



California Energy Commission Comisión de Energía de California

April 7, 2022

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Departamento de Energía Renovable



Role of the CA Energy Commission

- Advance State Energy Policy
- Advance Energy Efficiency
- Invest in Energy Innovation
- Develop Renewable Energy
- Transform Transportation
- Oversee Energy Infrastructure
- Prepare for Energy Emergencies

California has a 100 percent zero-carbon energy-planning goal by 2045.

California is recognized worldwide for transitioning its electricity system to one that relies increasingly on clean sources of energy, such as solar, wind, and geothermal.



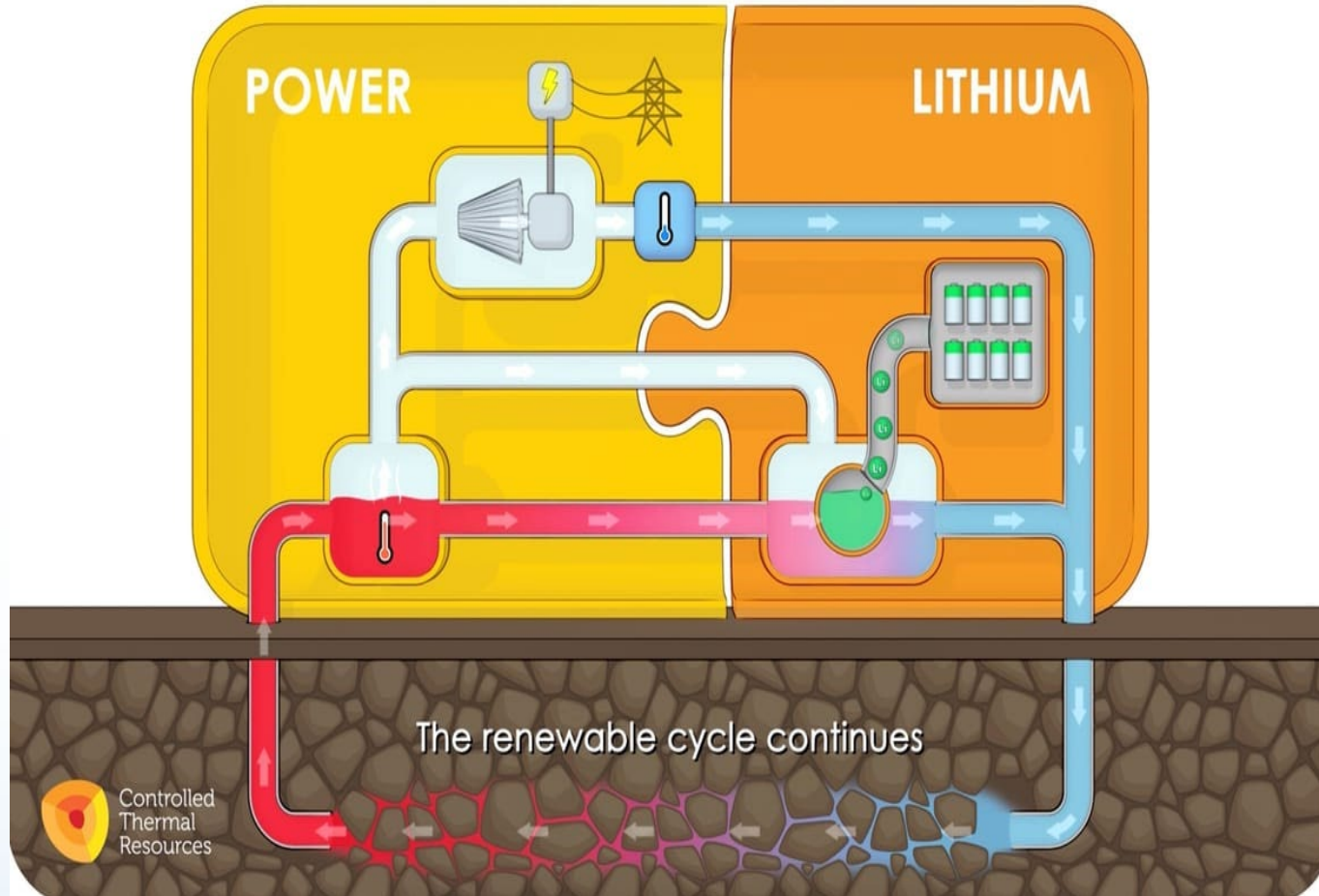
Lithium Market Today



- Today, more than 95% of world's lithium is produced in just 4 countries — Australia, Chile, China, and Argentina though hard-rock mining or large evaporation ponds.
- Both methods have significant environmental impacts, requiring unsustainable levels of water and/or land, with high levels of associated greenhouse gas emissions.
- Additionally, dependence on imports leaves the U.S. vulnerable to market changes and supply chain shocks.



California's Lithium Opportunity



- CA has abundant untapped lithium reserves in geothermal brine more than a mile underground near the Salton Sea.
- Experts estimate the region could satisfy more than one-third of today's global lithium demand.
- New methods of direct lithium extraction (DLE) from geothermal brine allow a more sustainable lithium supply than the processes commonly used today.



CEC Supporting Innovation

The CEC has funded more than 20 research projects to advance innovations for lithium recovery from geothermal brines, the processing of manufacturing grade lithium and the efficient use of lithium in batteries, as well as other related research, planning and development efforts.

- Research and development of lithium recovery technologies.
- Development of demonstration and pilot-scale facilities that recover lithium from geothermal brines.
- Financial and technical support for projects completing technical and economic evaluation of lithium extraction, processing and manufacturing.



Lithium Valley Commission

Assessing opportunities & benefits through a public process with support from CEC

Report due to State Legislature by October 1, 2022



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ALIANZA COACHELLA VALLEY



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AUDUBON CALIFORNIA'S SALTON
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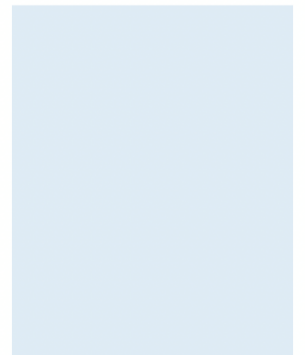
Manfred Scott
QUECHAN INDIAN TRIBE



Tom Soto
DIVERSE COMMUNITIES IMPACT
FUND



Jonathan Weisgall
BERKSHIRE HATHAWAY ENERGY



Vacant
(PREVIOUSLY MARTHA GUZMAN-
ACEVES)



Governors Proposed Budget

Through economic development incentives for the clean energy sector, the Administration proposes a robust infrastructure that will:

- Provide incentives to advance the clean energy market in California.
- Provide Californians a share of the benefit from these projects.
- Develop labor standards that deliver community benefits, economic development, and labor opportunities.
- Provide a model in the clean energy sector that can guide state engagement in other opportunity areas, with a focus on
 - supporting California's clean energy goals,
 - maintaining high environmental and labor standards,
 - and engaging proactively with affected stakeholders and communities



Thank you!

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