



LITHIUM VALLEY ECONOMIC OPPORTUNITY INVESTMENT PLAN

Summary

Lithium/rare-mineral mining/processing/manufacturing and renewable energy generation/storage possess the opportunity to propel the economic future of Imperial County residents for generations.

Introduction

The County of Imperial desires to increase the overall wealth of its residents through private economic investment into the Imperial Valley Region in the form of lithium and rare mineral extraction, processing and manufacturing/packaging for end-user applications and renewable energy generation/storage in the form of geothermal, solar, wind and energy storage. The Imperial County Lithium Valley Economic Opportunity Investment Plan will be accomplished through specific actions of the County of Imperial, State of California and the United States Federal Government.

Lithium is a vital mineral in the rechargeable batteries used by consumers in portable computing devices, electric vehicles and battery storage. More than 80% of the world's raw lithium is mined in Australia, Chile, and China. Currently, China controls more than half of the world's lithium processing and refining and has three-fourths of the lithium-ion battery mega factories in the world, according to the International Energy Agency.

Today, the United States has only 1% of global lithium being mined and processed, according to the U.S. Geological Survey. Imperial County, California is blessed with an abundance of Geothermal Brine at the Salton Sea. The earth heated brine is rich in critical minerals needed for the production of batteries and alloys, including lithium, manganese and zinc.

Industry professionals estimate there may be as much as fifteen (15) million tons of lithium in Imperial County that would take 50-100 years to extract. Additionally, there is an estimated 1,000-1,500 MW of additional geothermal energy generation available. The mining of lithium (and other rare-earth minerals) in addition to geothermal power generation provide the opportunity for the United States to have greater control over needed material in the supply chain for electric vehicles and consumer/commercial electronics while providing greater stability to our energy supply.

Benefits of Economic Investment

County (Local)

Employment opportunities (construction and operation).

Education/training opportunities for persons desiring a career in lithium/rare mineral extraction, processing and manufacturing/processing or renewable energy generation/storage from geothermal, wind and energy storage.

Tax Revenue improved and consistent tax base for which the County can provide appropriate government level services to its residents (in the form of public safety, infrastructure, judicial, social services and quality of life including recreational and cultural/arts).

State of California

Employment opportunities which reduce individual reliance on social services.

Education/training providing for an enhanced workforce to propel a variety of industries (primary and secondary).

Tax Revenue providing financial resources to the State of California to fund education (K-16+), infrastructure, public safety, social services and quality of life activities.

Environmental improvements by providing necessary products to propel rechargeable zero-emission transportation.

Digital connectivity and productivity by providing necessary resources used for consumer and commercial application communication.

Vertical production capability to increase assembly/manufacturing in California, creating products exported domestically and internationally.

Energy Supply stability is enhanced by additional base-load renewable energy generation from geothermal facilities providing needed power when solar/wind is unable to produce.

Renewable Energy compliant with Renewable Portfolio Standards (RPS) in the form of geothermal energy generation produced in California for Californian's.

United States Federal Government

National Security: lithium/rare-minerals and renewable energy generation are key to the National Security interests of the United States. The case for renewable energy is simple – its cleaner and safer for the environment and it is domestically produced. For lithium and rare-minerals, high value communication products (both consumer and commercial scale) depend on these elements. Reliance on foreign nations for these products places our communication systems at risk of geopolitical instability.

Environmental transformation: as the United States continues marching toward rechargeable vehicles, lithium is an essential element for batteries. In order to achieve its climate change goals, the country needs a long-term, stable and preferably domestic source of lithium, otherwise the United States is at the mercy of other nations which again exposes our interests to geopolitical instability.

Supply Chain Certainty: historically, United States consumer demand for passenger vehicles and light trucks exceeds fifteen million vehicles per annum. This is exclusive of commercial and mass-transit vehicles. The ability to deliver vehicles to consumers at a “affordable” price is dependent on mass production in order to maximize efficiency. Supply chain certainly is at the heart of scaled efficiency. As with many other raw and semi-finished materials, it is incumbent on the United States to have capacity within our nation.

Self-Determination

In its purest form, self-determination is defined as the process by which a person controls their own life. For purposes of the Lithium Valley Economic Opportunity Investment Plan this shall be defined as the process by which the **County of Imperial** controls its economic future as it relates to lithium/rare mineral extraction, processing, manufacturing and renewable energy generation and storage through specific actions that will be taken with intention and transparency.

Specific Actions of the County of Imperial

1. Board of Supervisors adopting a Resolution in support of the Lithium Valley Economic Opportunity Investment Plan.
2. Board of Supervisors creating a subcommittee known as the Lithium Valley Economic Opportunity Investment Plan Subcommittee comprised of two (2) members of the Board of Supervisors.
3. Creation of an internal working group to the County Board of Supervisors to include:
 - Lithium Valley Subcommittee (2 persons of the Board of Supervisors)
 - County Executive Officer
 - County Counsel
 - County Director of Planning and Development Services
 - County Director of Intergovernmental Relations
 - Contract Economist/Economic Development Consultant to the County.
4. County of Imperial seeking voter approval to establish appropriate remuneration for lithium/rare mineral mining and power generation/storage to provide appropriate financial benefits to the County (as a municipal corporation) and community organizations that further the economic interests of the region. Said remuneration shall be used to address environmental impacts of industry and infrastructure improvements. The remuneration vehicle shall provide tax credits for lithium/rare mineral extraction used within Imperial County for mid-stream processes (may include but not be limited to processing and manufacturing).
5. County of Imperial establishing a Lithium Valley Project Ombudsperson to work directly with economic investors seeking to engage in lithium/rare-mineral mining and renewable energy generation to provide enhanced communication by and between internal departments to the County as well as assistance in communication with State and Federal Agencies.
6. County of Imperial exploring economic viability of an Enhanced Infrastructure Finance District (EIFD) to finance infrastructure improvements.
7. County of Imperial providing leadership (Subcommittee of the Board of Supervisors) and professional staff resources for which to locally implement the specific actions requested of the State of California and the United States Federal Government, including the following:
 - a. Effectuate rule changes giving local jurisdictions authority to entitle and permit up to 99.9 MW of energy generation and changes to definition of “net-to-grid”.
 - b. Create a Specific Plan (SP) for Lithium Valley within Imperial County.
 - c. Create a Programmatic Environmental Impact Report (EIR) for Lithium Valley within Imperial County
 - d. Create and implement the Lithium Valley Development Office to assist with the development of lithium/rare-mineral mining, ancillary processing, assembly and manufacturing and renewable energy generation projects.

- e. Assist State and local agencies in the development, construction and operation of a California Polytechnic University or similar institution to provide education and training in support of lithium/rare-mineral mining and renewable energy generation.

Specific Actions Requested of the State of California

Governor Newsom identified Lithium Valley in remarks on his fiscal year 2022-23 proposed budget, The California Blueprint which was released on January 10, 2022. “We have what someone described as the Saudi Arabia of lithium right here in the state of California down in Imperial County near the Salton Sea,” Newsom remarked.

Imperial County agrees with the Governor’s assessment 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. California and the United States can secure a strategic mineral resource and promoted environmentally-friendly business practices.

Delegating planning and permitting authority of Geothermal Development up to 99.9 Megawatts generation, to the County of Imperial. (Currently limited to 49.9 Megawatts)

Currently, Imperial County is authorized to permit Geothermal Power Plants that generate up to 49.9 MWs, and a developer wishing to construct a Geothermal Power Plant 50MWs or larger is required to follow the California Energy Commission’s (“CEC”) Application for Certification Process (“AFC”). However, the CEC’s Small Power Plant Exemption Program (“SPPE”) allows for a proposed Thermal Power Plant project to be exempted from the AFC when: 1) the project will generate between 50 and 100 MWs; and 2) the CEC has made a determination that the project will not have a significant effect on the environment or energy resources. Imperial County is respectfully requesting that the (“CEC”) grant our County the ability to permit Geothermal Power Plants up to the maximum 99.9 MWs in accordance with the SPPE.

Further, formally change the definition of “net-to-grid” to provide opportunity for energy generation facilities in Imperial County to deliver power to themselves (parasitic load), adjacent users (affiliated and non-affiliated) and micro-grid users (affiliated and non-affiliated) within five (5) miles of the boundaries of the host site. Host site shall be defined as the parcel at which the power generation facility is located (or all parcels if facility is located on multiple parcels). When said changes are granted by the State of California, it will kick start both the development of mineral recovery and increase the State baseload renewable power portfolio.

Provide Direct Funding to Imperial County for the Lithium Valley Specific Plan and Programmatic Environmental Impact Report (\$5,000,000) to be available within 30 days of adoption of the FY 2022-23 State Budget

The Lithium Valley Specific Plan and Program EIR seeks to help meet the State of California’s renewable energy production goals, while providing Industry with a clear timeline for project delivery. The Specific Plan’s goal is built upon this effort, expanding the development opportunities, both in additional geothermal energy production along with mineral recovery, hydrogen, biofuels, and renewable (cathode, battery, electric vehicle) manufacturing facilities. The Program EIR ensures consideration of CEQA requirements and environmental impacts on a large project area plus avoids duplication of individual project CEQA reviews.

There are a number of other sectors of the renewability that the Salton Sea Resource has the potential to develop. This includes: 1) creating environmentally safe and renewable mineral recovery through geothermal brine, 2) developing other sustainable fuels such as green hydrogen and bio-based fuels, and 3) recycling and reusing

organic (plant based) and inorganic mineral waste (battery recovery), both diverting from landfills and reducing the depletion of raw materials.

Imperial County released a Specific Plan and Programmatic Environmental Impact Report (EIR) Request for Proposals on January 13, 2022. The responses will be brought to the Imperial County Board of Supervisors in March 2022, with a recommendation to award. We are seeking support and funding of the Lithium Valley Specific Plan and Program EIR, with an estimated cost of \$5 million to be made directly available to the County of Imperial within 30 days of adoption of the FY 2022-23 State of California Budget.

Direct Funding to the County of Imperial for the Lithium Valley Development Office (\$500,000 annually, increasing by 5% per annum) for a period of ten (10 years) beginning with the FY 2022-23 State Budget

Imperial County is seeking support and funding of a Lithium Valley Development Office, located in Imperial County. The office function will be to provide direct feedback to the development on project status and shepherd projects through the County of Imperial permitting and planning offices. In addition, the office will follow the Lithium Valley Specific Plan and Program EIR, answer Industry inquiries, and encourage ancillary business development in Lithium Valley.

The Lithium Valley Development Office will include an economic development officer, civil engineer, planner and analyst. Each position would be limited term and compensated at 30% greater than the current corresponding County pay structure. The team will report to the Imperial County Board of Supervisors and provide collaboration reports to the California Energy Commission, Lithium Valley Commission and Governor's Office of Economic Development (GOBIZ). The estimated cost is \$500,000 annually (increasing by 5% per annum) and would be for a term of ten (10) years, between July 1, 2022, and June 30, 2031.

State of California Support and Assistance in creation of an Imperial County Severance Tax or Resource Levy for critical minerals (delegated authority to Imperial County)

In November 2022, the County of Imperial shall seek voter approval to establish appropriate remuneration for lithium/rare mineral mining and power generation/storage to provide appropriate financial benefits to the County (as a municipal corporation) and community organizations that further the economic interests of the region.

The State of California shall support this self-determination effort so that the County of Imperial and its residents will directly benefit from the production of lithium/rare minerals and renewable energy resources being exported elsewhere in California, the nation and internationally. A mineral tax/levy/fee would be directed to infrastructure, environmental mitigation, and community enhancement, all within Imperial County.

Infrastructure needs are being identified by Imperial County Public Works and the Lithium Valley Specific Plan. Already, Imperial County has invested in the repair and reopening of two (2) critical bridges that serve the Lithium Valley Area. As the Salton Sea recedes, additional Geothermal resources and mineral extraction sites will need road and utility connection. A guaranteed revenue allows Imperial County to make the improvements, as industry demands grow.

Environmental mitigation needs are found at the South Salton Sea. Air pollution dust control projects, wetlands, remediation, land reclamation, and tree planting are some of the measures available. These projects would be on land around or near the Lithium Valley area.

Community enhancement needs are items that make our neighborhoods alive. Imperial County, in partnership with the Cities and Special Districts within the County would begin investment in cultural projects, music, art, parks and education endowment. Celebrating the contributions of our diverse community and encouraging some of the new workforce to locate in our communities.

The State of California will work cooperatively with the County of Imperial relative to any fee/taxation being discussed by State officials in an effort to ensure that such fees/taxes combined with local fees/taxes (for the benefit of the host community/region) do not place an undue burden on the industry, thus making lithium/rare-mineral extraction and geothermal energy generation unfeasible.

Support and Funding of a Cal-Poly campus in Imperial County (\$100 million) or Expansion of Current/Past Efforts (including cooperatives with UC Riverside and UC Davis to include educational opportunities in engineering, geology and chemistry for which to train/support the lithium industry in Imperial County)

Imperial County requests the support and funding of a California Polytechnical University in Lithium Valley. A Cal-Poly campus would provide the engineers and chemists needed to work in the geothermal and lithium development sector; as well as any co-locating cathode or battery company workforce needs. The polytechnical college provides opportunities for the vocational and technical development of the workforce as well, plus it would complement the need for supporting our continuing agricultural business.

As an immediate action, the State of California would establish a Cal-Poly extension at the three hundred (300) acres site in Brawley, California. The property was previously donated by a local businessperson with the hopes that a full four-year university would be established. The site has some superstructures, though is currently vacant. The on-site buildings could be remodeled and re-opened to immediately establish a Cal-Poly extension on this land with temporary classrooms/laboratories while a full campus is designed and constructed. The need is immediate.

Support and Provide Seed-Funding a Reference Lab for Lithium Purity Testing

The value and use applicability of metals, minerals and other elements rely on their laboratory-tested purity. Laboratory facilities must be located at or near actual mining facilities for quality control purposes. As the host community for lithium extraction, the Imperial Valley must have appropriate testing facilities to ultimately benefit commercial and consumer applications of lithium and other rare-earth minerals. Such a facility could be run as a cooperative serving many different extraction operations and (ultimately) be paid for out of a remuneration tax or fee.

Go-Biz Tax Credit Carve-Out for Lithium, Geothermal

The County of Imperial requests that the State of California dedicate \$5,000,000 annually for new Employment Tax Credits for employers within appropriate NAICS codes making new investments of lithium/rare-mineral mining in Imperial County for a period of five (5) years (time period of FY 2024 through FY 2028). This carve-out would provide the impetus for lithium/rare-mineral mining/processing/manufacturing and geothermal energy generation to begin immediately to meet the market demands and thus providing for supply-chain and environmental benefits to the State of California sooner.

Executive Order or Legislative Action exempting lithium/rare-mineral and geothermal producers from additional compliance from CEQA after PEIR and SP

The County of Imperial requests that the State of California take an executive or legislative action that results in the exclusion of current and future projects that are within the County's (to be created) Specific Plan and

Programmatic Environmental Impact Report from further environmental review, such as the California Environmental Quality Act (CEQA).

Specific Actions Requested of the United States Federal Government

The United States Department of Energy (U.S. energy Secretary Granholm) produced the National Blueprint for Lithium Batteries (released in June 2021). It outlined the need for lithium production as a means of propelling the United States economy and providing for environmental improvements. It quotes President Biden's Executive Order 14008 "Tackling the Climate Crisis Home and Abroad" (1/27/21). Lithium/rare-mineral mining and renewable energy generation domestically helps reduce American reliance on foreign sources for needed manufacturing inputs and energy production.

The Infrastructure Investment and Jobs Act of 2021 provides \$1.2 trillion of future spending from the United States Federal Government on various programs and projects. Included in this is about \$550 billion of direct spending on infrastructure projects. Imperial County's Lithium Valley Economic Opportunity Investment Plan needs the direct involvement and investment from the Federal Government.

The Infrastructure Bill included future spending in the following categories that can be used to propel the Lithium Valley Economic Opportunity Investment Plan:

Roads & Bridges: \$157 billion

Railways: \$66 billion

Electrical Grid: \$65 billion

Environmental Remediation: \$21 billion

Portions of the Infrastructure Bill can be utilized to help propel investment in lithium/rare-mineral mining and renewable energy generation in Imperial County:

Roads & Bridges (\$157 billion): Imperial County needs an allocation of \$50 million to provide for road and bridge infrastructure to portions of the region where lithium/rare-mineral mining and renewable power generation occur. This will provide the opportunity for increased access in a safe manner for production equipment and construction/operational personnel.

Railways (\$66 billion): An estimated 15,000,000 tons of lithium will be extracted over a 50+ year period (Upstream). Some of this material will be used directly in midstream (material processing, and cell manufacturing). Ultimately almost all either upstream or midstream material/products will be exported out of Imperial County to end-users. Rail is an efficient and effective means to move these materials and goods. Imperial County needs \$1 billion of railway upgrades in the form of additional tracks, loading and siding/spur infrastructure.

Electrical Grid (\$65 billion): The process of lithium and rare-mineral extraction (in the case of Imperial County) also generates significant geothermal (baseload) power. Energy production is reliant on transmission and distribution. Expanded capacity is needed to move energy from Imperial Valley to more populous areas throughout California and the Western United States. Imperial County requests \$500 million in funding offsets for grid upgrades and wheeling charges from energy producers.

Environmental Remediation (\$21 billion): Lithium battery production will (ultimately) generate an issue at the back end, “End-of-life recycling and reuse”. Without significant advanced planning and investment, this will become an immense environmental issue for generations to come. The Federal Government has the opportunity to utilize funds from the Infrastructure Bill to invest in appropriate facilities for “End of Life Recycling and Reuse.” Imperial County believes such activities should occur where (or near) the lithium was originally mined and processed. The Federal Government should allocate up to \$500 million in direct funding and/or loan guarantees for companies that desire to build/operate End of Life Recycling and Reuse facilities in Imperial County to support the lithium battery and technology industry.

Call to Action

The Lithium Valley Economic Opportunity Investment Plan will create billions of dollars of private economic investment in Imperial County producing lithium/rare-minerals and renewable energy helping propel the United States economy for generations. This will result in employment opportunities for residents of the region and tax revenue at the local, state and federal government.

The success of the Lithium Valley Economic Opportunity Investment Plan relies on the adoption and funding of the Plan at all levels of government (County, State and Federal). The actions needed by each level of government are outlined quantitatively within the plan. It is incumbent on each participant to take immediate action on their portion of the plan in order to achieve the desired outcome for economic investment.

