically integrated engineering model, capable of producing renewable baseload energy 24/7 by harnessing geothermal heat. This framing distinguishes geothermal energy from wind or solar by emphasizing reliability and independence from weather variability. From this stable energy source, CTR promotes its capacity to extract and refine critical minerals at commercial scale, again linking extraction to national resilience: “Reduce supply chain risks, strengthen national energy independence, and create thousands of good-paying jobs in the U.S.” (CTR website, n.d.). Lithium itself has been framed as an “import dependency.” The vast majority of lithium processed in the United States comes from Chile and Argentina (Riofrancos, 2023, p. 3). This idea constructs a narrative in which policies justify the expansion of lithium extraction in order to counter “China’s dominance,” while aligning with the U.S.’s reliance on other regions for energy inputs, leaving room for corporate interests to be integrated into this rapid energy transition, often framed as a form of new resource nationalism (Riofrancos, 2023, p. 3).

When evaluating the Imperial Valley, it is important to examine the way that it has been framed in public and political discourse, with lithium-rich brines leading to references as a “modern gold rush.” In 2022, the region was called the “Saudi Arabia of lithium” by California Governor Newsom, further highlighting how messaging around national dominance and a lucrative national investment is being promoted at both federal and state levels of policy discourse in relation to lithium mining in the U.S. and specifically in the Imperial Valley (Klawans, 2026). A reference to “Saudi Arabia” further highlights U.S. involvement in global extractive relations aimed at maintaining control over natural resources abroad, demonstrating an extractive political-economic logic (Klawans, 2026). This framing also demonstrates how, through political and national security discourse, the Imperial Valley region is perceived primarily for its subsurface resources, positioning it as a site of lucrative extraction, and not for the culture or communities that live there.

The growth of artificial intelligence and other technological advances has also led to a rising demand for energy, a moment in which industries involved in power generation, lithium development, and processing are seeking to capitalize on this demand (Klawans, 2026). CTR participates in this broader framing of “urgency” and “necessity,” shaping how lithium extraction in the Imperial Valley is presented through its public messaging. This is made clear in statements by Rod Cowell, CEO of Controlled Thermal Resources, who noted in a February 2026 LinkedIn post that “The energy equation for AI, hyperscale data centers, and U.S. energy security is becoming clearer by the day. Reliable, scalable, clean baseload power is no longer optional, it’s foundational.”

Echoing this broader discourse of energy urgency and scalability, the Salton Sea landscape and geothermal field are further represented through technical and institutional assessments that emphasize its baseload capacity and strategic energy potential. In an article published in *The*

Desert Review, the U.S. Department of Energy and Rod Cowell discuss the potential energy capacity of the region. Rod Cowell is cited stating that “the Salton Sea geothermal field currently produces around 450 megawatts of baseload power and has an estimated 2.5 gigawatts of untapped capacity—that’s enough around-the-clock electricity to power an entire city. It’s an immense and underutilized clean energy resource that can offer immediate utility-scale solutions” (as cited in Gaxiola, 2026). Cowell further emphasized:

The strategic value of Hell’s Kitchen and the greater Salton Sea geothermal resource should not be underestimated. It is a proven resource with a 40-year operating history that can be scaled rapidly to service near-term energy demand while helping to alleviate longer-term energy supply instability as alternative technologies and battery energy storage systems mature (Gaxiola, 2026).

Across these statements, the energy transition is framed primarily as a question of scale, speed, and competitiveness. CTR’s assertion that “clean baseload power is no longer optional, it’s foundational” reinforces a growth-oriented logic in which development becomes both inevitable and necessary (CTR Facebook, Feb 2, 2026). Within this framing, community concerns risk being positioned as obstacles to progress rather than as central components of a just transition.

Local Government Support and Community Framing

Following the release of the Draft Lithium Valley Specific Plan (LVSP), the Draft Program Environmental Impact Report (PEIR), amendments to the General Plan and Zoning Ordinance/Map, and the Lithium Valley Construction Workforce Ordinance, the County described these actions as a major “milestone in the county's long-term effort to responsibly plan for Lithium Valley and position Imperial County as a national leader in developing vertically integrated ecosystems that can produce geothermal energy, domestic supply of critical minerals and co-locate advanced manufacturing” (Imperial County, Facebook post, December 30, 2025). The language feels closely aligned with that used on the CTR website. Board members of the Supervisors have continued to show support for CTR both on their own personal social media accounts and through the county website and social media account, stating their support for an industry bringing jobs and opportunities that will not arise again.

In a 2024 article for Imperial Valley Press, Bojórquez Adelante Valle reports on a letter submitted to the Board of Supervisors in support of a loan application requested by Controlled Thermal Resources to the U.S. Department of Energy’s Advanced Technology Vehicles Manufacturing Loan Program. The letter states that “the project will provide significant benefits to our community including employment, education, and outreach resources to residents thereby strengthening the local community and economy” (Bojórquez Adelante Valle, 2024). The company's CEO "humbly requested" supervisors to stop feeding whom he considered a

dangerous snake while coming together to make the Lithium Valley succeed. That sentiment was shared by all five supervisors. District 3 Supervisor Mike Kelley expresses his support to the Lithium Valley to make this project succeed and benefit the region, the state, and the nation. Kelley suggested fellow supervisors stand without fear and work for the benefit of county residents. That feeling was seconded by District 1 Supervisor Jesús Eduardo Escobar. Separately, District 5 Supervisor John Hawk said he felt disappointed by CCV's "selfish effort" while expressing his support for "what's good for the county" and promising to "fight tooth and nail" against what affects the livelihood and jobs of county residents (Bojórquez Adelante Valle, 2024).

These statements demonstrate that all five members of the Board of Supervisors publicly expressed support for the Lithium Valley plan and CTR's efforts, framing the project as beneficial to the region and county residents. They describe the project as "what's good for the county" and emphasize its potential positive impact on the livelihoods of both the region and the broader county. The project is framed as serving the greater good, and any opposition is portrayed as obstructing economic growth and vitality in the region. The county's alignment with the industry is clear.

Industry-Government: Strategic Alignment

The County has positioned itself to support CTR in a way that appears to align with California's environmental and climate policies, particularly the state's carbon neutrality goals (AB 1279), which codify the 2045 target for net-zero greenhouse gas emissions and net-negative emissions thereafter. While the County does not explicitly reference these policies, its actions suggest a strategic alignment with state sustainability priorities. In this way, the County is strategically aligning itself with CTR.

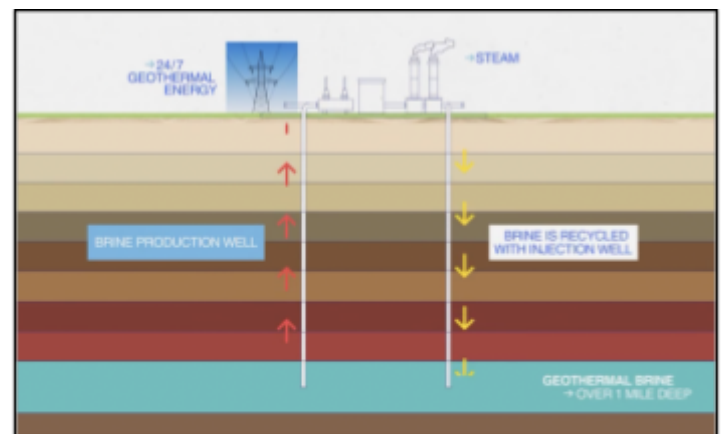


Figure 8. Screenshot from a Facebook post by Ryan Kelly, member of the Imperial County Board of Supervisors (November 10, 2025), featuring the caption "A vision for a new sustainable energy, critical minerals, and domestic supply system in Imperial" (timestamp 0:44).

For example, on its Facebook page, the County posted a photo of Rod Colwell with Governor Newsom at the Hells Kitchen project site, quoting Colwell:

Imperial County supports the Governor's Vision of securing a domestic supply of critical materials and Lithium Valley can produce these valuable resources in an environmentally conscious way. Each proposed lithium extraction plant would be a closed-loop system, without the creation of open pits or solar evaporation ponds. As well as an inviting

location for battery manufacturing, adjacent to the resource, here in Imperial County (Colwell, 2023).

By highlighting this collaboration, the County reinforces CTR's initiatives while signaling responsiveness to state priorities. This dual positioning allows the County to maintain political credibility with regulators and the public, while promoting industry-friendly policies that support CTR's operations.



Figure 9. Screenshot from a March 20, 2023 Facebook post by Imperial County showing Governor Gavin Newsom touring potential development zones alongside Rod Colwell, CEO of Controlled Thermal Resources, and Ryan Kelly, member of the Imperial County Board of Supervisors.

Governance, Participation, and Legitimacy

(Procedural Justice, Institutional Authority, and Trust)

The Imperial Valley represents a landscape of intersecting power relations among multiple stakeholders with distinct concerns, economic capacities, political agendas, and forms of influence. It is crucial to evaluate how the development of the Hell's Kitchen project may perpetuate or reinforce inequality and contribute to unevenly distributed environmental and social costs, while also examining the processes through which decisions are made and whose voices are prioritized.

Analyzing procedural justice within stakeholder interactions is vital to construct a clearer understanding of whether communities and groups with less political or economic power have an equal balance of authority in decision-making processes. Procedural justice “requires the meaningful participation of marginalized peoples in decision making processes, and a commitment to recognizing and addressing how power, authority, and suppression operate in such arenas” (Koebele et al., 2023; Mendez-Barrientos, Under Review, as cited by Barrientos et al., 2024), shaping broader notions of procedural failures (Mendez-Barrientos et al., 2024, p. 4).”

The term “marginalized peoples” is used here to highlight structural conditions that shape unequal access to participation in public discourse and decision-making, rather than to suggest a lack of autonomy, motivation, or capacity for self-determination. Rather, I refer to populations that have historically been denied equal access to such participation due to structural limitations, including underrepresentation in unincorporated regions, immigration status, language barriers, limited access to transportation or digital resources, or exclusion from formal decision-making spaces. These examples illustrate how inequalities in political and community participation can emerge. This research draws on an environmental justice (EJ) lens to examine how structural inequalities shape access to participation, representation, and decision-making power.

Procedural Barriers in Administrative Participation

On December 23, 2025, the County of Imperial posted a public statement on their website, titled “Imperial County Announces Public Comment Period for Lithium Valley Specific Plan and Environmental Review,” in which they outlined the steps and requirements needed to submit public comments so that they could be addressed in the Final Programmatic Environmental Impact Report (PEIR), highlighting the ways in which the County engages with the public and receives feedback. For context, the Draft PEIR extends beyond the Hell’s Kitchen lithium project and serves as a broader framework for long-term zoning and intended land use tied to critical mineral extraction, geothermal energy, and other green energy initiatives in the Imperial Valley, serving as a baseline for future development projects related to these industries.

While the Hell's Kitchen Lithium Project has completed its project-level Environmental Impact Report (EIR) review, including the public comment period and the preparation of a Final EIR, the Lithium Valley Specific Plan (LVSP) and its Programmatic Environmental Impact Report (PEIR) constitute a broader, subsequent planning effort. Together, they establish a regional framework for lithium and geothermal development in the Imperial Valley. The LVSP is particularly relevant in this context because it guides how the County evaluates and incorporates public input on issues related to cumulative development, land use, and infrastructure. Importantly, it addresses not just individual lithium projects but also the larger vision for development and projections associated with the Lithium Valley “vision.”

Public comments submitted during the PEIR review for the Lithium Valley Specific Plan (LVSP) emphasize stakeholder concerns regarding the cumulative impacts of development projects in the region, including issues of resource scarcity and environmental degradation (Imperial County Planning & Development Services Department, 2025; LVSP Public Comments Combined, 2025). While the LVSP Programmatic Environmental Impact Report (PEIR) operates at a regional level, addressing cumulative impacts, land use planning, and long-term development trajectories for lithium development in the Imperial Valley across multiple projects and industries (Imperial County Planning & Development Services Department, 2025)—the Hell’s Kitchen project underwent a separate, project-level Environmental Impact Report (EIR) process (Imperial County Planning & Development Services Department, 2023), which was subsequently subject to legal challenges regarding potential violations of the California Environmental Quality Act (CEQA), including inadequate analysis of air quality, hazardous waste, water supply impacts, and tribal consultation requirements (Earthworks & Comité Civico del Valle, 2024). Despite these procedural distinctions, analyzing both processes together provides critical insight into how public participation is structured, experienced, and contested across different stages of lithium development in the Imperial Valley.

The Draft Program Environmental Impact Report (PEIR) public comment period began in late December 2025 and was initially scheduled to conclude on March 2, 2026, but was subsequently extended to April 17, 2026 in response to community requests. Comments submitted during this extended review period will be incorporated into the Final PEIR, which is expected to be completed following the close of the comment period and made available to the public.

The County released the Program Environmental Impact Report (PEIR) together with the Lithium Valley Specific Plan in a combined document, the *Draft Lithium Valley Specific Plan Program Environmental Impact Report*, separate from the standalone LVSP document. This combined report covers approximately 51,622 acres of potential development sites and outlines that the project would include:

implementation of LVSP land use regulations, design guidelines, transportation networks, and infrastructure policies tailored to support the unique community-based needs of the Lithium Valley region. By leveraging the unique characteristics of the Imperial Valley, this project aims to harness renewable energy resources, extract lithium and potentially other available minerals, develop manufacturing and distribution of related products (electric batteries, capacitors, vehicles, components, etc.), other innovative renewable resources industries, and develop the associated infrastructure in a sustainable and environmentally conscious manner. Through careful planning and adherence to regulatory requirements, the project seeks to foster economic growth, support clean energy initiatives, and preserve the region’s natural resources and biodiversity. The PEIR would streamline future environmental assessments for projects within the Plan Area. As

per Section 15168 of the CEQA Guidelines, a PEIR can be prepared when the scope of the environmental reviews covers a series of interconnected actions. These actions may include the development of governing rules, such as land use plans, and may involve multiple projects under the same regulatory authority. (County of Imperial, 2025a, p. 16)

In this way, the PEIR facilitates future reviews for projects like the Hell’s Kitchen lithium project within the planned area, making it a central mechanism through which the County engages with the energy transition and guides decision-making for present and future development initiatives. Additionally, it has become an important tool for shaping public discourse about lithium projects and planned development initiatives in the region, sparking discussion among the community and serving as one of the primary ways that the County has communicated its intentions to the public.

In the December 2025 statement on the Imperial County website, the County provided updates on the public comment period, noting:

“Written comments will be accepted only through the following channels:

- “By Mail: Imperial County Planning & Development Services Department 801 Main Street, El Centro, CA 92243
- By Email: publiccomment@co.imperial.ca.us
- All submissions must clearly include ‘LVSP 2025’ in the subject line. To ensure fairness and consistency in the environmental review process, oral comments and submissions made outside of the methods listed above will not be accepted or responded to as part of the Final PEIR.”

This notice, while seemingly procedural, carries significant weight and highlights the potentially contentious relationship between the community and the County regarding in-person public comment periods. By establishing rigid formats and specific submission channels, the County created a structured form of dialogue that shapes how community feedback and concerns can be expressed and addressed. This format may create structural barriers for residents who lack reliable technological access, digital literacy, or English-language fluency, as the notice was distributed only in English and required either mailed or emailed submissions. While the County presents this structure as a mechanism to ensure fairness and consistency, the limitation of participation to specific written formats may narrow who is realistically able to engage. This becomes particularly significant when considering that one of the unincorporated regions directly affected by the proposed development, Niland, only recently received notice in February 2026 that it would be obtaining a post office in the near future. In this context, access to formal comment mechanisms intersects with broader infrastructural inequities.

As stated by Mendez-Barrientos et al. (2024), procedural justice distinguishes policy processes that merely invite participants into predetermined forums from those in which participants can shape rules, agendas, and outcomes (p. 5). The County's structured comment process reflects a model of participation that emphasizes formal input channels rather than the co-creation of decision-making parameters, contradicting the principles of procedural justice, which envision community members as active participants in shaping rules and engaging in dialogue surrounding decision-making. Many community members have expressed concerns that the County Board of Supervisors is closely aligned with CTR and that key decisions appear predetermined. Whether or not this perception reflects institutional intent, it plays a significant role in shaping public trust and perceived legitimacy of County procedures.

In addition, limiting participation to written submissions rather than more interactive and in person formats may contribute to perceptions that community voices are filtered through procedural mechanisms rather than meaningfully integrated. While formal avenues for dialogue remain available, the structure of participation creates the potential for settings that may not fully align with environmental justice principles, which prioritize inclusive, accessible, and deliberative engagement.

In response to the public comment from the California State Lands Commission staff, who raised concerns about the adequacy of tribal consultation among other issues, the County stated:

The County conducted and closed AB 52 Tribal Consultation in compliance with the regulation. All Tribes that have requested consultation on County projects were contacted and a request for consultation was made. Requests from consulting Tribes were considered and responded to as appropriate. The AB 52 Tribal Consultation process closed, and the Tribes' input was incorporated into the DEIR (*Final Environmental Impact Report for the Hell's Kitchen PowerCo 1 and LithiumCo 1 Project*, prepared for Imperial County by Chambers Group, Inc., December 2023, p. 68).

This response primarily highlights how the County suggests it is following regulatory requirements. However, as noted in the letter below from Carmen Lucas, a leader of the Kwaayamii Laguna Band of Indians, this consultation was not extensive enough to meaningfully engage local Indigenous leaders and communities in the region. Moreover, the required consultation processes do not align fully with principles of procedural and environmental justice.

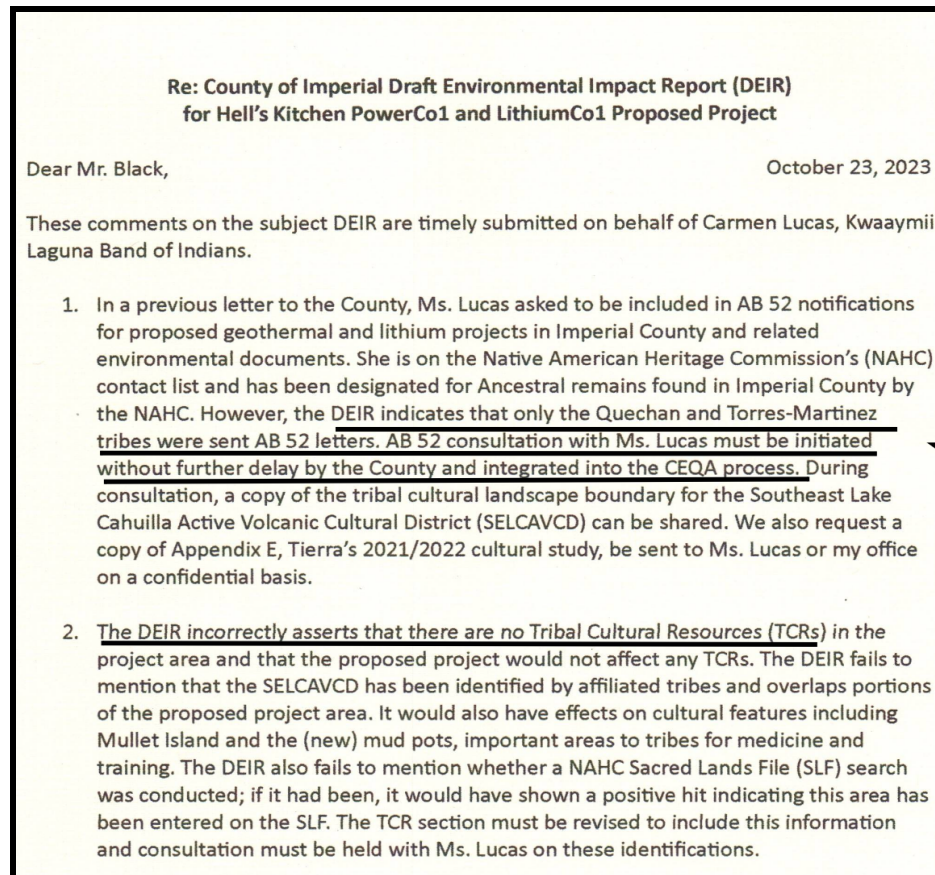


Figure 10. Public comment submitted by Carmen Lucas
on behalf of the Kwaaymii Laguna Band of Indians.

Judicial Standards and the Privileging of Technocratic Discourse

These governance dynamics are further illustrated in the October 2024 hearing at the Imperial County Superior Court. CCV and Earthworks filed a joint petition in the Imperial County Superior Court against Imperial County and CTR, alleging violations of CEQA following the County Board of Supervisors' approval of the Hell's Kitchen project and the Environmental Impact Report (EIR). In the County Superior Court, Judge Jeffrey Jones presided over litigation between Comité Cívico del Valle (CCV), Earthworks, and Controlled Thermal Resources (CTR) concerning the Lithium Valley Specific Plan and the alleged CEQA violations. As reported by the Calexico Chronicle (2024), Judge Jones requested statements from all parties "without emotional terms," stating that "cases like these are decided with nouns and verbs, not adjectives" (Rodriguez, 2024). The court's directive aimed to establish clear argumentative boundaries, shaping the acceptable register through which claims could be articulated, a process that signals the privileging of technical and procedural language over affective and often narrative-based testimony, drawing from experiential knowledge.

CCV and Earthworks, as environmental justice organizations, frequently draw from the lived experiences of the communities they represent, emphasizing local concerns, tribal perspectives, and historical ties to place. These concerns are often expressed through affective language, reflecting fear, anger, and uncertainty arising from people's experiences of daily exposure to environmental risks associated with future development projects, economic precarity, and long-standing patterns of marginalization. Limiting or discouraging this form of expression has functioned in practice to shape procedural engagement, often privileging technical or regulatory forms of communication over community-based testimony. Such advocacy relies on narrative and affective framing because it emerges directly from the material realities, social contexts, and historical connections of the communities affected.

The directive to remove “emotional terms” functioned, whether intentionally or not, to constrain how these organizations could frame and communicate community experiences within the legal arena. Such constraints stand in contrast to the historical development of environmental justice advocacy, which has relied on grassroots mobilization in disproportionately affected communities of color, where storytelling and testimony play central roles.

Historically, the environmental justice movement emerged from political and academic spheres in the 1980s, when civil rights activists in North Carolina protested environmental racism and organized to prevent the dumping of millions of pounds of contaminated soil containing PCBs in Warren County's disproportionately African American communities. Following this activism, environmental justice studies emerged as an interdisciplinary field that evaluates the unequal impacts of environmental pollution on racial and ethnic groups. This work influenced policymakers and contributed to a push for equal protections and regulations to safeguard public health within communities of color and other marginalized populations. This momentum eventually led to the Environmental Protection Agency's adoption and further definition of environmental justice, creating a more formal federal framework for future policy work. This trajectory highlights how grassroots mobilization, driven by the lived experiences, struggles, and collective power of affected communities, transformed personal experiences into political action and broader social change (Mohai et al., 2009).

In the context of Imperial County, these dynamics remain highly relevant. Local residents, in voicing their concerns, draw from their experiences living in Imperial County, including concerns about their proximity to development sites, apprehensions about water scarcity, tax allocations, and the impact on the local economy and workforce. These concerns also reflect experiences of limited labor opportunities and broader social challenges in the region, as well as perceptions of the Board of Supervisors, shaped by a range of lived experiences. Nonprofit organizations such as CCV and Earthworks draw on both scientific evidence and quantitative data related to the potential impacts of lithium extractive industries in the region. At the same time, these organizations center community civic engagement and participation in their work,

illustrating how such constraints may inhibit their ability to adequately represent public perspectives and articulate the broader moral implications of development.

By contrast, industry actors are often better positioned to rely on technical documentation, regulatory compliance language, and procedural framing in the legal arena. This professionalized framing is frequently perceived as more neutral and authoritative within legal settings, thereby privileging technocratic forms of knowledge over experiential, community-based, and environmental claims. This example highlights how procedural neutrality can nonetheless shape which forms of knowledge are considered legitimate within governance processes

As seen in the Hell's Kitchen case, the work of Michael Méndez helps further explain how these dynamics are not only procedural, but also rooted in broader environmental justice concerns regarding participation and epistemic authority. Méndez emphasizes that “bottom-up, transparent forms of decision-making” are critical for redressing environmental inequities, particularly where regulatory systems exclude “the voices and embodied perspectives of communities of color” (p. 61). In this context, the key issue is not only how arguments are framed in legal settings, but how certain forms of knowledge come to be institutionalized as credible or invalidated.

Narrative Framing and the Construction of Legitimacy

Beyond formal procedures, governance and legitimacy are also shaped through public messaging. CTR's CEO, Rod Colwell, has publicly characterized litigation brought by CCV and Earthworks as a "frivolous lawsuit" and "complete bullshit," presenting the court's dismissal as evidence that the NGOs' claims lacked technical merit (Guilin-O Live, 2025, 10:11–10:16). In an interview, Colwell was asked about CCV and their approach to the lawsuit. He stated that “it caught us all by surprise” before continuing:

I think Judge Jones made it pretty clear there was no technical merit to any claim. Which was fine, we create dust, right, but we mitigate by putting blacktop roads down. Every idiot understands that. The water use claiming to be the steward of the water ... The main point is that CEQA is the most arduous environmental permitting law on the planet. You know, we spent an extra 8 months before we even launched the damn thing; it must have weighed forty pounds with studies on studies, and nothing there that was credible in any of the claims. (Guilin-O Live, 2025, 6:10–7:18)

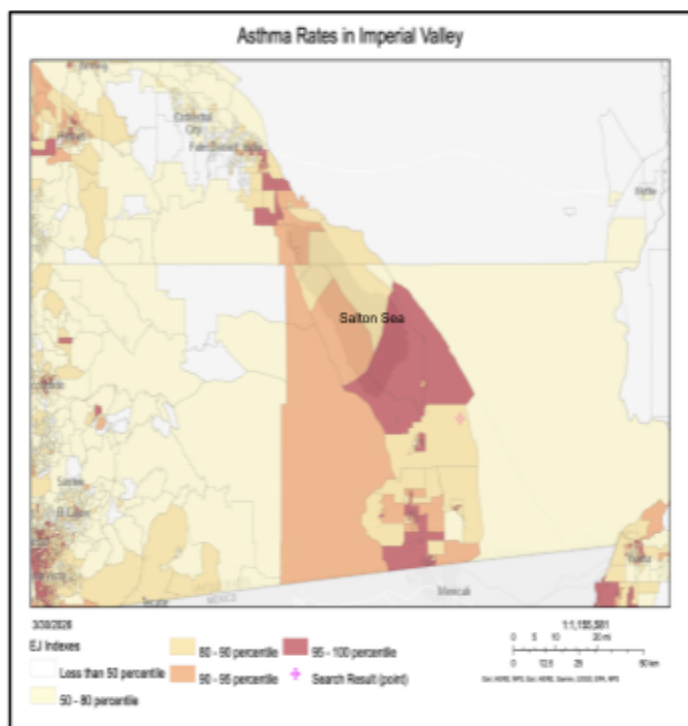


Figure 11. Asthma rates in Imperial County (EJScreen, U.S. Environmental Protection Agency, 2024), highlighting areas of elevated prevalence near regions where geothermal activity and lithium extraction are projected. These patterns underscore community concerns about potential health impacts from industrial and energy development.



Figure 4
Lithium Valley Specific Plan: Proposed Development Areas Including Hell's Kitchen LithiumCo 1 (HKL1) **Note.** Adapted from *Draft Lithium Valley Specific Plan Environmental Impact Report (SCH# 2023120104)* (Imperial County, December 2025, p. 151).

While Colwell frames the issue through the lens of technical merit and regulatory compliance, community concerns extend beyond whether mitigation measures are technically feasible and, for many residents, stem from embodied experiences with respiratory health issues, longstanding public health concerns, cumulative environmental and health impacts, and other community vulnerabilities that shape local residents' perceptions of the proposed development.

Returning to Figure 4, the earlier visualization of the proposed development areas for the Lithium Valley Specific Plan, including the region where Hell's Kitchen LithiumCo would develop, alongside Figure 11, which illustrates asthma indicators within the region, highlights elevated areas of vulnerability and concern regarding respiratory health. These figures help contextualize genuine community concerns surrounding the potential health impacts that industrial development may have on residents' well-being. This provides an important contrasting perspective to Colwell's statements about "dust," which dismiss community concerns and environmental advocates' claims by framing these impacts as technically manageable rather than as broader public health concerns.

Colwell stated that Judge Jones' ruling was very clear on the technical challenges and that "you cannot appeal simply because you feel something is good enough or because you feel that there is dust or something" (Guilin-O Live, 2025, 10:32–10:41). By framing community priorities and concerns as trivial or unworthy of attention, his rhetoric reinforces an unequal power dynamic between industry stakeholders and the concerned public, including NGOs. In decision-making processes where development, environmental well-being, and public health are directly affected, these dismissive characterizations are especially consequential, leading to the infantilization of any party that critiques their project. Framing CCV and Earthworks' litigation as lacking substantial technical evidence serves to instill targeted efforts toward their reputational merit and professionalism and simultaneously pushes attention away from other substantive issues, such as tribal consultation, free, prior, and informed consent, and broader community-based concerns.

Colwell's statements narrowly characterize community concerns about air quality and respiratory health as "dust," downplaying the severity and complexity of the issue. This framing overlooks the broader environmental context, including the region's disproportionately high rates of asthma. As shown in Figure 11, the proposed lithium development areas identified in the Lithium Valley Specific Plan are located within communities that EPA EJScreen identifies as falling within the 95th–100th percentile for asthma indicators based on comparison with communities nationwide. A 95th–100th percentile ranking in EPA EJScreen means that these communities have asthma indicator values among the highest in the United States, exceeding those of 95 percent or more of communities nationwide. This highlights existing respiratory health vulnerabilities that contribute to concerns surrounding potential industrial impacts. These elevated asthma rates demonstrate an existing respiratory health burden that may increase community concerns and sensitivity to additional environmental stressors, including potential exposure to particulate matter and air toxics associated with industrial development and the drying Salton Sea.

Colwell's comments also fail to acknowledge how industrial construction and ongoing lithium development could increase dust generation and potentially exacerbate exposure to toxic particulates from the drying Salton Sea. These factors have led CCV, Earthworks, public stakeholders, and concerned residents to question the sustainability and potential health implications of the proposed project. The overlap between proposed development areas and communities experiencing elevated asthma indicators further demonstrates why residents and stakeholders have raised concerns regarding potential cumulative impacts associated with future lithium development. Despite mitigation efforts, potential health impacts remain a key community concern.

His characterization of community concerns over dust as naive reflects a broader industry framing that positions technical expertise as the primary form of knowledge and portrays

community members as unable to comprehend planned mitigation technologies. This rhetoric reaffirms the skewed power dynamics within the decision-making process, dismissing legitimate community concerns, where air quality is a significant challenge, effectively limiting dialogue in which these concerns could be discussed and addressed. This framing also fails to address the issue with care or contextualize concerns within a region where respiratory illness and air quality are longstanding public health concerns. This framing effectively delegitimizes critiques, positions industry as holding technological authority, and diminishes the perceived legitimacy of community and NGO advocacy.

Colwell added, “Technically the technical merits are that we won. We know we've won and we're moving forward. We don't really give a rat's ass about Olmedo and all the rest of them” (Guilin-O Live, 2025, 10:42-10:53). This statement further targets CCV as an opposing stakeholder. Olmedo, the Executive Director of CCV, is specifically called out in this remark. Colwell continues to frame these parties as opposition and their concerns as political barriers to be overcome, rather than as an opportunity for understanding or dialogue. This emphasis on “winning” and moving forward despite tension in the community demonstrates a lack of willingness to engage with CCV, Earthworks, or the broader community. Such rhetoric signals that this context is not conducive to dialogue or consensus-building.

Colwell also used highly confrontational language, characterizing Comité Cívico del Valle (CCV) as a “faction” that was “instilling fear and lies” and urging the Imperial County Board of Supervisors to “stop feeding” the “dangerous snake” (Bojórquez, 2024). Simultaneously, the County’s press releases emphasize the thoroughness of the Environmental Impact Report and frame the lawsuit as “meritless” following judicial rulings, sharing rhetoric similar to that of CTR.

In a September 23, 2025 post on the Imperial County website, the County questioned whether the lawsuit was grounded in CEQA violations or instead served as “leverage for a financial settlement.” The post stated, “Interestingly, while CCV and Earthworks continue the appeals process in the Hell's Kitchen Project, they also continue parallel efforts to receive a financial settlement from the Project, which they state would result in them dropping the lawsuit” (Imperial County, 2025c). This framing positions environmental justice groups as imposing duplicative costs and barriers to development, reinforcing a narrative in which regulatory challenge is equated with obstruction.

In the same post on the Imperial County website, the County cited remarks made by an Earthworks representative on September 22, 2025. Naimark, who serves as Earthworks' Western Mining Senior Manager (Earthworks, n.d.), stated that “a simple agreement would pave the way for Hell's Kitchen to move forward: the creation of an environmental impact program funded by a fee tied to the project's annual water use” and that “we have been and remain open to settlement

talks to implement reasonable environmental mitigation measures" (as cited in Imperial County, 2025c). The County used Naimark's statement to question the motivations behind CCV's lawsuit, asking, "Is this lawsuit on Hell's Kitchen Project about an error of the superior court and a violation of CEQA or is the lawsuit about leverage for a financial settlement?" (Imperial County, 2025c).

To provide context, there is no formally negotiated Community Benefits Agreement (CBA) between the developers of the Hell's Kitchen project and community groups or local residents. CCV sought a CBA through a proposed payment from Controlled Thermal Resources of \$83 million over the course of 30 years, the projected timeline/lifespan of the first stage of the critical mineral lithium project, as part of a plan to fund environmental justice programs that could support environmental justice advocacy and communities around the Salton Sea once extraction began. The payments would not go directly to their organization but would be structured on an annual basis to support community initiatives and community capacity building. These negotiations occurred before CCV's litigation began, and the request was ultimately denied by CTR.

Instead of a CBA, the Imperial County has created and instituted its own "Lithium Community Benefits Program," funded by a state-mandated lithium excise tax plan. The lithium excise tax was adopted through Senate Bill (SB) 125 in 2022, signed into law by Governor Newsom. This bill assists in the process of helping Imperial County develop lithium capacities in the Salton Sea geothermal resource area. The SB 125 funding helped support the development of the Lithium Valley Specific Plan (LVSP) and the PEIR documents that were evaluated by the public, CCV, and Earthworks. The bill also supplied a development and adoption of the lithium excise tax plan to fund affected communities from the industry. In addition to this plan, SB 125 assists in restoration efforts, assigning a percentage of revenues to the Salton Sea Restoration Fund. The goal of the bill was to facilitate renewable energy development, changing permissible land uses to include green industrial manufacturing (County of Imperial, 2025a).

Revenue from the lithium excise tax is collected under state law and allocated to counties, providing Imperial County with statutory authority to determine which communities are considered impacted and how funds are distributed. This statutory framework establishes mechanisms for procedural oversight and transparency, effectively reducing the need for formal CBAs. While funds are earmarked for community and environmental purposes, the structure of these processes and the way public communications are framed can create barriers to meaningful community participation, shaping perceptions of legitimacy and limiting opportunities for residents and advocacy groups to engage fully in decision-making.

In this way, the county aligns with the state government and Governor Newsom's initiatives to transition from fossil fuels to green energy while outlining plans for tax allocations. Section

47100(a) gives counties the power to distribute and create allocations specific to their regional needs, giving Imperial County significant discretion over which communities are deemed indirectly impacted and how compensation is reviewed. While CBAs have never been mandated by state law, they have often existed to build community support and mitigate opposition. However, in this case, § 47100 provides a statutory mechanism to distribute compensation to communities, allowing the county to meet these obligations through its own distribution process rather than through negotiated agreements. This mechanism may reduce pressure to negotiate CBAs, as the county can meet these requirements through its own allocation process. As a result, some community members express concern that the county retains disproportionate authority over the determination and distribution of community benefits. Coupled with perceptions that county leadership favors industry interests and that community voices remain underrepresented, this dynamic has contributed to skepticism regarding the transparency and reliability of the region's emerging economic development initiatives. This skepticism has contributed to broader mistrust among multiple actors. CCV, for example, has faced accusations of pursuing financial settlement, while the County and industry are perceived by some community members as insufficiently prioritizing community interests.

Governance Through Procedure and Discourse

Together, these administrative procedures, judicial directives, and public communications illustrate how governance in the Hell's Kitchen case operates not only through formal decision-making authority, but also through discursive strategies that shape whose knowledge is legitimized, whose participation is constrained, and how opposition is publicly interpreted. Procedural justice in this case is not solely about whether participation is technically permitted, but about how participation is structured, how legitimacy is defined, and how trust is constructed or eroded through both institutional practice and public narrative.

In order to demonstrate the relationship between the County and the Board of Supervisors with the public, I provide this example. The Metishi Network del Valle Facebook group is a public group with 21,500 members, described as a space for locals to ask questions, share “chisme” (informal local news and community updates, often involving everyday conversations and personal perspectives on events within their communities), and exchange perspectives with one another. This creates a platform that allows users to understand local concerns and priorities. The account essentially functions as a communal mutual aid network in which community members are able to share their honest feelings about what is happening in their community. After reviewing this group, it is clear it has become a tool for members to discuss local political actions and issues.

Within this space, Patricia Carrillo, a top contributor, often shares posts related to local government and the challenges of feeling misrepresented. In a post from December 9th, 2025, Carrillo shared a clip taken during a Board of Supervisors public meeting, in which Ryan E.

Kelley, the representative of District 4 (encompassing Brawley, Bombay Beach, Calipatria, Desert Shores, Niland, Salton City, Salton Sea Beach, Vista del Mar, and Westmorland), made the following remarks to attendees. During the meeting, Supervisor Ryan Kelley stated:

I've heard lots of arguments about why we shouldn't be able to do this item, or why we shouldn't be able to do this item, why we can't develop here, why we can't do this. Does anybody ever come to this assembly and say why we can do something? Does anybody ever bring a positive outlook into this chamber? (Metishi Network Del Valle Group, 2025b)

This form of dialogue and discursive strategy within the chamber illustrates how opposition is constructed and framed. Concerned citizens are depicted as impediments to industrial development and progress, while their concerns are reduced to pessimistic perspectives, effectively delegitimizing their testimonies. Consequently, their apprehensions are positioned as obstacles to progress and as nuisances within the procedural process. These patterns within the chamber have created long-standing skepticism within the public regarding their relationship with decision-making spaces. This is further illustrated in the Hell's Kitchen lithium project, where these dynamics have become more contentious.

To analyze public interpretations of this comment, I examined responses from local Imperial Valley residents and members of the Metishi Facebook network in the post's comment section. Although classified as a private group, membership is unrestricted and easily obtained, making the account function as a broadly accessible community space rather than an exclusive one. Carrillo expressed her sentiments about this video clip she shared from a Board of Supervisors meeting, writing:

We must ask: Since when did asking for an Environmental Impact Report (EIR) become an act of "shame"? Supervisor Kelley recently stated that the "window is closing" for our county and that further debate is a "laugh." But for those of us living near these proposed sites, the concerns are not a joke... When our elected officials dismiss the fears of mothers, farmers, and local business owners as "uncertainty" or "bureaucracy," they forget who they serve. We are not "impediments" to progress; we are the people who will have to live with the consequences of these decisions long after the construction crews leave. We call on Supervisor Kelley and the Board to trade their admonishments for authentic dialogue. Our voices are not "outside interests"—they are the heart of this Valley. (Metishi Network Del Valle Group, 2025b)

The community's frustration is evident in how residents feel excluded from procedural decision-making processes. While there may be avenues for residents to voice their concerns, the responses they receive often fail to make them feel genuinely heard or that their well-being is

being prioritized. Carrillo's use of quotation marks around words like "shame," "impediments," and "outside interests" suggests she is directly responding to language or sentiments she and other residents have received from officials dismissing community concerns. Regardless, her message asserts that residents should never feel shame for seeking environmental safeguards, and it reclaims community power by describing residents as "the heart of the Valley" and noting that officials "forget who they serve."

In another post to the Metishi Network Del Valle Group, dated January 9, 2025, Carrillo asked whether Imperial County was becoming a "revolving door" for industry insiders, writing:

Is Imperial County becoming a 'revolving door' for industry insiders and professional job-hoppers? In just the last few months, the Board of Supervisors has made moves that should have every taxpayer in the Imperial Valley asking: Who are we actually hiring?

The 'Academic' Outsider (Bruce Davis) ... Are we being taken in by the 'glitz and glamour' of his degrees?

The 'Industry' Insider (Bari Smith Bean): Our Deputy CEO of Natural Resources came directly from marketing for BHE Renewables (Berkshire Hathaway Energy). She now works hand-in-hand with Supervisor Ryan Kelley to oversee the 'Lithium Valley' plans—the same industry BHE dominates. (Metishi Network Del Valle Group, 2025a)

In this statement, there is a clear articulation of mistrust between local residents and the Board of Supervisors, who hold final decision-making authority over lithium development and project approvals. The Board is framed as composed of both “academic outsiders” and “industry insiders,” whose legitimacy is questioned through references to the “glitz and glamour” of academic credentials and professional mobility. This framing reflects frustration with technocratic authority, where expertise is perceived as disconnected from local experience, contributing to growing resentment toward institutional decision-making.

In addition, concerns emerge around potential conflicts of interest, as members of the Board are described as closely aligned with lithium development initiatives and affiliated industry actors. This perceived overlap between governance and industry reinforces a sense of diminishing local control as large-scale development accelerates.

Eddy Peña, a member of the Metishi Network Del Valle Group further expresses an environmental concern in his comment stating, “The valley I grew up in, the agricultural hub, is gone. The water used for lithium extraction is brackish water that is used and replaced back into the water table” (Metishi Network Del Valle Group, 2025b). This statement highlights apprehension about the ecological sustainability of the direct lithium extraction method, which

has been characterized as a green solution compared to more water-intensive strategies used to extract lithium and minerals. Jonathan Gonzales, a member of the Metishi Network del Valle group further articulates this frustration by sharing:

Why can't we bring a positive outlook to the chamber? Because you rarely do anything that truly represents what this community and its constituents want. Too often it feels like decisions are based on who donates to your campaigns and who keeps you in office, not the people who live here. Not everyone is educated enough to fully understand how power and politics have shaped our valley, but many of us are. A lot of people stay quiet because they feel they cannot make a change anyway. The reality is that many residents believe these officials do not truly care about people like you and me. It comes across as being about personal benefit and money, not the real problems this community faces every day.

So to answer your question directly, how about for once in your political life you start listening to the people instead of the people filling your pockets? And let's be honest, that is exactly why frustration keeps growing. We aren't dumb...At the end of the day, "positivity" does not mean silence or agreement; it means accountability and leadership that actually represents the people and their needs. Let me ask you this, sir: have any of you—this board, this chamber, this assembly—ever asked the public or the community what it is that they want or think they need? Maybe there would be more positivity. (Metishi Network Del Valle Group, 2025b)

Across these comments, there is a demand for leadership that meaningfully represents the needs of the community, alongside a critique of institutional processes that prioritize and legitimize technocratic knowledge and industrial development in alignment with corporate interests. Instead, these comments call for transparent and accountable leadership that centers the ecological, public health, and overall well-being of the community in a more holistic manner, while also underscoring the structural conditions driving growing frustration between locals and the county.

Distribution of Risks and Benefits

The distribution of risks and benefits associated with lithium development in Imperial Valley encompasses topics related to the allocation of financial revenue generated from lithium extraction, as well as broader themes related to economic opportunities and regional development, environmental responsibility, public health concerns, and community participation in decision-making processes. Lithium extraction has been framed by state and county institutions as a pathway for potential regional economic transformation through tax revenues, job creation, and investment opportunities associated with the emerging industry. Within this section, I explore how the community is understanding, responding to, and, in some cases, contesting these framings and decisions.

During this research, I have found that the structure of the lithium excise tax plan, workforce projections, and the urgency surrounding accelerated development have contributed to tensions within the community regarding who is positioned to benefit from the emerging industry and who may bear the potential burdens and risks associated with development. These tensions also highlight questions regarding how decision-making bodies are working with communities and disseminating transparent knowledge about the future of lithium development, including potential opportunities, risks, and uncertainties. Community concerns reflect broader environmental justice issues, particularly when formal mechanisms designed to distribute benefits raise questions about their ability to create equitable outcomes in practice. By evaluating these community concerns, this section examines perceptions of fairness and the relationship between distributive justice and procedural justice in the region's transition toward lithium development.

Structure of the Lithium Excise Tax and Distributional Justice

A key mechanism shaping the distribution of benefits is the lithium excise tax established under state law and implemented in Imperial County. The tax is applied to lithium extraction from geothermal brine and allocates revenue through a structured distribution model. Of total revenues, 80% is allocated to counties, while 20% is directed to the Salton Sea Lithium Fund for environmental restoration. Within the county's share, at least 30% must be distributed to communities most directly and indirectly impacted by extraction activities.

From an EJ perspective, this structure represents a formal attempt at distributive justice by embedding revenue redistribution into statutory policy. While the structure appears equitable in design, its implementation raises procedural questions regarding how “impacted communities” are defined and how allocation decisions are made in practice. The designation of funds into separate accounts, including dedicated environmental restoration funds, also reflects an institutional attempt to separate economic development from environmental remediation.

However, the designation of “directly impacted communities” remains contested in practice, with some residents expressing concern that this classification does not fully reflect lived proximity or perceived exposure to environmental and social impacts. This ambiguity has contributed to feelings of exclusion among certain community members who nonetheless experience indirect effects of development activities. This debate is further complicated by both community and industry responses to the lithium excise tax. For example, public comments submitted on the Lithium Valley Tax Plan reflect concerns over perceived inequities in recognition and support, with one resident asking, “Why are we not as important as everyone else in the valley to get the help and respect we deserve?” (Youngberg, 2024, p. 22).

Adding to this tension, Controlled Thermal Resources leadership has also characterized the tax as “unfair,” reflecting broader friction between state-led redistribution mechanisms and private sector expectations regarding cost-sharing and local obligations. Such framing highlights the contested legitimacy of redistributive policy instruments in the Lithium Valley context.

Importantly, although 100% of revenue originates from extraction activities, the distribution process is mediated through state and county governance structures, which determine how benefits are ultimately experienced at the local level. This mediation highlights a central procedural justice concern: equitable distribution on paper does not necessarily translate into perceived fairness or meaningful community benefit on the ground.

Revenue Distribution and Community Allocation

Of the total revenue allocated to Imperial County — 80% of the overall excise tax, the county must distribute at least 30% to communities most directly and indirectly impacted by lithium extraction. The remaining portion of the county’s share is at the county’s discretion and may be used for general county purposes, mitigation, or infrastructure needs. Separately, 20% of total lithium excise tax revenue is allocated by state law to the Salton Sea Lithium Fund for environmental restoration. This 20% is not part of the county’s 80% share and is managed independently for environmental purposes. In short, 100% of revenue from the lithium excise tax comes from commercial lithium extraction and sales, flowing from extraction companies to the state and then distributed according to these allocations. This information is drawn from Revenue and Taxation Code § 47100(a), which specifies the 80/20 split: 80% of revenue goes to counties (with at least 30% of each county’s share directed to impacted communities), and 20% of total revenue is designated for environmental restoration.

All-Affected Communities				
Location	Population	% of Pop	15% Allocation	Amount*
Bombay Beach	231	0.14%	\$912,500	\$3,735.10
Brawley	26,416	15.48%	\$912,500	\$143,739.27
Calipatria	6,515	3.82%	\$912,500	\$37,333.96
Niland	756	0.44%	\$912,500	\$6,542.13
Westmorland	2014	1.18%	\$912,500	\$13,268.32
Calexico	38,633	22.64%	\$912,500	\$209,060.29
Desert Shores	1,128	0.66%	\$912,500	\$8,531.11
El Centro	44,322	25.97%	\$912,500	\$239,477.85
Heber CDP	6,896	4.04%	\$912,500	\$39,371.06
Holtville CCD	7,700	4.51%	\$912,500	\$43,669.84
Imperial	20,263	11.87%	\$912,500	\$110,840.83
Ocotillo CDP	215	0.13%	\$912,500	\$3,649.55
Palo Verde CDP	152	0.09%	\$912,500	\$3,312.70
Salton City CDP (includes Vista Del Mar)	5,155	3.02%	\$912,500	\$30,062.40
Salton Sea Beach CDP	508	0.30%	\$912,500	\$5,216.14
Seeley CDP	1,729	1.01%	\$912,500	\$11,744.50
Winterhaven-Bard CCD	2,698	1.58%	\$912,500	\$16,925.48
Quechan Tribe	2,475	1.45%	\$912,500	\$15,733.16
Torres Martinez Tribe	2,859	1.68%	\$912,500	\$17,786.31

*Amount includes \$2,500 base allocation prior to population allocation. Totals may not be exact due to rounding.
Note: to accurately account for the population of the Winterhaven-Bard CCD region, census data is being used for Winterhaven-Bard CCD instead of Bard and Winterhaven individually. Vista Del Mar is within the Salton City CDP.

Figure 13. Diagram from the Lithium Excise Tax Plan illustrating the structure of tax allocation for lithium revenue to directly impacted communities, as designated by the County of Imperial.

Structure of the Lithium Excise Tax

The lithium excise tax plan illustrates how revenue from extraction is allocated to balance economic benefits, community compensation, and environmental restoration, providing a concrete example of how financial and regulatory mechanisms shape the distribution of risks and rewards from lithium development.

The excise tax plan has been implemented effectively since early 2023. It is a tax applied to producers for extracting lithium from geothermal brine, where the majority of the tax and revenue go to the state and counties (80%), and the remaining 20% goes to Salton Sea restoration. The *Lithium Excise Tax Funding Plan* under SB 125 is a statewide law, but it is designed to apply specifically to Imperial County. In this document, the County states that its plan is "based solely on estimations and projections and is considered speculative" (Imperial County, 2024a, p. 4), further explaining the excise tax structure:

Tax law requires any person who extracts lithium from geothermal fluid, spodumene ore, rock, minerals, clay, or any other naturally occurring substance in this state to pay a lithium extraction excise tax upon each metric ton of extracted lithium carbonate equivalent. (Imperial County, 2024a, p. 4)

The Imperial County website highlights that revenues from the lithium excise tax will be placed in a dedicated fund separate from the county's general budget, ensuring that the funds are used for their intended purpose. These percentages are calculated from the total tax collected from lithium extraction companies.

Competing Institutional Narratives: RAND Report and Workforce Strategy

These tensions between formal redistribution mechanisms and perceived fairness are further complicated by institutional narratives that frame the long-term economic potential of lithium development. The RAND Corporation's workforce report, "Empowering Imperial County," was contracted by Imperial County and plays a central role in shaping how the lithium economy is framed institutionally (Alhajjar et al., 2025). The report emphasizes a 10-year development horizon and identifies both opportunities and structural constraints, including infrastructure gaps, educational limitations, and workforce readiness challenges. While County communications frequently draw on RAND findings to highlight economic potential, the report itself presents a more conditional and phased interpretation of development outcomes.



Figure 14. Screenshot from the Imperial County Instagram account (May 26, 2023), featuring a post captioned: "On Wednesday, May 24th, Imperial Valley College (IVC), the County of Imperial, and representatives from EnergySource Minerals, BHE Renewables, and Controlled Thermal Resources announced the launch of the Lithium Industry Force Training (LIFT) program..."

From a discourse analysis perspective, this creates a divergence in framing between institutional actors. The County emphasizes economic opportunity and urgency, while RAND highlights uncertainty, sequencing challenges, and structural barriers that may limit immediate workforce absorption. This divergence contributes to what can be understood as informational asymmetry, where different stakeholders selectively emphasize aspects of the same dataset to support distinct narratives of development.

This asymmetry has direct implications for procedural justice, as uneven framing of feasibility and timing affects how communities understand their ability to benefit from the proposed lithium economy.

Employment Projections as Contested Knowledge and Framing Conflict

Employment projections constitute one of the most contested aspects of lithium development discourse. The RAND report and County communications project approximately 7,000 permanent operational jobs and 1,000 construction jobs across the Lithium Valley initiative, based on three major announced projects. However, these aggregated figures contrast with phased project-level estimates that present significantly different timelines and labor distributions.

At the project level, Controlled Thermal Resources' Hell's Kitchen development provides more specific projections. As reported by CTR, Phase 1 is estimated to generate approximately 220 permanent operational jobs and 480 construction jobs, with additional employment emerging in later phases. In contrast, broader communications often emphasize cumulative or full-capacity employment figures, which can obscure the phased nature of job creation.

This discrepancy becomes more pronounced in the context of the RAND report commissioned by the County, which uses Thacker Pass as a comparative benchmark to illustrate potential labor impacts in Imperial Valley. While this comparative approach provides a useful and widely accepted method for situating emerging projects within broader domestic lithium development trends, it also introduces important limitations when applied across projects with differing technological systems and development pathways.

Thacker Pass, as an open-pit mining operation, relies heavily on labor-intensive roles such as heavy equipment operation, hauling, and excavation. These forms of employment are more closely aligned with traditional extractive labor structures and existing regional skill sets. In contrast, geothermal lithium extraction and Direct Lithium Extraction (DLE) in Imperial Valley

are structured around more technologically intensive processes, requiring specialized expertise in chemistry, engineering, and systems operation.

These technological differences are compounded by variations in project phasing. Geothermal lithium projects are more incremental in their development, with employment opportunities distributed more gradually over time. As a result, while comparative modeling such as that used in the RAND report is valuable for providing a reference point for potential labor trajectories, it may not fully capture how differences in technology and phasing shape the timing, accessibility, and composition of local employment opportunities. From an EJ perspective, these distinctions are critical because they influence the “capacity to benefit” from development. When employment projections are communicated without clear differentiation between phases, technologies, and skill requirements, there is a risk of creating unrealistic expectations about local labor participation.

Framing of Opportunity, Urgency, and Risk in Lithium Development

The development of lithium extraction in Imperial County is framed by both the County and Controlled Thermal Resources (CTR) through a narrative of economic urgency and limited opportunity. From an environmental justice (EJ) perspective, this framing is significant because it shapes how risks and benefits are perceived, distributed, and ultimately contested within the community. By emphasizing that delays in project approval may result in “missed opportunities” for investment and employment, official communications construct lithium development as time-sensitive and economically necessary.

Building on this, urgency framing contributes to what can be understood as a procedural justice tension: while some residents interpret the project as a pathway to economic inclusion and job creation, others perceive accelerated timelines as limiting meaningful community participation in decision-making processes. In this sense, urgency operates not only as a temporal claim, but also as a discursive mechanism that influences how legitimate opposition and alternative perspectives are received within public debate.

At the community level, this has produced polarized responses. Some residents support development due to anticipated employment opportunities, while others raise concerns about environmental health, procedural exclusion, and long-term community impacts. These divisions reflect broader EJ dynamics in which distributive benefits (jobs, revenue) are weighed against perceived procedural deficits (lack of transparency and meaningful engagement).

Alongside these urgency-based narratives, the distribution of risks and benefits is also formalized through state-led fiscal and regulatory mechanisms.

Project Approval and Urgency Narratives

CTR and Imperial County highlight the potential economic benefits the Hell’s Kitchen lithium project and lithium developers could bring to the region, framing legal challenges or community pushback as delays that have prevented these opportunities from materializing, thereby generating tensions and diverging sentiments within the local residents due to diverging priorities and concerns. Some residents support the development due to its projected labor opportunities and economic projections, while others remain opposed to the project, leading to polarized perceptions within the community. Some locals have even participated in the negative depiction and framing of CCV, the local NGO engaged in litigation against CTR, highlighting the effectiveness of CTR and the County’s messaging.

County communications further reinforce this sense of urgency, emphasizing that the window to capitalize on the Hell’s Kitchen project represents a limited opportunity that could be lost to inaction, highlighting the economic stakes tied to project timelines, and for many this causes anxiety about a fleeting opportunity, while for others it raises concern that this “urgency” could lead to rushed development without enough planning or evaluation of environmental impacts that assess effects on community health and ecological sustainability during the rapid push for development.

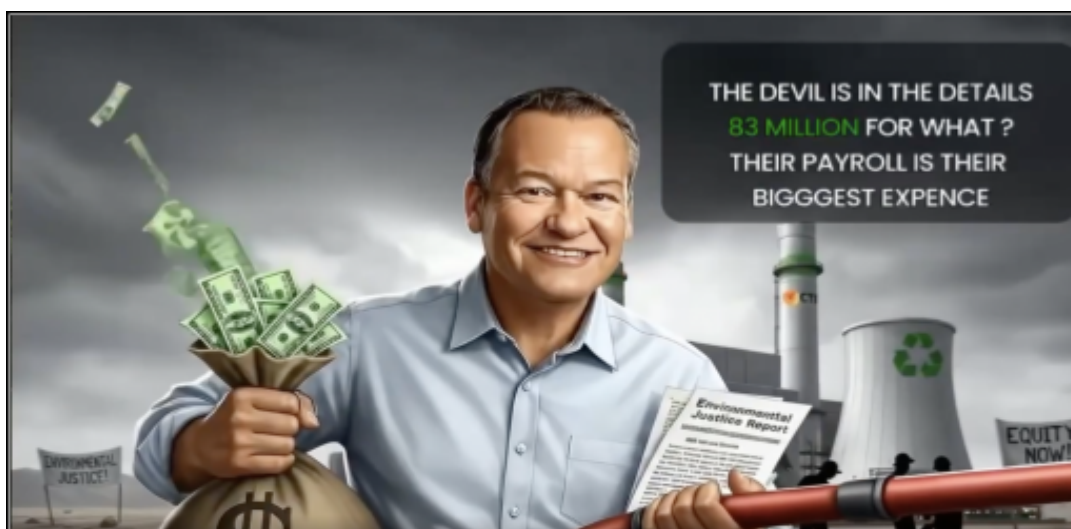


Figure 12. Screenshot from the Facebook account “White Gold in Lithium Valley” (September 26, 2025). The author is unidentified. This post illustrates how messaging related to Lithium Valley may shape community sentiment and trust toward CCV.

Transparency, Trust, and Community Knowledge Production

Publishing varied employment projections has contributed to widespread confusion about what a future lithium industry could look like in Imperial Valley, particularly regarding the Hell's Kitchen project and the types of local opportunities available during its initial stages. This confusion is not simply a matter of public misunderstanding, but rather reflects inconsistencies in how employment data are produced, framed, and disseminated by institutional actors. From a discourse analysis perspective, these discrepancies illustrate how different actors emphasize large-scale, cumulative job figures while often obscuring distinctions between project phases, timelines, and job types.

Policy Recommendations

Based on the findings of this study, three recommendations are proposed to strengthen procedural justice, transparency, and community participation in lithium development in Imperial Valley. These recommendations focus on improving the communication of employment projections, strengthening water governance coordination and public accessibility in water resource management decisions, and increasing transparency and community participation in lithium excise tax allocation. While additional pathways exist to expand community access to decision-making and participation in lithium development, these three recommendations are emphasized because the issues they address emerged as recurring concerns identified through public comments, stakeholder perspectives, and document and media analysis conducted throughout this study.

Recommendation #1: Improve Communication of Employment Projections

From an environmental justice and procedural justice perspective, inconsistencies in how employment projections are communicated limit communities' ability to meaningfully understand, evaluate, and participate in lithium development. As demonstrated in the analysis above, these inconsistencies are not only informational but also reflect broader issues of framing, transparency, and accountability. Imperial County and project developers should improve the transparency, consistency, and accessibility of employment projections by providing phase-specific job estimates, coordinating communication across institutions, and working with trusted community organizations to ensure residents receive accurate and accessible information about employment opportunities. Clear communication of employment timelines and projections is essential to procedural justice as it allows community members to evaluate potential economic benefits realistically, participate meaningfully in decisions regarding lithium development, and

hold project developers and institutions accountable for the commitments and projections they present to the public.

Provide Phase-Specific Employment Projections and Development Timelines

While cumulative employment projections are important for understanding the long-term potential of a regional lithium economy, greater emphasis should be placed on phase-by-phase employment breakdowns. This ensures that community members can better understand when jobs are expected to become available, while recognizing that timelines may shift due to regulatory, legal, or development delays, rather than focusing primarily on total projected outcomes.

From a procedural justice perspective, providing phase-specific projections improves transparency and allows community members to more meaningfully engage with development timelines and evaluate potential benefits. This information should be uniform to ensure consistent dissemination of knowledge and reduce discrepancies in how employment opportunities are framed across institutions.

Partner with Trusted Local Organizations and Community Platforms

To support community understanding, it is recommended that project developers collaborate with trusted local organizations, such as Imperial Valley Equity and Justice, and community platforms like the In Simple Terms podcast, to host workshops and information sessions. Many community members have expressed feeling excluded from decision-making and lacking access to timely, digestible project information.

This sentiment is also evident on Metishi Newtok del Valle, a community-run Facebook page where residents share concerns about events in Imperial Valley. Community member Patricia Carrillo frequently posts about the County Board of Supervisors and the Lithium Valley plan, highlighting a sense of disconnect in how information is conveyed. For example, she referred to a newly appointed supervisor as the “Academic Outsider (Bruce Davis)” and asked followers, “Are we being taken in by the ‘glitz and glamour’ of his degrees?” (January 10, 2026). She further questioned why local leadership experience seemed secondary to credentials, illustrating a perception that important information and decision-making processes are not being explained in ways the community can fully engage with.

Engaging trusted local platforms supports procedural justice by expanding access to understandable information and creating more inclusive channels for participation. Partnering with organizations and platforms already embedded in the community can ensure that

employment projections and project timelines are communicated clearly, accurately, and in ways that residents can understand and act on.

By creating these structured forums, developers can share employment timelines, phase-specific projections, and technical details in a transparent and accessible way. The goal is not to persuade, but to provide clear, understandable information about the realities of job creation. Engaging multiple local platforms ensures that complex project details are communicated in formats that resonate with diverse audiences, ultimately building trust and fostering informed participation.



Figure 16. Conceptual illustration of the Hell's Kitchen lithium project in Imperial County, California, showing the proposed full campus layout with co-located auxiliary industrial sites (Controlled Thermal Resources).

Coordinate Employment Messaging to Reduce Confusion and Misaligned Expectations

To address the confusion identified in this analysis, particularly regarding inconsistencies between County and CTR projections, greater coordination and clarity in communication are necessary. Publishing varied employment projections has contributed to widespread confusion about what a future lithium industry could look like in Imperial Valley, particularly regarding the Hell's Kitchen lithium project and the local opportunities available during its initial stage.

This issue is particularly significant from a procedural justice perspective, as it affects not only access to information but the ability of community members to meaningfully interpret and act on that information. For example, Ashley Contreras, founder and CEO of Access to Thrive, recently created a podcast called In Simple Terms, with the sole goal of “break(ing) down topics like local politics, energy development, and policy in terms that, as she puts it, a ‘fourth grader could understand.’” In her podcast, she interviews various community leaders in Imperial County and discusses topics that “people are talking about” in the community (Dodd, 2026).

Even within a medium designed to make complex issues more accessible, the challenges of reconciling competing employment projections and making sense of conflicting information remain apparent. In an interview posted on the In Simple Terms Instagram account, accompanied by the caption, “In Simple Terms - The report claims 112 sustainable jobs, so where are the thousand jobs actually coming from?”, Contreras discussed the employment projections associated with lithium development and questioned the consistency between publicly communicated job estimates and project-level projections. She stated:

What I am understanding is that the lithium industry is going to bring jobs, but it’s only going to bring for seasons. And the report clearly says 112 sustainable jobs are going to be created, so when you really announce thousands of jobs and the reports say 100, there’s a discrepancy there (In Simple terms, 2025).

This example demonstrates that even highly engaged residents and community-led platforms designed to improve understanding are navigating inconsistent and sometimes difficult-to-reconcile conflicting information. Rather than reflecting a lack of community engagement or understanding, these discrepancies illustrate the challenges created when employment projections are communicated without clear distinctions between construction jobs, permanent operational jobs, project phases, and future expansion opportunities. This underscores the need for Imperial County and CTR to collaborate more closely to ensure consistent messaging and clear communication of employment projections across all platforms.

For instance, Phase 1 of the Hell’s Kitchen project is projected to create 220 direct sustainable jobs and 480 construction jobs, with additional opportunities emerging as later stages are built and co-located industries are established (CTR). However, an Imperial County statement on its official website presents different figures, which may contribute to public confusion. In a statement published September 23, 2025, the county wrote, “Today, we are twenty months past the day the County approved the Hell’s Kitchen project... This project... could have already employed over 500 construction jobs and could be in the process of hiring 75 full-time employees to start new, high paying careers.”



Figure 15. Overview of community questions and environmental considerations related to the Hell's Kitchen Lithium & Power project in Imperial County, California. Adapted from *Community and the Environment: Your Questions Answered – Hell's Kitchen Lithium & Power, Imperial County, California* (n.d.), https://static1.squarespace.com/static/5bbc837993a6324308c97e9c/t/66876d52466a783f3f6e46da/1720151392424/240705_Community+QA_Website.pdf

As CTR publications indicate, these figures exceed the phased plan, which projected 220 direct jobs by 2026 and 940 by 2029. The County's statement claiming "over 500 construction jobs" is inflated relative to the actual phased projections, even assuming an earlier start. This discrepancy is not merely a matter of timing; according to the project's phased construction plan, the projected number of jobs would not have been available at that point. Such discrepancies can create inflated expectations about employment opportunities.

From a framing perspective, the way employment projections are communicated—whether as cumulative totals or phase-specific estimates—directly shapes how community members interpret the scale, timing, and accessibility of economic benefits. Maintaining consistent, phase-specific information is essential for ensuring that the community can understand the timeline and scale of job creation accurately. Providing consistent, transparent, and phase-specific information ensures the community can understand the process realistically, rather than being misled by aspirational or cumulative projections.

Clear and phase-specific communication ensures that support for development is based on an accurate understanding of both the opportunities and limitations of the emerging lithium economy, rather than on inflated or misinterpreted projections. This information is essential for the community to make informed decisions and remain active participants in the decision-making of the development of the regions they call home.

This issue is not due to a lack of engagement by community members; rather, it highlights how even those actively seeking to understand the lithium industry are exposed to inconsistent or misaligned employment projections. Additionally, disseminated information should clearly distinguish whether projections refer to the project at full capacity or to a specific phase of development.

Recommendation #2 : Enhance Water Governance Coordination and Public Accessibility in Imperial Valley

Long-term water governance for lithium development in Imperial Valley should be strengthened through greater transparency, interagency coordination, and meaningful public dissemination of accessible information and opportunities for participation in water resource management. Imperial County, the Imperial Irrigation District (IID), project developers, tribal governments, agricultural agencies, and community stakeholders should collaborate to provide phase-specific information on projected water demand, cumulative water use throughout the lifespan of projects, and long-term planning related to climate change and diminishing water resources. This information should help communities understand potential future water availability, identify which sectors and communities may be most affected under different allocation scenarios, and determine the long-term sustainability of proposed industrial development. Public access to these discussions and planning documents should be made readily available, including translations into Spanish and Indigenous languages, to strengthen procedural justice and help community members better understand the pressures these industries may place on regional water resources, agricultural livelihoods, public health, and the long-term sustainability of the Imperial Valley.

Background and Rationale

The reason I am writing about water and water resources in Imperial is because, after looking at public comments in initial impact report comment sections and released public comments on social media, it is clear water is one issue that the community is very concerned about with incoming industrial development.

The Imperial Valley is situated at the nexus of complex environmental limits and resource politics, particularly regarding future water allocation in the Colorado River Basin once the

current operating guidelines expire at the end of 2026. The Colorado River serves as Imperial County’s main water source for large-scale agricultural and municipal needs. At the same time, the Colorado River is a major regional and international water system that extends beyond Imperial County and the U.S.–Mexico border. It supplies water to about 40 million people across the southwestern United States, more than 5.5 million acres of farmland, and around 30 tribal nations (Public Policy Institute of California, 2025).

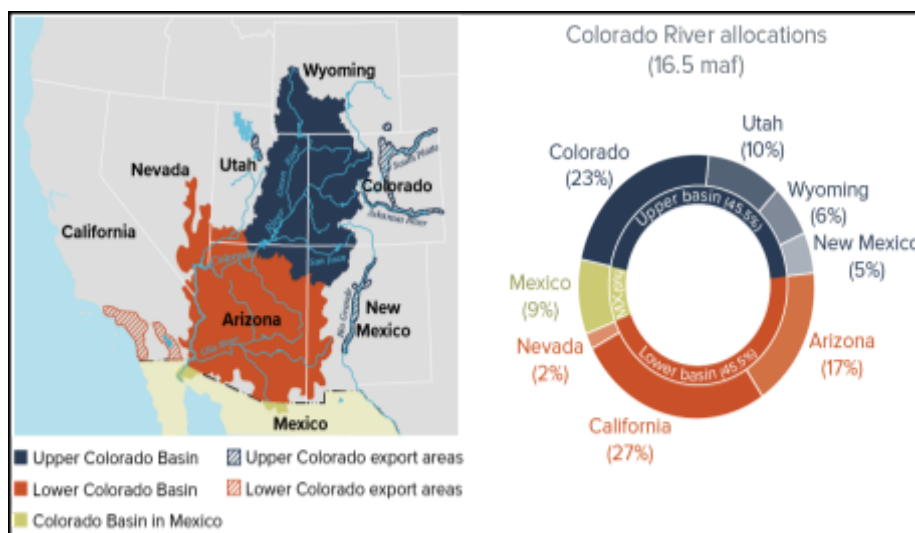


Figure 16. Colorado River allocations in the southwestern United States. Source: Public Policy Institute of California (2025).

It also supports agricultural regions in northwestern Mexico, including the Mexicali Valley and parts of Sonora. These rights exist within the broader “Law of the River,” which governs water allocations across seven U.S. states—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming—as well as Mexico, making the Colorado River one of the most vital and highly managed regional resources, increasingly pressured by climate change, prolonged drought, and competing demands.

“For the Imperial Valley, the Colorado River is the region's sole water supply. It supports more than 470,000 acres of farmland that produce a significant share of the nation's winter vegetables and generate more than \$3 billion in annual economic activity” (Imperial Irrigation District, 2026). Approximately “one in six local jobs depend on agriculture,” demonstrating the economic importance of water allocations for residents whose livelihoods are tied to this sector (Office of the Agricultural Commissioner and Sealer of Weights & Measures, 2024, p. 5). “IID holds the largest single entitlement on the Colorado River, including 2.6 million acre-feet of senior present perfected rights with a 1901 priority date, protected by federal law, binding contracts, and United States Supreme Court decrees” (Imperial Irrigation District, 2026).

This recommendation is further grounded in broader policy discussions surrounding the “reification” of the Colorado River, in which decision-makers increasingly recognize the river as a physically constrained resource requiring new pathways and management solutions. Over the past 25 years, Colorado River water use has exceeded the river’s annual supply by an average of approximately 1 million acre-feet (Public Policy Institute of California, 2025), underscoring the structural imbalance between supply and demand.

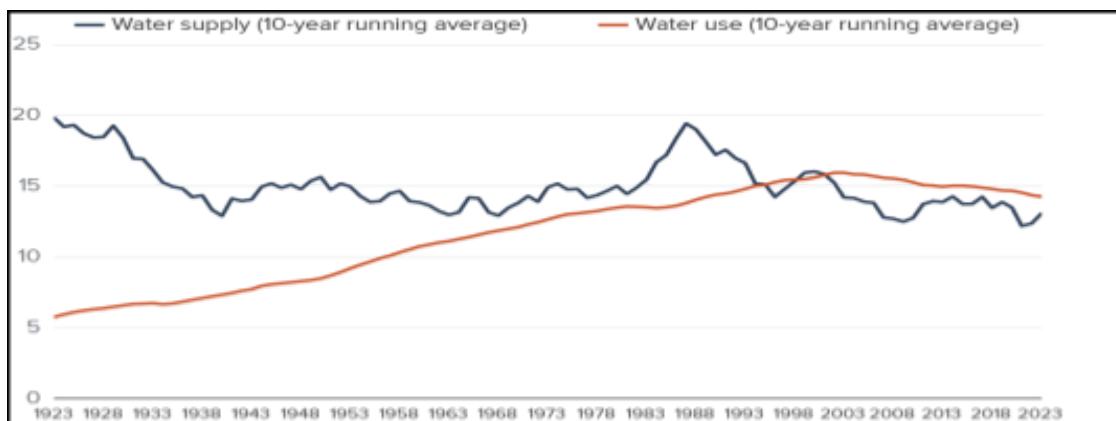


Figure 17. Water supply trends over the past 100 years
 Source: Public Policy Institute of California (2025).

Policy Context: Basin-Wide and Regional Water Scarcity

State and regional water leaders have reinforced this reality in a California Natural Resources Agency (CNRA) webinar on Colorado River management, where officials discussed basin-wide water scarcity and long-term hydrological change. Karla Nemeth, Director of the California Department of Water Resources, emphasized that prolonged drought conditions are fundamentally reshaping expectations of water availability. Similarly, Michael Anderson, a California State Climatologist with the Department of Water Resources, noted that basin flows have declined significantly, intensifying long-term scarcity pressures (CNRA, 2026).

JB Hamby, Chair of the Colorado River Board of California, further acknowledged that while California holds senior water rights, future planning must still account for what the river can physically support. He emphasized that “some of our users in California are exclusively dependent on the Colorado River,” including the Imperial Irrigation District (CNRA, 2026).

While these remarks were not made in reference to the Hell's Kitchen Lithium Project specifically, they provide important basin-wide context for understanding the structural constraints shaping future industrial water use in the Imperial Valley. Echoing this perspective, Robert Cheng of the Coachella Valley Water District highlighted that even regions with senior rights remain deeply dependent on the river and must engage in collaborative planning due to increasing scarcity pressures. Given these conditions, the water management and sustainability of industrial projects such as the Hell's Kitchen Lithium Project require clear and publicly accessible planning that accounts for the full project lifespan of approximately 30 years. This includes transparent communication about where industrial water supplies will be sourced from and how allocation decisions are made, ensuring that the public remains informed throughout the project's development and operation.

Industrial Development and Water Demand Pressures

Emerging industrial projects, such as the Hell's Kitchen lithium project, underscore tensions inherent in this water allocation system. While proponents emphasize economic development and energy transition goals, lithium extraction at Hell's Kitchen is promoted by Controlled Thermal Resources (CTR) as a less water-intensive approach using closed-loop geothermal systems. However, despite these claims, it still requires freshwater inputs for processing and cooling, raising concerns about cumulative water demand across multiple industrial projects.

Agricultural and tribal communities in the region have highlighted issues of procedural justice and equitable participation in decision-making, noting that water scarcity exacerbates existing environmental vulnerabilities and threatens long-term livelihood stability.

These concerns have been formally expressed through public comments on the Lithium Valley Specific Plan. For example, in comments submitted by the Kwaaymii Laguna Band of Indians, tribal representatives emphasized that tribal cultural landscapes and water systems have not been adequately considered in planning processes (2025, p. 71).

Water access is therefore not only a resource issue but also a cultural and livelihood issue tied to land stewardship and continuity of Indigenous practices.

Salton Sea Conditions and Community Impacts

The Salton Sea is a heavily degraded terminal lake whose condition is directly tied to Colorado River allocation decisions. As agricultural runoff declines due to water reallocation pressures, shoreline retreat exposes toxic dust, increasing respiratory health risks for surrounding communities. Residents are already experiencing environmental degradation, including sulfuric

odors, declining air quality, and ecosystem collapse, and are concerned that the industrial lithium project could potentially further exacerbate the drying of the Salton Sea shoreline, increasing respiratory illnesses tied to community proximity to the Salton Sea and worsening air quality due to particulate matter released from dust storms.



Figure 18

Southern portion of the Salton Sea showing shoreline conditions (1985, Google Earth historical imagery)
Note. Image from Google Earth (1985), Google LLC



Figure 19

Southern portion of the Salton Sea showing shoreline conditions and expanded exposed playa (2020, Google Earth imagery).
Note. Image from Google Earth (2020), Google LLC

Lithium Valley Water Planning, the Water Master Plan, and IID Coordination

Understanding the County’s aggregated water planning under the Lithium Valley Specific Plan is critical for contextualizing the Hell’s Kitchen Lithium Project, as the project’s water requirements will draw from shared allocations from the IID and must be balanced alongside other industrial lithium developments in the area.

In the County of Imperial Lithium Valley Specific Plan Executives summary released in February 2025 Draft the report noted that Phase 1 of the lithium development project would require a water demand of approximately 48,023 acre-feet per year, and that this allocation “will be secured through negotiations with IID. Water supply may be provided by surface water, groundwater, and reclaimed water. Future water supply for subsequent phases is intended to be

guided by a comprehensive Water Master Plan (WMP)” (County of Imperial, 2025c, p. 5). This information masks the project-level competition for water resources amongst competing sectors and interested actors, in addition to other industrial projects in the region that also rely on these allocations. In addition to this, some of the only provided information is from this initial Phase of the project and initial buildout, but it leaves communities in the dark about what these projections may look like once the full vision of the Hell’s Kitchen project is realized and at full capacity.

IID has raised concerns regarding the lack of consultation and clarity around these assumptions, noting that it was not fully engaged in the development of the Water Master Plan concept and was not consulted about its potential role in the process. The IID stated in response to the release of the Draft Lithium Valley Specific Plan in a report titled “*February 2025 Draft Lithium Valley Specific Plan Public Review Comments, Section 1: Federal, State and Local Agencies*,” stating:

Prior to the release of the Draft Specific Plan, IID was not aware of the County's intention to prepare a Water Master Plan (WMP) to identify the infrastructure and “strategies” to provide water supplies to meet the anticipated demands for Phases 2 and 3...A WMP is not a document IID has prepared or contributed to before now and it is currently unclear whether this would in fact be the correct mechanism to accomplish the desired objectives. (Imperial County, 2025a, pp. 23–24)

This statement further highlights the need for more transparent information for the public regarding the steps taken to account for water demand and water scarcity planning, as well as collaboration with IID.

Implications for Water Governance and Recommended Actions

Together, these perspectives demonstrate that, despite the legal protections of the “Law of the River” and senior water rights, future water governance in the Colorado River Basin will likely involve shared reductions across all users. This introduces significant uncertainty regarding long-term water availability and raises critical concerns about the sustainability of large-scale industrial development in the Imperial Valley, particularly lithium extraction projects that depend on stable and long-term water access.

Project developers and local agencies should therefore provide transparent, phase-specific disclosure of water use, clearly distinguishing between individual project demand, cumulative demand, and long-term projections under different allocation scenarios and drought scenarios. This should be supported by the completion and public release of a comprehensive Water Master Plan prior to Phase 1 approval, in collaboration with IID, and community and tribal consultation.

Formal coordination with the Imperial Irrigation District (IID) should be required at the earliest stages of project planning to ensure that proposed water use does not conflict with existing legal obligations and agricultural priorities. Community members, particularly agricultural workers, emphasize that uncertainty regarding water sourcing and management is creating concern about the potential impact it may have on their livelihoods.

Calexico resident Jorge Avila stated, "Mi preocupación es el agua. No hay manera de que reciben el agua del Salton Sea? Sin agua o sin detalles de como usaran el agua, nos dejan a los trabajadores de campo fuera" ("My concern is the water. Is there no way for them to receive water from the Salton Sea? Without water or details on how water will be used, they leave us field workers out in the cold," author's translation) (February 2025 Draft Lithium Valley Specific Plan Public Review Comments, 2025, p. 312).

Avila's comment reflects border community concerns regarding a lack of transparent communication between developers, local government, and Imperial Valley constituents surrounding decision-making processes related to water procurement. His statement highlights that uncertainty about water availability is not only an environmental concern but also a concern about participation and representation. Avila expresses concern that farmworkers are being excluded from decision-making spaces and draws attention to how those whose livelihoods depend on water availability may lack meaningful access to information and opportunities to participate in decisions that will directly affect their employment and economic security. Avila's comment also provides insight into how Spanish-speaking community members may be feeling regarding access to information about development decisions. In Avila's comment, he questions why the development plans propose drawing from Imperial Irrigation District (IID) water allocations, which are primarily used for agriculture, instead of drawing water from the nearby Salton Sea. This question demonstrates the apparent lack of explanation that the County and industry have provided to community members. These are legitimate questions that warrant clear explanations regarding alternative water sourcing plans and the reasoning behind why certain options are being considered or rejected. Providing this information is important to ensure transparency and public understanding of resource allocation decisions.

This concern was echoed by another community member, who also identified the lack of information regarding water use as a significant issue. Martina Soto, a Calexico resident, wrote:

"Me preocupa que no hay detalles del agua. Soy trabajadora de campo y me preocupa" ("I am concerned that there are no details on the water. I am a field worker and it concerns me," author's translation) (February 2025 Draft Lithium Valley Specific Plan Public Review Comments, 2025, p. 311).

Soto's comment reinforces Avila's concern that the absence of clear information about water planning creates uncertainty among agricultural workers. Soto's statement further illustrates how this uncertainty is experienced personally by those whose work depends on continued access to water and agricultural stability. Together, these comments demonstrate that concerns about water are not limited to resource availability but also involve questions of transparency, communication, and whose voices are considered in development planning, especially those who are likely to be among the most directly affected. It is also noteworthy that Soto's comment, like Avila's, is written in Spanish. Although neither commenter explicitly states that information about lithium development and water procurement planning was not made available in Spanish, the fact that both comments raise similar concerns may suggest a broader issue: that bilingual dissemination of these planning decisions was not perceived by some residents as sufficiently accessible or effective. While this observation is drawn from only two comments, it may point to a wider concern about transparent communication of lithium development and water procurement planning information for Spanish-speaking residents.

Another community perspective further reinforces how concerns over resource availability are connected to concerns about transparency regarding development planning and the potential impacts on the future of Imperial Valley's agricultural communities. As Holtville resident May Salazar stated:

Another community perspective reinforced the idea that drought has heightened water vulnerability in Imperial Valley, and that future development threatens to strain these resources even further, impacting the Valley's agriculture-dependent communities. As Holtville resident May Salazar stated:

“As water droughts throughout California and Mexico are becoming more frequent, local governments must take into account the environmental impact on our local agricultural-dependent economies and communities. And by local governments, we mean you, dear Board of Supervisors” (February 2025 Draft Lithium Valley Specific Plan Public Review Comments, 2025, p. 271).

Salazar's comment broadens the discussion from individual experiences of uncertainty to the regional consequences of water governance decisions for the broader agricultural economy and surrounding communities. Her statement emphasizes that water concerns are also tied to the long-term sustainability of Imperial Valley's agricultural communities. Communities in Imperial Valley are already highly sensitive to environmental degradation, prolonged drought conditions, and the ongoing drying of the Salton Sea, as these issues directly impact their lived realities. Agricultural workers are already experiencing multiple socioeconomic vulnerabilities, and these existing challenges must be considered when evaluating the potential impacts of additional water demands. Water-related concerns are therefore particularly salient, as they directly intersect with

public health risks, agricultural stability, and long-term economic security. Salazar's comment also goes further to call on the Board of Supervisors to take these factors into account and to make decisions that reflect the needs of their community.

Ultimately, strengthening transparency, coordination, and phase-specific disclosure is essential not only for resource management, but also for ensuring that water governance is understood as part of the broader framing, justice, and accountability issues shaping lithium development in Imperial Valley. The information needs to be disseminated as soon as possible and ensured that it is made accessible to agricultural workers in Spanish and other Indigenous languages, so that farmworkers are able to participate in and understand water governance decisions and plans, understand development plans, and advocate for their concerns, and be informed and actively participate in decision-making, an essential aspect of procedural justice.

Recommendation #3 : Increase Transparency and Community Participation in Lithium Excise Tax Allocation

Imperial County should strengthen transparency and public participation in the administration of lithium excise tax revenues by communicating the County's allocation framework and revenue distribution model in clear and accessible ways. Providing clearer explanations of allocation formulas, revenue projections, and funding processes would improve public understanding, strengthen accountability in funding decisions, and expand meaningful community engagement. Revenue projections should be communicated using realistic production scenarios that distinguish between phase-specific production and full project buildout so that communities understand how expected tax revenues may change over time. Residents should also have meaningful opportunities to influence how tax revenues are allocated within their communities. Together, these actions would strengthen procedural justice by increasing transparency, ensuring that community priorities are reflected in funding decisions, and allowing residents to develop realistic expectations about the economic benefits of lithium development.

County Allocation Framework and Revenue Distribution Model

Applying the County's allocation framework to projected lithium production levels for the Hell's Kitchen Lithium Project provides important context for understanding how California's lithium extraction excise tax is designed to operate. The County provides an allocation example using a revenue scenario in which total tax proceeds are divided through a 20/80 split between Salton Sea restoration efforts, managed by the State (20%), and the County of Imperial (80%). This example is based on the County of Imperial receiving \$6,400,000 from lithium extraction activities (one or more operators). In practice, actual disbursements would depend on the total quantity of lithium extracted by all involved industries. The County provides this scenario to

illustrate how funds would be distributed under the plan, but it does not specify whether the example represents a single industry or multiple operators' projected taxes. Instead, it provides a general framework for how the County plans to allocate funds among communities.

Allocation Methodology: Directly Affected vs. All-Affected Communities

From this baseline, the County demonstrates the parameters used to distribute its 80% share across two primary categories: Directly Affected Communities and All-Affected Communities. Each category receives 15% of the County's allocation, but distributions differ based on population and methodology. The Directly Affected Communities category includes five designated communities: Bombay Beach, Brawley, Calipatria, Niland, and Westmorland, and incorporates both population and geographic proximity into its formula. Certain communities, , Calipatria, Niland, and Westmorland, receive a Location Priority Bonus, which effectively increases their population count for allocation purposes, resulting in a higher percentage share and greater overall funding. In contrast, the All-Affected Communities category includes a broader group of 19 communities and distributes funds based solely on population, without bonus proximity adjustments. As a result, directly affected communities receive funding from both allocation streams. While these technical formulas define the distribution of funds, community feedback suggests that the resulting allocations may not adequately reflect local needs or perceived vulnerabilities.

Limitations of Current Revenue Projection Scenarios

While the County's example provides a reference for how funds might be distributed, it is only an illustrative scenario and does not explain how the \$6,400,000 amount was determined. It does not provide an accurate picture of how lithium extraction industries as a whole, or individual projects such as the Hell's Kitchen Lithium Project, may impact tax allocation. While it serves as a proxy, the example does not provide the community with data that is directly applicable to projected outcomes or company-specific production goals. According to reporting, the Hell's Kitchen Lithium Project, led by Controlled Thermal Resources (CTR), is expected to produce approximately 25,000 metric tons of lithium in its initial phase, with potential expansion to 65,000 metric tons annually through supply agreements, and up to 300,000 metric tons of lithium carbonate equivalent (LCE) at full buildout (NS Energy, 2024; Stellants, 2023). These projections indicate a significant increase in production over time, yet the County's publicly available example does not scale allocations to reflect these higher output levels.

Community-Level Allocation Outcomes Under the Current Framework

Of this \$6.4 million example distributed to the County, the amounts allocated to each directly impacted community were as follows:

- Bombay Beach: \$8,631.10
- Brawley: \$708,123.27
- Calipatria: \$272,725.96
- Niland: \$76,046.13
- Westmorland: \$98,996.32

These figures account for both the cumulative All-Affected Communities allocation and the Directly Affected Communities allocation, adjusted for population and Location Priority Bonuses. Scaling the allocation framework to align with projected production levels would provide more relevant and transparent information about potential tax benefits. For example, this could involve calculating how tax distribution might look if allocated across CTR's projected lithium production, from its initial 25,000 metric tons in the first phase to 65,000 metric tons and ultimately up to 300,000 metric tons of lithium carbonate equivalent (LCE) at full buildout. It would also enable communities to hold their local governments accountable, as they would be aware of the funds that companies have committed to provide under their agreements with the lithium excise tax plan and their publicly stated lithium production projections. This transparency would allow communities to advocate for their priorities based on knowledge of expected monetary allocations and to hold industry and government actors accountable for delivering on those commitments.

Governance Structure, Uneven Administrative Capacity, and Equity in Lithium Excise Tax Allocation Across Communities

In addition, funds are disbursed to communities on a recurring basis and are managed locally, as outlined in the County of Imperial's *Lithium Excise Tax Funding Plan*. Incorporated cities manage their own allocations, while funds for unincorporated communities are administered by the County of Imperial. In these cases, local advisory committees are stated to help determine how funds are used, typically supporting community-identified priorities such as infrastructure improvements, public services, and social programs (County of Imperial, 2024). All expenditures are subject to reporting requirements and public transparency.

Among the directly impacted communities, the incorporated cities are Brawley, Calipatria, and Westmorland. Niland and Bombay Beach are unincorporated, meaning that funding for these areas is managed by the County rather than the community directly. This difference could potentially lead to local mistrust in the local government regarding how funds are allocated and whether community priorities are addressed. Mistrust in the Board of Supervisors is a recurring concern, and unclear allocation processes could exacerbate inequities or tensions in unincorporated areas.

The Board of Supervisors' Oversight, Centralized Decision-Making, and the Need for Institutional Accountability

The County should have clear systems in place to ensure that both incorporated and unincorporated communities can provide meaningful input on how funds are spent. These updates and clarifications are necessary for the effective implementation of the lithium excise tax plan. For unincorporated communities, the lithium excise tax states: 'Unincorporated and township funds will be managed by the County of Imperial and dispersed to designated advisory groups for use in those respective communities' (pg. 10, 2024). It would be beneficial for the County to provide detailed guidance on how this process is intended to work, including how community members' local priorities will be identified and the ways in which they can interact with the Board of Supervisors during decision-making processes. Currently, this process remains very vague and requires further clarification to ensure adequate community consultation and that local needs are effectively addressed.

The County plan distinguishes between incorporated and unincorporated communities in how lithium excise tax funds are managed. Incorporated cities (Brawley, Calipatria, Westmorland) are responsible for managing their own allocations, while unincorporated areas (Bombay Beach, Niland) have funds administered by the County, typically through designated advisory groups. However, the plan also notes that "Allocation within each division will be at the discretion of the County Board of Supervisors, based on priority of services needed within each respective division. At the discretion of the Board of Supervisors, funds may be allocated at different percentages within the County of Imperial to ensure the development needs of the County and Lithium Valley" (County of Imperial, 2024, p. 14). This structure provides flexibility but reduces transparency for the public, since ultimate allocation decisions rest with the Board, even if local advisory groups or city governments are responsible for day-to-day management.

Thus, even though incorporated regions have some control over their allocations, the Board of Supervisors ultimately determines funding decisions and how money is used in the community. This top-level discretion introduces another layer of opacity, leaving the public largely outside the decision-making process. For unincorporated communities, this structure creates a further disconnect: funds are managed by the County, and allocations are effectively determined in a top-down manner, giving more authority to the County than to local residents. In practice, the plan establishes a hierarchy in which the Board of Supervisors holds ultimate authority over both funds and the decisions regarding their distribution.

Community Engagement Through the Quality of Life Advisory Committee (QLAC)

The County has proposed the creation of a "Quality of Life Advisory Committee" (QLAC) to manage the Lithium Community Benefits Program in coordination with the Board of Supervisors (Imperial County, 2024, p. 12). Meetings will be open to the public, who may attend and share ideas for community improvements. QLAC is intended to recommend projects that improve

quality of life for residents, with recommendations submitted to the Board of Supervisors for approval during public meetings. QLAC will comprise fourteen representatives from diverse sectors, including Agriculture, Community-Based Organizations, Economic Development, Education, Environmental, Faith-Based, Labor, Small Business/Chamber, Tribal representation, and the Imperial County Supervisor as Chair. QLAC members must reside in Imperial County and serve two-year terms, with staggered terms for the first committee to establish a rotating board. Members have equal voting power to determine fund allocation recommendations (except for Tribal and Cultural Affairs), and individuals are selected by a majority vote of the Board of Supervisors. While this structure provides some community input, ultimate discretion over fund allocation rests with the Board, which could leave community members feeling that their participation is symbolic rather than influential. The lithium excise tax plan should clarify how QLAC interacts with the Board of Supervisors to ensure community priorities are meaningfully incorporated into funding decisions.

Public Perception Regarding Allocation Fairness

After reviewing public comments on the lithium excise tax plan in Imperial County, as well as analyzing social media posts that discuss concerns about the tax allocation, the available comments suggest that many community members feel dismissed by their local representatives in this era of rapid green energy industrialization in the region. Residents frequently express frustration and concern, as well as a perception that their representatives are not adequately supporting their needs.

Amerlija Vicente submitted an email to the Board of Supervisors expressing concerns regarding the lithium excise tax allocation plan. In *Public Comment Received on Draft Plan (as of 8:00 a.m. on 9/10/2024)* on the County website, Vicente responded to the County's proposed Lithium Excise Tax Funding Plan, raising concerns about whether the allocation framework adequately accounted for the unique impacts experienced by frontline communities, particularly those located near proposed lithium development sites. Vicente stated:

Issues with their tax plan

1. Distribution based on population, not need, which means even though Bombay Beach was determined one of the Frontline Communities that will be directly affected by the Lithium Mining we will be receiving less money than other cities and towns in Imperial County who are not listed as one of the 5 to be directly effected.
2. It's not listed in the link above but there is also an added bonus based on Proximity to the Lithium Mining not population that Niland, Calipatria and Westmoreland will be receiving. Bombay Beach should have been added to that list due to it being located directly on the Shoreline of the Salton Sea, which will be impacted by the mining and receding at a more rapid rate caused by the amount of water that will be needed to do the mining. Especially since BHE has already proposed 3 new geothermal plants right

along the Shoreline that they will be starting construction on in the near future, as soon as they work out all the kinks in their construction plan

(County of Imperial, 2024b, p. 20).

In Vicente's comment, she argues that despite Bombay Beach being designated as one of the five directly impacted "Frontline Communities," it is expected to receive significantly less funding than others. She attributes this disparity to the county's reliance on population-based allocation formulas. Because Bombay Beach is a small, unincorporated rural community, this method may not accurately reflect the level of environmental and economic risk it faces. As Vicente emphasizes, Bombay Beach is located directly along the shoreline of the Salton Sea, making it especially vulnerable to both lithium extraction impacts and the accelerating ecological decline of the region.

Although the lithium excise tax plan includes a proximity-based bonus, Vicente notes that Bombay Beach was excluded from this category. She argues that the cumulative impacts of expanding geothermal and lithium extraction industries, particularly those co-locating operations near the Salton Sea, place Bombay Beach in a uniquely vulnerable position. As industrial activity scales rapidly, residents are left to experience worsening environmental conditions, including increased exposure to dust, water depletion, and ecological degradation. These concerns are further reflected in comments from other Bombay Beach residents regarding the allocation framework.

In the *Public Comment Received on Draft Plan (as of 8:00 a.m. on 9/10/2024)*, Anna Meloyan stated, "Your breakdown has been calculated based on population, and while Bombay Beach's population might be smaller than the other designated Frontline communities, we are more severely impacted by the impending lithium mining due to our proximity to the Salton Sea. This proposal embodies the continual oversight enacted by Imperial Valley in all matters related to Bombay Beach" (County of Imperial, 2024b, p. 22).

This comment reinforces concerns that population-based metrics may overlook place-based vulnerability. Residents of Bombay Beach are not only frustrated by the lack of a proximity bonus, but also point to what they perceive as a broader pattern of neglect. They highlight that their community is already experiencing environmental degradation due to the receding Salton Sea, and that additional industrial pressures may further intensify these challenges. These concerns reflect an awareness of existing regional inequalities and apprehension about how future development may further marginalize their community.

Candace Youngberg, director of the Bombay Beach Community Services District, further articulates these concerns in the *Public Comment Received on Draft Plan (as of 8:00 a.m. on 9/10/2024)*:

We are more than just a number on a piece of paper, we are families, retirees, hard workers, artists, musicians, performers, advocates, college students, we are a community who has over the years been forgotten and cast to the side by the county and state and everyone else until recently when a few of us decided that enough is enough and we need to stand up for ourselves and be noticed again. We have made progress doing so and we are now receiving the help we deserve from a few organizations but not so much from the county. All I can ask is why? Why are we not as important as everyone else in the valley to get the help and respect we deserve? (County of Imperial, 2024b, p. 26).

Here, a community leader describes the allocation process as dehumanizing, emphasizing that reducing communities to population-based figures may overlook lived realities and diminish their perceived value. Youngberg highlights that Bombay Beach is a diverse and active community that has historically been overlooked, raising questions about why it continues to receive less attention and support compared to other areas in the county.

Social media advocacy groups, such as @valleimperialresiste and @ivequityjustice on Instagram, similarly amplify these concerns. These organizations focus on environmental justice, government accountability, and community empowerment through health equity. In a post from September 18, 2024, they shared selected quotes from over 100 public comments submitted ahead of a September 10 Board of Supervisors meeting, highlighting community priorities and concerns regarding the approved lithium tax plan:

- “The amount of money that is provided wouldn't cover even the health of the people that will be affected”- Westmorland resident
- “We would like to have a library”- Bombay beach resident
- “Infrastructure improvements and additional spaces for the youth/community to escape the heat”- Westmorland resident
- “Niland necesita una oficina de correos”- Niland resident
- “There is not access to fresh food”- Calipatria resident
- “Calipatria needs sidewalk, Always small towns suffer”- Calipatria resident
- “Me gustaría que hubiera una clínica en mi comunidad”- Westmorland resident
- “Me gustaría que hubiera más rutas de tránsito, más transportacion, y más casetas para esperar el camión”- Westmorland resident
- “We need lighting for east side residents in calipatria”- Calipatria resident

These comments illustrate that residents are not only concerned about environmental impacts, but also about longstanding gaps in infrastructure, public services, and health resources. The range of needs, from libraries and post offices to clinics, sidewalks, and transportation, demonstrates that many communities are already under-resourced and experiencing unequal access to services that larger, more urban regions provide, which support safe, healthy, and stable living environments, thereby underscoring the importance of equitable allocation of lithium tax

revenue and the need to address these community priorities, as they are essential for improving residents' quality of life.

The organizations also noted that, despite over 100 public comments raising concerns about limited community engagement, the Board of Supervisors ultimately approved the plan unanimously. In another post, they wrote, “Despite over 100 public comments voicing concern about the lack of community engagement, which Supervisor Plancarte acknowledged, the county decided to approve it unanimously” (Valle Imperial Resiste & Imperial Valley Equity and Justice, Instagram posts, 2024).

Implications for Policy Reform and Recommended Actions

Taken together, these responses suggest that many residents feel excluded from the decision-making process and that their input may not be meaningfully incorporated into final policy decisions. This highlights the need for stronger accountability measures. There is a need for clearer, more transparent, and enforceable processes outlining how the Imperial County Board of Supervisors will collaborate with local communities to allocate and use lithium tax revenues once extraction begins. These processes should prioritize community-identified needs rather than relying solely on top-down decision-making.

Additionally, the county should provide clearer definitions of what constitutes a “directly impacted community” and how funding decisions are determined. Communities that did not receive proximity-based bonuses may seek further justification, while those that did receive them require clearer explanations of the criteria used. As seen in the case of Bombay Beach, residents indicate that their geographic and environmental conditions place them at equal or greater risk, though this is not reflected in the current allocation framework.

Conclusion:

This study examined the roles of CCV, Earthworks, Controlled Thermal Resources (CTR), Imperial County, and how local communities have interacted with one another and responded to the Hell’s Kitchen lithium extraction project in Imperial Valley. While contextual information about these organizations was useful, the primary focus was on understanding the forms of communication and engagement between stakeholders. I analyzed how stakeholders interact across multiple channels, including social media, legal reports, and supporting legal frameworks, and how power dynamics operate within these contexts.

The study explored how different stakeholders interpret policies and regulations to advance their own agendas and priorities. For example, projects such as FAST-41 and SB 125 illustrate how alliances and partnerships are formed across actors and the ways in which actors can capitalize on existing structures to advance their priorities and how these mechanisms may shape the future extraction of critical minerals. The Imperial Valley case offers insight into how domestic critical

mineral initiatives are designed and may serve as a model for other regions. I centered the ways that local communities reacted and responded to the framings surrounding lithium extraction in Imperial Valley and the framings of the technologies, the companies, the procedural systems, and ways that communities have felt they have been consulted and included in the process. I evaluated through discourse analysis how narratives surrounding urgency, economic projections, energy dominance, and security favor corporate and county priorities, whereas community members often lack the same political and financial power and decision-making influence, despite community organizations and local leaders speaking their concerns.

Additionally, this research considered procedural justice, examining how stakeholders and community members perceive fairness and participation in decision-making processes. It highlighted contrasting approaches: industry and local government often emphasize national security, energy independence, and trade agreements, while community organizations prioritize environmental justice through grassroots advocacy. Comparing these perspectives provides a clearer understanding of how policy, power, and priorities intersect in emerging domestic critical mineral industries.

Overall, the findings underscore the complex interplay between legal frameworks, stakeholder strategies, and community interests, offering valuable lessons for both policy implementation and future resource management.

As Earthworks states in a joint Instagram post, “Trade agreements for ‘critical minerals’ must not perpetuate an extractivist model that drives environmental destruction, labor abuse, and human rights violations” (Earthworks, 2025). This period in Imperial Valley demonstrates a pivotal moment for communities and their livelihoods. It is critical that local residents, tribal members, and community members are included in decision-making processes in holistic ways and have access to genuine involvement, which can lead to stronger policy outcomes and greater public support.

It is also critical that Controlled Thermal Resources and the County move beyond predominantly top-down approaches and ensure that technocratic decision-making is not the dominant hierarchy. Instead, communities should be recognized as valued contributors whose knowledge is meaningfully incorporated into policy decisions. This is necessary to support a just transition that does not replicate the harms of past extractive industries that were not labeled as “green,” and to ensure that communities benefit, remain transparently informed, and have their concerns and priorities addressed.

Approaches grounded in national security and rapid transitions to electric vehicle production should not overlook the health, dignity, and safety of the communities that will be directly impacted. The Hell’s Kitchen project sets a precedent at a time when domestic lithium extraction

in the United States is accelerating, as the country seeks to reduce reliance on international suppliers and meet growing technological demand.

The community is mobilizing to support and protect its future. This extends beyond resistance and reflects a call for improved collaboration and stronger relationships between stakeholders, grounded in respect. At the same time, tensions have emerged as efforts to expand economic and labor opportunities are occurring alongside concerns about environmental impacts, procedural inequities, transparency, regulatory metrics, and public health within the community, leading to diverging perspectives, with some residents expressing support for the project and others remaining more apprehensive. Meaningful dialogue cannot take place when the County and industry depict community members as impediments or as lacking the capacity to engage with technical plans. Instead, engagement must be rooted in mutual respect, as communities deserve dignity and recognition in decisions that directly affect their lives.

Ultimately, the Imperial Valley case illustrates the central question this study set out to address: how stakeholders frame lithium extraction and the energy transition, and how communities respond to and contest those framings. These tensions highlight the structural challenges of achieving a just transition in regions that are heavily burdened by structural and socioeconomic vulnerabilities and procedural mechanisms that limit adequate community and tribal consultation and access to decision-making spaces and broader distribution of information and influence. The context of domestic critical mineral development in the United States is being presented as a national imperative, and this project sought to examine how local communities were responding and what challenges were emerging in that process. They also underscore the importance of centering environmental justice, procedural equity, and community knowledge in the governance of emerging energy infrastructures, something that will increasingly become more important if the project progresses.

Resources

- Alghamdi, M., Altmann, T., & Das, R. (2025). Direct lithium extraction from seawater brine: An assessment of technology and existing commercial systems. *Minerals*, 15(5), 512.
<https://doi.org/10.3390/min15050512>
- Alhajjar, E., Nguyen, P., Gable, A., Woo, A., & Ledgister, L. (2025, November 25). Empowering Imperial County: A comprehensive workforce and economic development strategy for harnessing the lithium opportunity. RAND Corporation.
https://www.rand.org/pubs/research_reports/RRA3836-1.html
- Barnard, M. (2025, September 5). Hell’s Kitchen: Can lithium & geothermal power thrive in the Salton Sea? CleanTechnica.
<https://cleantechnica.com/2025/09/05/hells-kitchen-can-lithium-geothermal-power-thrive-in-the-salton-sea/>
- Benner, C., & Pastor, M. (2024). Charging forward: Lithium Valley, electric vehicles, and a just future. The New Press.
- Blair, J. J. A., Balcázar, R. M., Barandiarán, J., & Maxwell, A. (2023). The ‘alterlives’ of green extractivism: Lithium mining and exhausted ecologies in the Atacama Desert. *International Development Policy*, (16). <https://doi.org/10.4000/poldev.5284>
- Bland, A. (2023, January 17). Growers brace to give up some Colorado River water. CalMatters.
<https://calmatters.org/environment/2023/01/colorado-river-water/>
- Bravo, E. (2022). Governance on lithium mining shareholdings: Expanding ESG indicators to economic regulation and raw material politics. *Mineral Economics*, 36, 1–15.
<https://doi.org/10.1007/s13563-022-00358-8>
- Buck, H. (2020). Understanding inaction in confronting ecosystem collapse: Community perspectives from California’s Salton Sea. *Ecology and Society*, 25.
<https://doi.org/10.5751/ES-11443-250127>
- California Department of Employment Development. (2024). California thanks its agricultural workforce with 45th annual farmworkers appreciation breakfast.
https://edd.ca.gov/en/about_edd/news_releases_and_announcements/california-thanks-its-agricultural-workforce-with-45th-annual-farmworkers-appreciation-breakfast/
- Census Reporter. (n.d.). Census profile: Imperial County, CA.
<http://censusreporter.org/profiles/05000US06025-imperial-county-ca/>

- Colwell, R. (2026, February). Baker Hughes, American Data Power, geothermal... [LinkedIn post]. LinkedIn.
https://www.linkedin.com/posts/rodcolwell_bakerhughes-americandatapower-geothermal-activity-7424252525765218304-1sCX
- Comité Cívico del Valle, & Earthworks. (2025, September). The devil is in the details: Environmental health impacts of the Hell's Kitchen lithium and power project.
<https://ccvhealth.org/reports/the-devil-is-in-the-details>
- Controlled Thermal Resources Holdings Inc. (n.d.). C Thermal company page.
<https://www.cthermal.com>
- Controlled Thermal Resources Holdings Inc. (2025, June 16). Hell's Kitchen project selected as FAST-41 covered project.
<https://www.cthermal.com/latest-news/ctr-hells-kitchen-project-selected-as-a-fast-41-covered-project>
- Controlled Thermal Resources Holdings Inc. (2025, September 9). CTR and Baker Hughes join forces on 500 MW geothermal project.
<https://www.cthermal.com/latest-news/ctr-and-baker-hughes-join-forces-on-500-mw-geothermal-project-to-power-americas-surging-data-center-and-ai-growth>
- Controlled Thermal Resources Holdings Inc. (2025, November 3). Controlled Thermal Resources announces plan to list American Critical Resources in the U.S.
<https://www.cthermal.com/latest-news/controlled-thermal-resources-announces-plan-to-list-american-critical-resources-in-the-us>
- Controlled Thermal Resources Holdings Inc. (2026, January 29). CTR launches American Data Power to deliver 600MW geothermal energy complex [Facebook post]. Facebook.
<https://www.facebook.com/ControlledThermalResourcesUSA/posts/pfbid0NUkMd9sZncghBFc7YFcBcdsZhQKAPdNYLYLRyGebh7Uq6CzLtPiaYqATiJhYEG2fl>
- Controlled Thermal Resources Holdings Inc. (2026, February 4). Why clean minerals... [Facebook post]. Facebook.
<https://www.facebook.com/ControlledThermalResourcesUSA/posts/pfbid037NmjD7LxUNHer26qpJZZczXmuUzVw5Xot7RkC7nDfkxmq6C6tBjX6EjRp2CMV8ihl>

- County of Imperial. (2024a). Lithium excise tax funding plan [PDF]. Lithium Valley.
https://lithiumvalley.imperialcounty.org/wp-content/uploads/2024/09/Lithium-Excise-Tax-Funding-Plan_20240910.pdf
- County of Imperial. (2024b). Public comment received on draft plan (as of 8:00 a.m., September 10, 2024) [PDF]. Lithium Valley.
https://lithiumvalley.imperialcounty.org/wp-content/uploads/2024/09/All-Comments_2024-0910.pdf
- County of Imperial. (2025a, December). Draft Lithium Valley Specific Plan Program Environmental Impact Report (SCH# 2023120104) (prepared by DUDEK).
<https://imperialcounty.org/lvsppeir/#docaccess-4180a107c005fdfada0a6f066e9e32a32fe47f19110c58a384321fb0a3fd3453>
- County of Imperial. (2025b, December 30). Imperial County Lithium Valley Specific Plan.
<https://imperialcounty.org/lvsppeir/#docaccess-3cd381726e42598900aa7e67c414b4319ec1b6d43098ca83fb8e7880314079ff>
- County of Imperial. (2025c, February 7). Lithium Valley Specific Plan Executive Summary.
https://imperialcounty.org/wp-content/uploads/2025/02/English_PRDraftLVSP_Executive-Summary-1.pdf
- Crider, J. (2021). A history of Coachella and its people.
<https://www.coachella.org/about-us/history/history-book>
- Das, S. P. (2019). David Naguib Pellow, What is critical environmental justice? *International Sociology*, 34(2), 231–233. <https://doi.org/10.1177/0268580919831637a>
- Earthworks. (n.d.). Jared Naimark [Staff profile]. <https://earthworks.org/people/jared-naimark/>
- Earthworks. (2026). Posts and reels on Facebook. <https://www.facebook.com/earthworksaction>
- Earthworks & Comité Cívico del Valle. (2024, March 14). Community & environmental groups issue landmark legal challenge to Imperial Valley lithium project.
<https://earthworks.org/releases/community-environmental-groups-issue-landmark-legal-challenge-to-imperial-valley-lithium-project/>
- ESG News Editorial Team. (2025, June 17). SEC drops ESG disclosure and shareholder proposal rules as regulatory rollbacks accelerate. *ESG News*.

<https://esgnews.com/sec-drops-esg-disclosure-and-shareholder-proposal-rules-as-regulatory-rollbacks-accelerate/>

Estevez, I., & Riofrancos, T. (2025, September 10). Global green industrial policy. Climate and Community Institute.

<https://climateandcommunity.org/research/global-green-industrial-policy/>

Everwine, E. (2024, October 31). Judge orders clarity on key disputes in Lithium Valley lawsuit. Calexico Chronicle.

<https://calexicochronicle.com/2024/10/31/judge-orders-clarity-on-key-disputes-in-lithium-valley-lawsuit/>

Feindt, P. H., & Oels, A. (2005). Does discourse matter? *Journal of Environmental Policy & Planning*, 7(3), 161–173. <https://doi.org/10.1080/15239080500339638>

Fogel, M., et al. (2021). Crisis at the Salton Sea: The vital role of science.

<https://eartharxiv.org/repository/view/2113/>

Gaxiola, S. (2026, January 30). CTR launches American Data Power in Lithium Valley. Calexico Chronicle.

<https://calexicochronicle.com/2026/01/30/ctr-launches-american-data-power-in-lithium-valley/>

Guilin-O Live (Director). (2025, June 17). CEO CTR Rod Colwell on lithium extraction sustainable jobs & lawsuit delay [Video]. YouTube.

<https://www.youtube.com/watch?v=swpB9CHddAY>

Hell's Kitchen lithium extraction project gets green light. (n.d.). Calexico Chronicle.

<https://calexicochronicle.com/2023/12/15/hells-kitchen-lithium-extraction-project-gets-green-light/>

Hitch, M., Rodolaki, C., & Barakos, G. (2025). Power imbalances and sustainability challenges. *The Extractive Industries and Society*, 23, 101665.

<https://doi.org/10.1016/j.exis.2025.101665>

Holifield, R. (2018). Review of What is critical environmental justice? *Review of Agricultural, Food and Environmental Studies*, 99(3–4), 303–306.

<https://doi.org/10.1007/s41130-018-0078-5>

Imperial County. (n.d.). Imperial County updates and information. <https://imperialcounty.org>

Imperial County. (2024, August 29). Lithium Excise Tax Funding Plan.

<https://lithiumvalley.imperialcounty.org/community/lithium-excise-tax/#docaccess-2e557202eeff71038c014ee7a63a65a9>

Imperial County. (2025a). February 2025 draft Lithium Valley specific plan public review comments: Section 1: Federal, State and Local Agencies.

https://imperialcounty.org/wp-content/uploads/2025/08/LVSP_Public_Comments_Combined_July-2025.pdf

Imperial County. (2025b, December 31). Imperial County announces public comment period for Lithium Valley specific plan and environmental review [News release].

<https://imperialcounty.org/2025/12/prlvsppeir/>

Imperial County. (2025c, September 23). Imperial County stands firm on Hell's Kitchen Project and Lithium Valley.

<https://imperialcounty.org/2025/09/help-shape-the-future-of-voting-in-imperial-county-2-2-2/>

Imperial County. (2026, January 13). Imperial County appoints Bruce Davis as director of human resources & risk management. Imperial County.

<https://imperialcounty.org/2026/01/hrbdavis>

Imperial County Agricultural Commissioner and Sealer of Weights & Measures (2024, June). Economic contributions of Imperial County agriculture (Crop report plus).

https://agcom.imperialcounty.org/wp-content/uploads/2024/07/ImperialCO_Ag_Report_2024_V25REV-SingPgs-1.pdf

Imperial County Planning & Development Services. (2025, February 7). Request for proposal: Monitoring & compliance project—Hell's Kitchen PowerCo 1 LLC & Hell's Kitchen Lithium Co 1 LLC geothermal and lithium processing project (CUP #21-0020 & #21-0021).

<https://www.icpds.com/assets/CUP21-0020--0021-Hell's-Kitchen-Lithium-RFP-WEB-02-07-25.pdf>

Imperial Irrigation District. (n.d.). Imperial Integrated Regional Water Management Plan.

<https://www.iid.com/water/water-supply/water-plans/imperial-integrated-regional-water-management-plan>

Imperial Irrigation District. (n.d.). Salton Sea. <https://www.iid.com/water/salton-sea>

Imperial Irrigation District. (2026, January 15). IID works to ensure post-2026 Colorado River plan is lawful. <https://www.iid.com/Home/Components/News/News/1407/30>

Imperial Valley Equity and Justice. (n.d.). Posts on Instagram. <https://www.instagram.com/ivequityjustice/>

Imperial Valley Insider News. (2026). Posts on Facebook. <https://www.facebook.com/permalink.php>

Imperial Valley News. (2026). Posts on Facebook. <https://www.facebook.com/ImperialValleyFirst>

Imperial Valley Water. (2026). Posts on Facebook. <https://www.facebook.com/IVH2O>

Imperial Valley Weekly. (n.d.). Posts on Instagram. <https://www.instagram.com/theimperialvalleyweekly/>

In Simple Terms (n.d.). Posts on Instagram. <https://www.instagram.com/insimpleterms.iv/>

In Simple Terms. (2025, November 12). The report claims 112 sustainable jobs, so where are the thousands of jobs actually coming from? [Instagram reel]. Instagram. https://www.instagram.com/reel/DQ_Iq6IjBQJ/

Janubová, B. (2023). Green extractivism in Lithium Triangle. *Slovak Journal of International Relations*, 21, 109–134. <https://doi.org/10.53465/SJIR.1339-2751.2023.2.109-134>

Klawans, J. (2026). California residents are split over a local lithium treasure trove. *The Week*. <https://theweek.com/environment/california-residents-split-about-lithium-mining-salton-sea>

Leipold, S., et al. (2019). Discourse analysis of environmental policy revisited. *Journal of Environmental Policy & Planning*, 21(5), 445–463. <https://doi.org/10.1080/1523908X.2019.1660462>

Medzerian, D. (2024, October 28). Salton Sea documented as hot spot for child respiratory issues. *USC Today*. <https://today.usc.edu/salton-sea-an-area-rich-with-lithium-documented-as-hot-spot-for-child-respiratory-issues/>

- Méndez, M. (2020). *Climate change from the streets*. Yale University Press.
- Méndez-Barrientos, L. E., Shah, S. H., Roque, A. D., MacClements, V., & Stern, A. K. (2024). Assessing environmental justice contributions in research and public policy: An applied framework and methodology. *Journal of Environmental Policy & Planning*, 26(2), 188–204. <https://doi.org/10.1080/1523908X.2024.2321183>
- Metishi Network Del Valle Group. (2025a, January 9). Is Imperial County becoming a "Revolving Door" for industry insiders and professional job-hoppers? [Video]. Facebook. Retrieved from a private Facebook group; URL not independently accessible to readers.
- Metishi Network Del Valle Group. (2025b, December 29). [Video]. Facebook. Retrieved from a private Facebook group; URL not independently accessible to readers.
- Mohai, P., Pellow, D., & Roberts, J. T. (2009). Environmental justice. *Annual Review of Environment and Resources*, 34, 405–430. <https://doi.org/10.1146/annurev-environ-082508-094348>
- Mulvaney, D., Blair, J., & Cantor, A. (2025). Sunrise at the Salton Sea. *Sustainability Science*. <https://doi.org/10.1007/s11625-025-01698-4>
- NS Energy. (n.d.). Hell's Kitchen lithium and power project, US. <https://www.nsenergybusiness.com/projects/hells-kitchen-lithium-and-power-project-us/>
- Pellow, D. N. (2016). Toward a critical environmental justice studies: Black Lives Matter as an environmental justice challenge. *Du Bois Review: Social Science Research on Race*, 13(2), 221–236. <https://doi.org/10.1017/S1742058X1600014X>
- Reuters. (2025, June 5). Chilean business magnate Ponce exits firms with stakes in lithium miner SQM. <https://www.reuters.com/sustainability/sustainable-finance-reporting/chilean-business-magnate-ponce-exits-firms-with-stakes-lithium-miner-sqm-2025-06-05/>
- Ryan E. Kelly. (2025–2026). Posts on Facebook. <https://www.facebook.com/Ryan4ImperialCounty>
- Saldáña, J. (2017). *The coding manual for qualitative researchers*. SAGE.
- Singer, E. (1998). *Geology of Imperial Valley*. <https://fire.biol.wvu.edu/alles/SingerImperialValley.pdf>

Stellantis. (2023). Stellantis invests in CTR.

<https://www.stellantis.com/en/news/press-releases/2023/august/stellantis-invests-in-ctr-to-strengthen-low-emission-us-lithium-production>

The Colorado River. (n.d.). Public Policy Institute of California.

<https://www.ppic.org/publication/the-colorado-river/>

Tonello, M. (2025, April 12). Regulatory shifts in ESG: What comes next for companies?

Harvard Law School Forum on Corporate Governance.

<https://corpgov.law.harvard.edu/2025/04/12/regulatory-shifts-in-esg-what-comes-next-for-companies/>

UC San Diego Labor Center, & Comité Cívico del Valle. (2025, November). High road training for Lithium Valley. <https://ccvhealth.org/hells-kitchen>

U.S. Environmental Protection Agency. (2024, October 16). EPA settles with Hell's Kitchen geothermal over wetlands discharge, impact on Salton Sea [News release].

<https://www.epa.gov/newsreleases/epa-settles-hells-kitchen-geothermal-over-wetlands-discharge-impact-salton-sea>

U.S. Environmental Protection Agency. (2025, November 17). Final rule: Rescission of the greenhouse gas endangerment finding and motor vehicle greenhouse gas emission standards under the Clean Air Act.

<https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-rescission-greenhouse-gas-endangerment>

Valle Imperial Resiste (@valleimperialresiste). (n.d.). Instagram.

<https://www.instagram.com/valleimperialresiste/>

van Hulst, M., et al. (2025). Discourse, framing and narrative. *Critical Policy Studies*, 19(1),

74–96. <https://doi.org/10.1080/19460171.2024.2326936>

Writer, J. D. S. (2026, January 10). In Simple Terms podcast highlights local concerns. Imperial Valley Press Online.

https://www.ivpressonline.com/news/in-simple-terms-podcast-highlights-local-community-concerns-in-imperial-valley/article_7049dddc-5bbd-4dd5-95b8-b8156420a39b.html

Zuñiga, M. E., & Méndez, M. (2024). Environmental justice in general plans. *Urban Affairs Review*, 60(4), 1123–1161.

<https://doi.org/10.1177/10780874231175841>

