

# CLIMATE CHANGE

California has a unique opportunity to build upon the state's history of innovation, economic growth and science-based policymaking to lead global efforts to adapt to and mitigate climate change. The state is positioned to simultaneously confront the climate crisis and build a more resilient, just and equitable future for all communities.

Building on the state's climate leadership and the historic \$15 billion climate resilience investments in the 2021 Budget Act, the Governor's Budget proposed \$22.5 billion over five years to support transformative climate investments in transportation, energy, housing, education, wildfire resilience, drought, and health.

A record-breaking lack of precipitation from January through mid-April pushed California into a third consecutive year of drought. Climate change also continues to cause unprecedented stress on California's energy system—driving high demand and constraining supply—compounded by geopolitical and supply chain issues. Californians also continue to suffer from high prices at the gas pump and on their utility bills.

To address these pressing issues, the May Revision includes an additional \$9.5 billion from various fund sources over four years for a total \$32 billion to continue to advance the state's Climate and Opportunity Budget, provide equitable climate solutions, protect communities, and support energy reliability.

---

## CLIMATE RESILIENCE

---

### WATER RESILIENCE AND DROUGHT RESPONSE

Climate change is spurring warmer conditions in California and creating larger gaps between significant precipitation events that are vital to water supply. This year, water project operators will make only minimal deliveries to farms and cities, and wildlife managers are taking extraordinary action to relocate salmon to streams with cooler water than can be made available below major reservoirs.

Lessons learned in the 2012 to 2016 drought inform the current state response, which has also benefitted from significant investments, new data tools, and policy shifts over the last several years. This includes new laws related to safe drinking water, drought planning, water conservation, and local management of groundwater. The historic three-year, \$5.2 billion investment in California water systems enacted last year has helped to minimize immediate economic and environmental damage from the drought and enabled hundreds of projects by local water suppliers to prepare for and be more resilient to future droughts.

The Governor's Budget proposed an additional drought resilience investment of \$750 million General Fund, with a focus on drought relief and promoting water conservation. Given the intensification of drought since January, the May Revision includes an additional \$1.3 billion General Fund for drought resilience and response designed to help communities and fish and wildlife avoid immediate negative impacts as a result of extreme drought while continuing to advance projects and programs that prepare the state to be more resilient to future droughts. This funding is proposed for acceleration into the 2021-22 fiscal year given current availability of resources.

Significant Investments include:

- \$530 million to support water recycling and groundwater cleanup; advance drinking water and clean water projects that leverage significant federal infrastructure funds; and continue aqueduct solar pilots.
- \$553 million to provide grants to urban water districts and smaller community water suppliers for drought-relief projects; support data, research, and public education campaigns; support local technical assistance emergency drinking water response, including the purchase and pre-positioning of water storage tanks; enhance water

rights enforcement and modernization tools; and support food assistance programs for farmworkers impacted by drought.

- \$280 million to address fish and wildlife impacts associated with drought and climate change, and to build aquatic habitat and water resilience projects to support implementation of voluntary agreements with water suppliers.
- \$187 million to support agricultural water conservation practices; incentivize farmers to install more efficient irrigation equipment and provide on-farm technical assistance; provide direct relief to small farm operators; and support additional water conservation projects.

### Drought Resilience and Response (Dollars in Millions)

Investment Category	Department	Program	2021 Package Total	Accelerated Drought Resilience Package		Total
				Governor's Budget	May Revision	
Immediate Drought Support	Department of Water Resources	Small Water Suppliers Drought Relief & Urban Water Management Grants	\$484	\$120	\$180	\$784
	State Water Resources Control Board	Water Transfers Pilot Project	\$0	\$0	\$20	\$20
		Water Rights Modernization and Drought Resilience	\$0	\$0	\$44	\$44
	Department of Social Services	Drought Food Assistance	\$0	\$0	\$23	\$23
	Various	Data, Research, and Communications	\$127	\$0	\$116.8	\$244
		Drought Technical Assistance and Emergency Drought Response	\$57	\$25	\$161	\$243
Drought Permitting, Compliance, Curtailments and Water Right Enforcement		\$43	\$0	\$8	\$51	
Drinking Water, Water Supply and Reliability, Flood	State Water Resources Control Board	Drinking Water/Wastewater Infrastructure and State Revolving Fund	\$1,300	\$0	\$400	\$1,700
		PFA's Support	\$100	\$0	\$0	\$100
	Department of Water Resources	Water Recycling/Groundwater Cleanup	\$400	\$0	\$100	\$500
		Salton Sea	\$220	\$0	\$0	\$220
		Water Conveyance	\$200	\$0	\$0	\$200
		Flood	\$638	\$0	\$0	\$638
		Aqueduct Solar Panel Pilot Study	\$20	\$0	\$30	\$50
		Watershed Climate Studies	\$25	\$0	\$0	\$25
Natural Resources Agency	Clear Lake Rehabilitation	\$5.7	\$0	\$0	\$6	
Conservation/ Agriculture	Department of Water Resources	SGMA Implementation	\$300	\$30	\$26	\$356
		Agriculture and Delta Drought Response Programs	\$8	\$0	\$60	\$68
	Department of Food and Agriculture	Relief for Small Farmers	\$0	\$5	\$20	\$25
		On-farm Water Use and Agriculture Technical Assistance	\$5	\$0	\$15	\$20
		State Water Efficiency and Enhancement Program	\$100	\$20	\$40	\$160
	Department of Conservation	Multi-benefit Land Repurposing	\$50	\$40	\$0	\$90
	Various	Water Conservation Programs (Small and Urban), Turf Replacement, and State Water Conservation Projects	\$0	\$185	\$26	\$211
Habitat/ Nature-Based Solutions	Department of Fish and Wildlife/ Department of Water Resources	Fish and Wildlife Protection	\$0	\$75	\$100	\$175
		Improving Drought Resiliency on State-Owned Land and Migratory Bird Habitat	\$8	\$0	\$25	\$33
	Department of Water Resources	Studying Salmon and Tribal Co-Management Activities	\$0	\$0	\$7.3	\$7.3
		Climate Induced Hatchery Upgrades	\$33	\$0	\$17	\$50
	Department of Water Resources	Aquatic Habitat and Drought Resilience and Expediting Large Scale Habitat	\$0	\$0	\$130.6	\$130.6
	Various	Additional Nature-Based Solutions	\$1,033	\$0	\$0	\$1,033
<b>Total</b>			<b>\$5,157</b>	<b>\$500</b>	<b>\$1,550</b>	<b>\$7,207</b>

The May Revision also includes \$500 million General Fund in 2025-26, to serve as a multi-year commitment to promote strategic water storage projects in the state that benefit water supply reliability and the environment. California's variable precipitation makes above and below ground water storage crucial, and aquifers and off-stream reservoirs are among the most feasible places to store additional water as a resilience measure into the future. These resources will build upon the \$2.7 billion provided in

Proposition 1 under the Water Storage Investment Program to accelerate critical projects as part of a comprehensive and coordinated approach to water resiliency as outlined in the California Water Resilience Portfolio.

In addition, the May Revision includes \$1.2 million General Fund ongoing for the Judicial Council to address climate, environmental, and water-related legal disputes and \$75 million one-time General Fund to support the California Small Agricultural Business Drought Relief Grant Program to provide direct assistance to eligible agriculture-related businesses that have been impacted by severe drought conditions. See the Judicial Branch Chapter and the Economic Growth, Job Creation, and Expanded Opportunity Chapter for additional details.

In addition to funding in this package, some of the funding proposed for nature-based solutions described below will provide habitat restoration to improve the health of Northern California rivers which will support voluntary agreements with water users.

---

## **EXTREME HEAT**

Every corner of the state will be impacted in years and decades to come by higher average temperatures and more frequent and severe heat waves. Extreme heat threatens public health and safety, economic prosperity, communities and natural systems. It also poses profoundly disproportionate consequences for the most vulnerable populations, including tribal nations, low-income neighborhoods, communities of color, and older and disabled adults.

In recent years, California has provided historic investments to address extreme heat, including \$800 million General Fund over two years in the 2021 Budget Act as part of the Climate Resilience Package. This funding included \$300 million to support the implementation of the state's updated Extreme Heat Action Plan. The final plan was informed by input received through a public engagement process and released in April 2022. The proposed allocation of the \$300 million advances areas of near-term focus outlined in the Action Plan including:

- \$220 million over two years to support cooling of communities at schools and through resilience centers.
- \$43 million to protect vulnerable populations and ecosystems from extreme heat impacts through enhanced enforcement of codes, standards, and regulations.

- \$20 million to increase understanding of the risks posed by extreme heat and what resources are available to keep communities safe through a public awareness and outreach campaign.
- \$17 million to invest in the alignment of the state's response to extreme heat and High Road workforce development and building California's climate-smart workforce through training partnerships and apprenticeships in jobs and careers that address extreme heat.

**Extreme Heat**  
(Dollars in Millions)

Plan or Framework Category	Department	Program	2022-23	2023-24	Total
Cool Communities	Strategic Growth Council	Resilience Centers	\$85	\$85	\$170
	CAL FIRE	Green Schoolyards (Urban Forestry)	\$25	\$25	\$50
Protecting Vulnerable Populations and Ecosystems	Department of Public Health	Enhanced Protections for Vulnerable Populations	\$3	\$0	\$3
	Department of Industrial Relations		\$12.25	\$12.25	\$24.5
	Department of Social Services		\$2.75	\$5.75	\$8.5
	Department of Food and Agriculture	Animal Mortality Management Program	\$0.6	\$0.6	\$1.2
		Origin Inspection Program	\$0.25	\$0.25	\$0.5
	Department of Pesticide Regulation	Integrated Pest Management Technical Assistance	\$1.075	\$1.575	\$2.7
		\$1.075	\$1.575	\$2.7	
Increasing Public Awareness	Office of Planning and Research	Community-Based Public Awareness Campaign	\$6	\$14	\$20
Build a Climate Smart Workforce	Workforce Development Board	Extreme Heat High Road Training, Partnerships, and Apprenticeships Programs	\$13	\$4	\$17
<b>Total</b>			<b>\$150</b>	<b>\$150</b>	<b>\$300</b>

**NATURE-BASED SOLUTIONS**

California's natural and working lands—forests, wetlands, croplands, grasslands, deserts, and other landscapes—help sustain the state's communities and economy. They are also essential to combating the climate crisis and preserving California's world-renowned biodiversity. Nature-based solutions buffer state residents from climate threats, strengthen and protect cultural connections to the environment, contribute to carbon neutrality, sustain rivers and water supplies, protect fish and wildlife, and provide for outdoor experiences.

California is committed to the goal of conserving 30 percent of the state's lands and coastal waters by 2030. This 30x30 strategy is part of an international movement to conserve natural areas across the planet to protect biodiversity, expand equitable access to nature and its benefits, combat climate change, and build resilience to climate impacts.

The 2021 Budget Act committed \$1.4 billion General Fund over three years for multi-benefit nature-based solutions. This included \$768 million General Fund over two years to support implementation of the state's Natural and Working Lands Climate Smart Strategy to advance climate-focused land management toward an equitable, resilient, and carbon-neutral future, and the Pathways to 30x30 Strategy to accelerate California's pledge to protect biodiversity, expand access to nature and tackle climate change.

To advance these two initiatives, and reflecting over a year of public input, the Administration's proposed allocation of the \$768 million over two years includes:

- \$275 million to fund projects that will deliver climate benefits and protect biodiversity, including voluntary conservation acquisitions and easements.
- \$213 million to support regional action through investments in Natural Community Conservation Planning programs and projects funded through state conservancies and local and tribal conservation corps.
- \$100 million for the Tribal Nature-Based Solutions Program announced in March at the California Truth & Healing Council (See additional details below).
- \$90 million for inland wetlands restoration, which delivers multiple benefits including sequestering greenhouse gas emissions, protecting habitat, and advancing economic opportunity.
- \$50 million for wildlife corridors, including the Liberty Canyon Wallis Annenberg Wildlife Crossing Project.
- \$30 million to accelerate climate smart land management practices across California's diverse landscape including farms, forests, and community green spaces.
- \$10 million to support a compost permitting pilot program that will help local government entities and facilities locate and permit small and medium-sized compost facilities, diverting more organic waste away from landfills and into the creation of healthy soils and to support additional strategic nature-based solution investments.

### Nature-Based Solutions

(Dollars in Millions)

Investment Category	Department	Program	2022-23	2023-24	Total
Nature-Based Solutions Programs	Wildlife Conservation Board	Forest Conservation Program			
		Oak Woodlands Conservation Program			
		California Desert Conservation Program			
		Rangeland, Grazing Land and Grassland Protection Program	\$200	\$45	\$245
		California Riparian Habitat Conservation Program			
		Natural and Working Lands Climate Adaptation and Resiliency Program			
	Department of Fish & Wildlife	Nature-Based Solutions Wetlands Restoration Program	\$54	\$0	\$54
	Delta Conservancy		\$36	\$0	\$36
Department of Conservation	Multi-benefit Land Repurposing Program	\$0	\$20	\$20	
Department of Food & Agriculture	Healthy Soils Program	\$0	\$10	\$10	
CAL FIRE	Wildland Grazing (Fire Prevention Grant Program)	\$5	\$5	\$10	
Supporting Regional Action	State Conservancies	Support for Nature-Based Solutions	\$60	\$60	\$120
	Department of Fish and Wildlife & Santa Monica Mountains Conservancy	Wildlife Corridors (including Liberty Canyon)	\$50	\$0	\$50
	Department of Fish and Wildlife	Natural Community Conservation Program Planning and Land Acquisition	\$36	\$0	\$36
	Department of Conservation	Climate Smart Land Management Program	\$14	\$6	\$20
	Wildlife Conservation Board	Resource Conservation Investments Strategies	\$2	\$3	\$5
Expanding Educational and Economic Opportunities for Youth Climate Leaders	Conservation Corps	Local and Tribal Nature-Based Solutions Corps	\$35	\$17	\$52
Partnering with California Native American Tribes	Natural Resources Agency	Tribal Nature-Based Solutions Program	\$100	\$0	\$100
Additional Strategic Investments	CalRecycle	Compost Permitting Pilot Program	\$0.5	\$7	\$7.5
	Natural Resources Agency	Nature-Based Solutions Partnerships and Improvements	\$0.25	\$1.75	\$2
	Natural Resources Agency	CA Nature Support	\$0.25	\$0.25	\$0.5
<b>Total</b>			<b>\$593</b>	<b>\$175</b>	<b>\$768</b>

In addition to the nature-based solutions investments described above, the May Revision proposes additional funding to further build climate resilience in California.

Other Adjustments:

- **Coastal Restoration and Protection**—\$50 million one-time General Fund for the State Coastal Conservancy for the acquisition of real property. Building climate resilience may require acquisition of critical shoreline properties to protect natural resources, provide for public access, and implement the state's nature-based solutions agenda.
- **California Climate Information System**—\$18.3 million one-time General Fund for the integration and analysis of the most current climate monitoring data to provide information and decision-making tools for all entities that are working on the climate crisis. This funding will support the initial planning and development of the system, which will international sources that can be used by all interested parties to better inform the ultimately comprise a central hub for climate data from local, state, federal, and state's climate work and future state investments.

### **STRENGTHENING PARTNERSHIPS WITH CALIFORNIA NATIVE AMERICAN TRIBES**

California Native American tribes and people have stewarded the lands and waters within the current boundaries of the state since time immemorial. This stewardship is intertwined with tribes' deep connection to place, their natural and cultural resources, and sacred ceremonial and cultural areas. The May Revision recognizes the important role that tribes play in conserving lands, promoting best practices in enhancing fish and wildlife conditions, and meeting the state's goals as outlined in various climate-related plans.

The California Natural Resources Agency has worked to develop a robust tribal affairs program and strengthen coordination and collaboration with all tribal affairs programs across the departments, commissions, and conservancies under the Agency. This focused work and the core commitment to partnering with California Native American tribes in the Pathways to 30x30 and Natural and Working Lands Climate Smart strategies seek to further the Agency's mission to restore, protect, and manage the state's natural, historical and cultural resources for all.

The May Revision includes \$100 million one-time General Fund for the Tribal Nature-Based Solutions program to support tribal initiatives that advance shared climate and biodiversity goals as called for in Executive Order N-82-20 to accelerate the use of nature-based solutions to combat the climate crisis. This program will advance tribal initiatives including research, development and implementation of

traditional knowledge and tribal expertise, workforce training, capacity building and technical support, tribal nature-based climate conservation programs, increased access and co-management of lands, and ancestral land return. This program will be informed through a tribally led and informed process with the goal of strengthening partnerships with California Native American tribes in the funding and implementation of tribal nature-based solutions.

The Administration is also proposing the establishment of a Tribal Natural Resources Council, which is in direct response to the request from over 70 different California Native American tribes during government-to-government consultations on the Nature-Based Solutions Executive Order N-82-20, aimed at fostering inclusive partnerships and collaboration with tribes in addressing the biodiversity crisis and accelerating nature-based solutions. This Council will support the Agency's efforts to develop and implement the Tribal Nature-Based Solutions program and other tribal affairs programs and policies. The Council will have diverse regional representation and include federally and non-federally recognized California Native American tribal leaders.

---

### **WILDFIRE AND FOREST RESILIENCE**

The ongoing impact of climate change on California's wildlands continue to drive critically dry fuel conditions and longer, more severe fire seasons. The May Revision recognizes these conditions and its impact on firefighting operations and makes further investments to enhance CAL FIRE's fire protection capacity, which builds upon the Governor's January proposal to invest an additional \$1.2 billion investment over two years in a comprehensive wildfire and forest resilience strategy to continue to reduce the risk of catastrophic wildfires. See the Emergency Response Chapter for additional detail.

---

### **CAP-AND-TRADE EXPENDITURE PLAN**

The May Revision builds on the Cap and Trade Expenditure Plan in the Governor's Budget by targeting additional investments to programs that identify and mitigate methane emissions and protect disadvantaged communities. Specifically, the Administration proposes investing an additional \$120 million from Cap and Trade auction proceeds to two programs including:

- **Methane Satellites**—\$100 million Greenhouse Gas Reduction Fund on a one-time basis to expand the number of satellites launched for methane observations, which would provide weekly measurement of large methane emissions in the state and enhance enforcement capabilities. This data will allow California to identify the source of these emissions, work with programs to hold emitters accountable for violations, and further reduce the amount of short-lived climate pollutants in the atmosphere.
- **AB 617 Community Air Protection Program**—\$20 million Greenhouse Gas Reduction Fund on a one-time basis for the Community Air Protection Program, which reduces emissions in communities with disproportionate exposure to air pollution through targeted air monitoring and community emissions reduction programs. The Governor's Budget included \$240 million to support AB 617 investments; this additional allocation will bring the total proposed investment to \$260 million.

---

## ENERGY

Climate change is causing unprecedented stress on California's energy system—driving high demand and constraining supply. Extreme weather events from climate change—including heat waves, wildfires, and the impact of drought on hydropower capacity, combined with other factors such as supply-chain disruptions—are jeopardizing California's ability to build out the electric infrastructure in the time frame and at the scale needed.

The state has mandated more energy procurements than ever, accelerated projects, and postponed the planned retirement of power plants that generate thousands of megawatts. California has also implemented a range of emergency measures in 2020 and 2021 to reduce demand and increase supply at critical moments.

California's energy transition requires that the growth in the electricity system is clean, reliable and affordable. The Governor's Budget included \$2 billion for a Clean Energy Investment Plan to support innovation and deployment of clean energy technologies in the energy system. The May Revision includes an additional \$8 billion investment to further increase the state's energy system's resilience, increase reliability and affordability, and accelerate the deployment of the resources needed to achieve California's clean energy transition, and provide debt relief to California households impacted by the COVID-19 Pandemic.

## Energy Reliability, Relief and Clean Energy Investments

(Dollars in Millions)

Investment Category	Program	Agency	2021-22	2022-23	Multiyear Total
Ratepayer Relief	California Arrearage Payment Program	CSD	\$0	\$1,200	\$1,200
	Capacity Building Grants	CPUC	\$0	\$30	\$30
Reliability	Investments in Strategic Reliability Assets	DWR	\$1,500	\$445	\$4,250
	Distributed Electricity Backup Assets	CEC	\$550	\$0	\$950
	Residential Solar & Storage	CPUC	\$0	\$70	\$970
	Transmission & Energy Financing	IBank	\$0	\$250	\$250
	Demand Side Grid Support	CEC	\$200	\$0	\$295
Clean Energy	Carbon Removal Innovation	CEC	\$0	\$50	\$100
	Energy Data Infrastructure & Analysis	CEC	\$0	\$5	\$5
<b>Total Package</b>			<b>\$2,250</b>	<b>\$2,050</b>	<b>\$8,050</b>

### ESTABLISHMENT OF STRATEGIC ELECTRICITY RELIABILITY

To support reliability during the energy transition, the May Revision includes \$5.2 billion to invest in a Strategic Electricity Reliability Reserve. The resources from which the Reserve will be developed may include existing generation capacity that was scheduled to retire, new generation, new storage projects, clean backup generation projects, diesel and natural gas backup generation projects with emission controls and all required permits, and customer side load reduction capacity that is visible to and dispatchable by the California Independent System Operator (CAISO) during grid emergencies.

The Strategic Electricity Reliability Reserve will be a statewide resource capable of providing up to 5,000 megawatts available when the grid is stressed. This will increase the state's ability to withstand extreme and coincident climate events, but will not take the place of the longstanding obligations of all load serving entities to procure sufficient resources to maintain reliability.

In 2021, California increased the planning reserve margin requirements for most load serving entities in order to better incorporate the impacts of climate change and extreme weather. These actions will be coupled with the California Energy Commission updating its energy planning standards to further promote electricity reliability by ensuring that all load serving entities that are members of the CAISO adequately incorporate the impacts of climate change and extreme weather into their planning reserve margins.

The May Revision also proposes \$295 million over multiple years to support the CEC in developing demand-side grid support initiatives. These efforts will help reduce energy demand on the grid during peak energy times.

---

## **ACCELERATING CLEAN ENERGY AND STORAGE PROJECTS**

Achieving the state's climate and energy goals will require a diverse portfolio of clean and reliable sources of electric power. The May Revision accelerates the needed build out of clean energy and storage projects by providing a new streamlined permitting option at the California Energy Commission for qualifying projects. This proposal prioritizes the development of projects needed to enhance energy reliability while also providing opportunities for public, tribal, and local government engagement and environmental review.

The Governor's Budget proposed \$45 million to advance the state's offshore wind resource. The May Revision proposes a new pathway at the California Energy Commission for offshore wind developers to voluntarily partner with the state to help engage communities and stakeholders. It also looks to further build capacity in communities to encourage engagement in the Public Utilities Commission processes that shape the state's energy future.

The May Revision proposes \$970 million for the Public Utilities Commission to provide residential solar and storage system incentives, including for low-income households. This consists of \$670 million for solar and storage systems for low-income households. This also includes \$300 million for additional storage installations paired with existing residential solar systems.

Transformation of California's energy system and decarbonization of the economy requires careful consideration of electricity rates and new ways of allocating electricity service costs. The May Revision proposes statutory revisions to allow the Public Utilities Commission to adjust electricity rates to predetermined fixed charges with considerations of low income customers. This rate reform effort will reduce charges attached to volumes of electricity consumed, help control rate volatility, and enable creation of better price signals that will enhance widespread electrification efforts.

---

## **CLEAN ENERGY FINANCING**

The May Revision also includes \$250 million to leverage additional state financing tools dedicated to supporting the development of strategic clean energy projects that will

assist the state in meeting its reliability, affordability and climate goals. Projects will be identified in coordination with the Public Utilities Commission and the California Energy Commission, and in consultation with the CAISO, as appropriate. To the extent possible, the program will look to maximize the involvement of third-party capital, including from the federal Department of Energy and the private sector, in order to increase the impact of the state-provided funds. The initial priority of this new financing will be to support the development of new transmission to deliver to the CAISO system, clean, firm electricity from new resources located in the Salton Sea region. This investment will support the state's goals for development of Lithium Valley in Imperial County.

---

### **CALIFORNIA ARREARAGE PAYMENT PROGRAM**

Established in the 2021 Budget, the California Arrearage Payment Program (CAPP) directed \$1 billion in federal American Rescue Plan Act funding towards financial assistance to reduce or eliminate past due energy bill balances accrued by customers economically impacted by the COVID-19 Pandemic. Under CAPP, administered by the Department of Community Services and Development, over 1.5 million residential and commercial accounts received CAPP benefits. CAPP bill credits were automatically applied to qualified customers' energy utility bill accounts.

While CAPP made a significant impact on reducing or eliminating Californian's energy debts, public and investor-owned energy utilities are reporting that arrearages have continued to grow for customers. The May Revision includes funding of \$1.2 billion to relieve California households by addressing energy arrearages.

---

### **CARBON REMOVAL**

While the state is making bold efforts to aggressively reduce carbon emissions, more must be done. Both the California Air Resources Board and the California Energy Commission anticipate carbon removal will be needed for the state to achieve its greenhouse gas reduction and energy goals.

The May Revision includes \$100 million to support carbon removal projects by providing match funding to supplement grants that projects receive from the federal government and non-profit foundations. This funding will be critical to providing in-state projects a competitive advantage when applying for funds, especially the federal funding available from the U.S. Department of Energy through the Infrastructure Investment and Jobs Act.

---

## CLIMATE INNOVATION

In addition to the Administration's energy reliability, relief and clean energy package described above, to further support the development of clean technology in California, the May Revision converts two green tax credits proposed in the Governor's Budget—the Innovation Headquarters Credit and Credit for Green Energy Technologies—into a single Climate Innovation Grant program administered by the California Energy Commission. The grant would be funded at \$1.05 billion over four fiscal years—\$100 million in 2022-23, \$325 million in each of 2023-24 and 2024-25, and \$300 million in 2025-26—equal to the total amount proposed at Governor's Budget for both credits. The grant program would focus on research activities into technologies that help California achieve its climate goals. Grant recipients would be required to be headquartered in California. The grant would include a contractual obligation that would require repayment of grant amounts plus some return to the state if a recipient either has an Initial Public Offering or a change in ownership event that results in a greater than 50- percent change in the company's capitalization table. The amount of return to the state if the company has demonstrated success will be reduced if certain contractually specified performance metrics are met. In awarding grants, the CEC shall also consider whether the companies' investments are moving from a state that has enacted anti- LGBTQ+ or reproductive rights laws.

---

## LITHIUM VALLEY DEVELOPMENT

As emphasized in the Governor's Budget, lithium is a critical resource as the state—and the world—move toward a clean energy future.

Building on the proposal described in the Governor's Budget, the May Revision will spur growth of infrastructure to support the development of geothermal and lithium extraction facilities in the Salton Sea region. This infrastructure will support an economic supply chain hub that includes in-region lithium and battery production while providing opportunities for communities in the region to benefit from this economic development.

The May Revision proposes to:

- Accelerate development by streamlining geothermal permitting, including strong environmental protections, in coordination with California Native American tribes.

- Provide \$5 million to support the development of geothermal energy and lithium recovery in the Salton Sea region through evaluation, community planning and engagement.
- Incentivize projects that manufacture, process, or recover lithium through a sales and use tax exclusion, making \$45 million available over three years for these incentives.
- Provide for local governments and residents to benefit from the development and extraction of lithium by establishing a tax per ton of lithium extraction, placing reporting and fee requirements on lithium extraction activities, and providing funds to contribute to the maintenance, operations, and restoration of Salton Sea, and grants to support disadvantaged communities in the region.
- Create pathways for local residents to benefit from jobs created by the new industries. The May Revision proposes \$80 million to expand training at the San Diego State University, Brawley Center in the Imperial Valley. (See Higher Education Chapter)