

### The Transformative Potential of Lithium Extraction for the Salton Sea and Imperial Valley: Where We Stand Today

April 25, 2024

Noemí Gallardo Commissioner, California Energy Commission (CEC)



### **CEC Action on Supporting Lithium Valley**

#### 2021-2022 CEC initiates support to LVC

- Coordinates meetings, workshops, state delegation visits
- Identifies speakers
- Drafts and publishes materials, including report

#### 2023 CEC focuses on learning

- Meets with tribes, local government, CBOs and residents
- Coordinates state delegation visits
- Conducts tour and visit for DOE and DOD
- Develops relationship with DOD's community grants office
- Initiates coordination among state agencies

#### 2024 CEC ramps up efforts to advance Lithium Valley Vision

- Institutes Lithium Valley Vision informational proceeding
- Established Lithium Valley State Workgroup
- Coordinates state and County progress update on LVC recommendations
- Co-hosts Lithium Valley Symposium on 3/29 with GO-Biz and IVC







## **Lithium Valley Symposium**

#### Held 3/29/24 at Imperial Valley College

• Co-hosted by CEC, GO-Biz and IVC

#### 130+ people attended including reps from:

- Local governments
- CBOs
- Tribes
- Industry
- Trades/Unions
- Academic institutions
- Research labs

#### 17 state reps from:

- Legislature
- Governor's Office
- State Treasurer's Office
- CNRA
- CEC
- CalSTA
- Business, Consumer Services and Housing Agency
- LWDA Employment Training Panel





# Lithium Valley Vision Informational Proceeding



Source: CEC



**Purpose**: Develop cohesive and coordinated approach to turn the Lithium Valley Vision into Reality

**Objective:** Establish a record of input from multiple perspectives to develop a strategic assessment to guide future action

#### **Process:** Hold workshop series

- Hybrid and in-person in Salton Sea region
- Receive input about scoping topics
- Coordinate with state entities and County of Imperial

#### First Workshop held 4/19/24 in Sacramento and Zoom

- 100+ attendees via Zoom and 20 in room; 11 commenters
- County of Imperial provided update on Lithium Valley activities
- CEC explained proceeding, discussed scope of topics for future workshops, and provided update on progress addressing LVC recommendations

# **Status on Addressing LVC Recommendations**

**Purpose:** Determine state and County action taken on LVC Recommendations to avoid duplication, use resources effectively and reinforce efforts to support Lithium Valley

#### **Objectives:**

- Identify entities involved and work accomplished
- Assess progress made to determine further action needed by state
- Coordinate with County of Imperial on additional actions

Process: Obtain information from state and County of Imperial

#### Summary:

- 12 of 15 being actively addressed
- Current legislation (AB 2757, Garcia) would directly address:
  - #3: Establish Southeast California Economic Zone
- 2 recommendations have not been addressed:
  - o #8: Health Impact Analysis for Eastern Coachella Valley
  - o #10: Require and fund IID to conduct a water study
- Link to detailed summary on progress made on LVC recommendations: https://efiling.energy.ca.gov/GetDocument.aspx?tn=255768&DocumentContentId=91612



Source: Calexico Chronicle



### *Investing in the Vision: Economic Support of the Lithium Extraction Industry and Communities*

April 25, 2024

Erik Stokes, Chief of Staff Office of Commissioner Noemí Gallardo



#### CEC has invested across the battery supply chain:

- \$14+ million for lithium recovery\*
- \$80+ million for battery manufacturing
- \$130+ million for EV and Stationary Storage manufacturing
- \$20+ million for battery repurposing & recycling

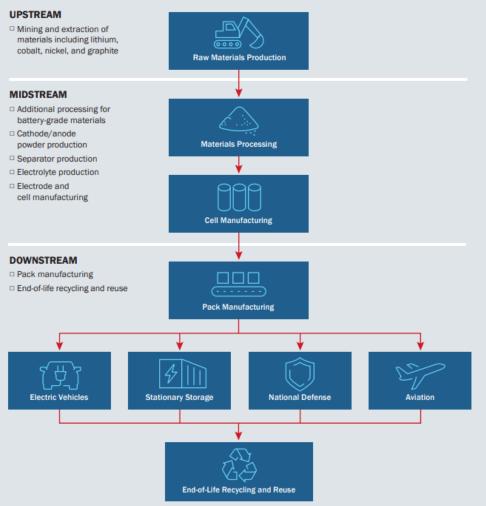
#### **CEC Funding Sources:**

- Electric Program Investment Charge (EPIC)
- Clean Transportation Program (CTP)
- Geothermal Grant and Loan Program (GRDA)

#### **Federal Cost Share**

- Helps CA organizations compete for federal funding
- \$5.2 million in EPIC funds has secured \$26 million in federal funding for lithium-related projects in CA.

#### Lithium-Based Battery Supply Chain



\* CEC has funded all three geothermal/lithium developers in Salton Sea.

Source: Department of Energy National Blueprint for Lithium Batteries

# **Current Funding Opportunities**

#### Geothermal Energy Operations and Lithium Innovation (GEO/LI) (EPIC - \$23 million)

- Category 1: Prevent scaling and corrosion
- Category 2: Increase mineral recovery and minimize waste streams, water use, and chemicals
- Category 3: Optimize production between geothermal and lithium processes

#### PowerForward (CTP - \$35 million):

- Category 1: Production of cathodes and cathode active materials.
- Category 2: Open to a variety of activities in the battery manufacturing lifecycle.

#### Geothermal Grant and Loan Program (GRDA - \$5.8 million)

- Phase I: Technical Assistance to Local Jurisdictions
- Phase II: Support development of geothermal energy and/or lithium recovery from geothermal brine.

#### Federal Cost Share (EPIC)

- \$5 million reserved for Sparkz' proposal to DOE.
- Proposal would secure \$150 million in federal funding to CA for battery manufacturing.

### POWER FORWARD

## ZEV Battery Manufacturing Grant Program

Expanding California's leadership in domestic battery supply chains

Eligibility

# Lithium Valley Information Dissemination

#### Lithium Valley Dashboard

- Track investments into LV and CA Lithium Economy
- Starting with state investments
- Tentative May 2024 release

#### **Lithium Valley Subscription**

- Created as part of CEC Lithium Valley Vision webpage in February 2024: <u>Lithium Valley Vision | California Energy Commission</u>
- Enables CEC to push out information on Lithium Valley
- This includes workshop notices, workshop materials, and lithiumrelated CEC and Federal funding opportunities

SUBSCRIBE		
Lithium Valley		
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SUBSCRIBE	April 18, 2024	
	DOE Announces National Laboratory Funding	

DOE Announces National Laboratory Funding Opportunity to Support Critical Materials of Geothermal Energy



Spodumene, source of the critical mineral lithium (via USGS)