



Toward a 100% Clean Energy Future

Chair David Hochschild, California Energy Commission

Pacific Offshore Wind Summit, March 2022

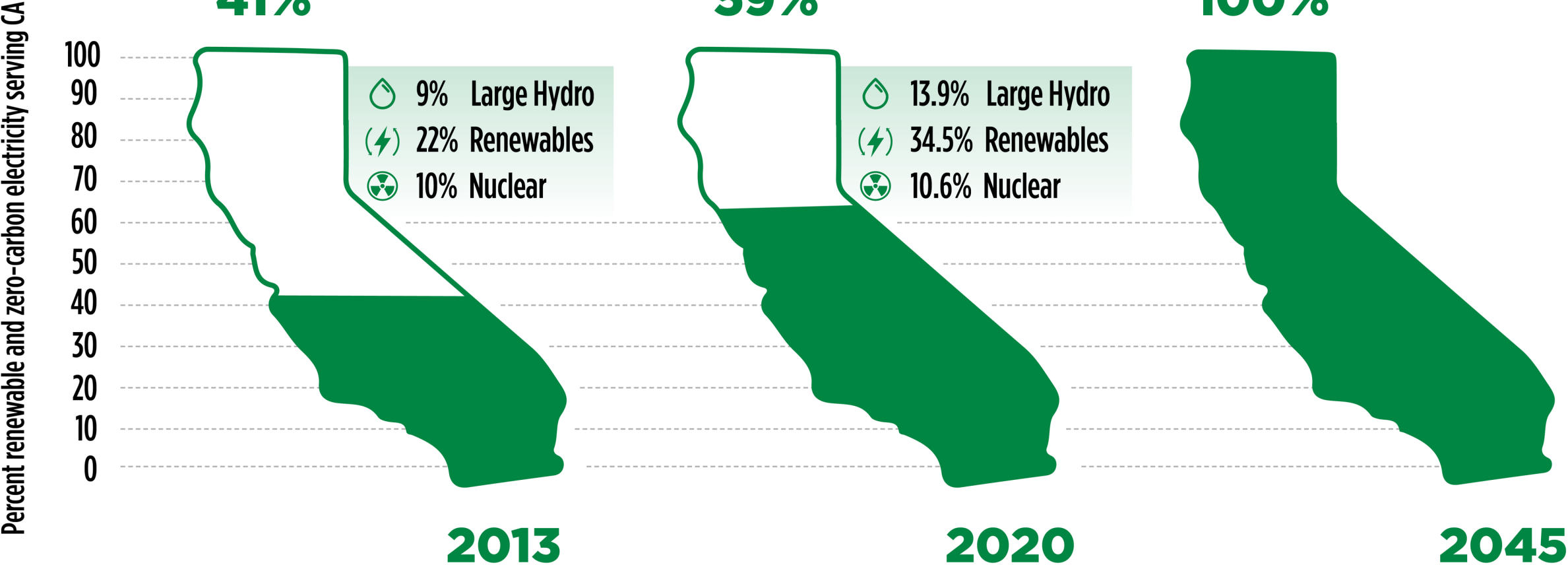


CALIFORNIA'S BOLD CLIMATE ACTIONS



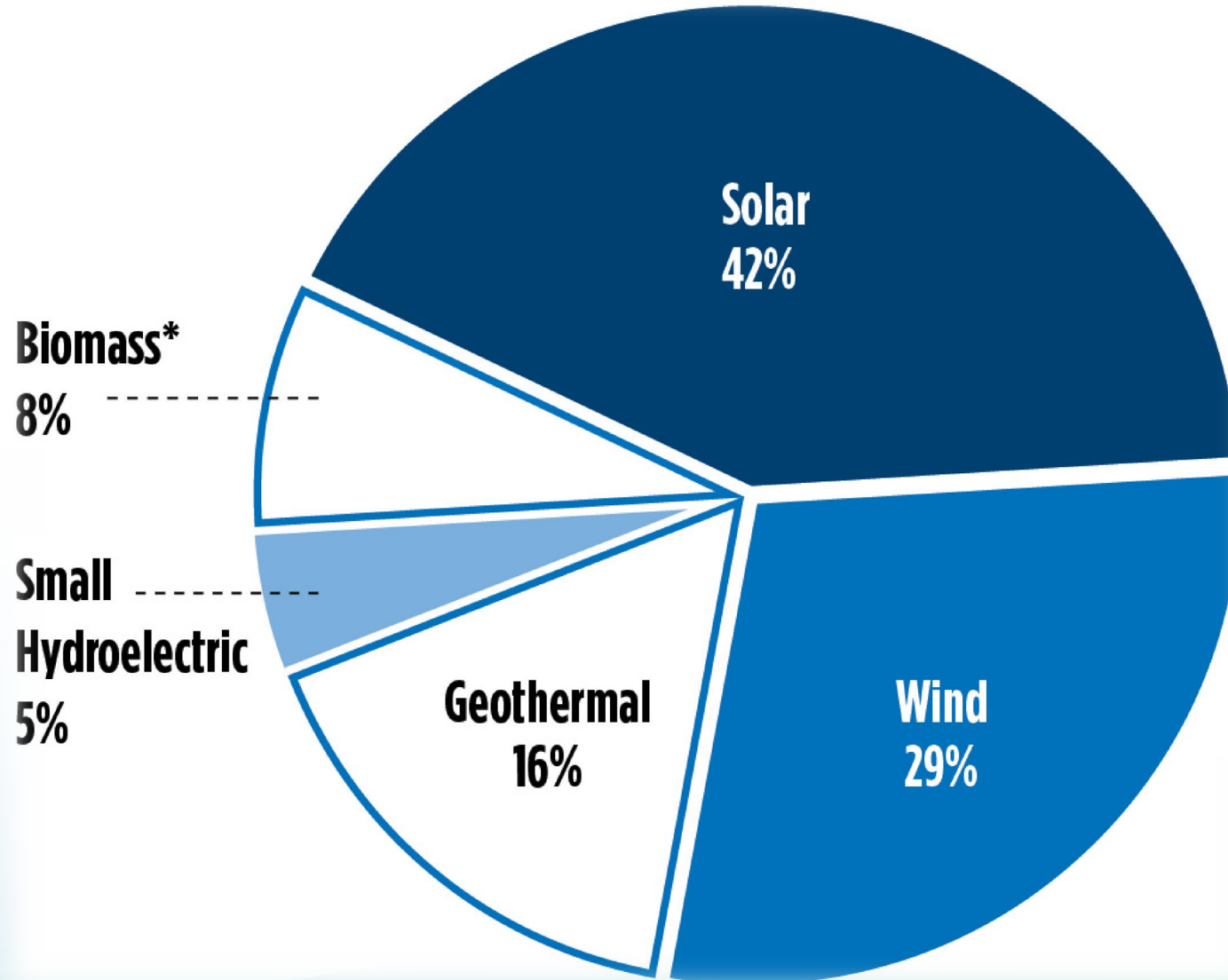
- 100% Carbon Free Electricity by 2045
- Carbon Neutrality by 2045
- 100% ZEV by 2035
- Protect 30% of land and water by 2030
- Offshore wind goal

Progress to 100% Clean Electricity





2019 RENEWABLE ENERGY SOURCES





THE WORLD'S LARGEST GEOTHERMAL POWER PLANT

Geysers Geothermal Power Plant
955 MW
Lake County, CA





THE WORLD'S LARGEST SOLAR ROOFTOP

Apple Headquarters
17 MW
Cupertino, CA





THE WORLD'S LARGEST BATTERY ENERGY STORAGE PROJECT

Moss Landing Energy Storage Facility
300 MW
Monterey County, CA



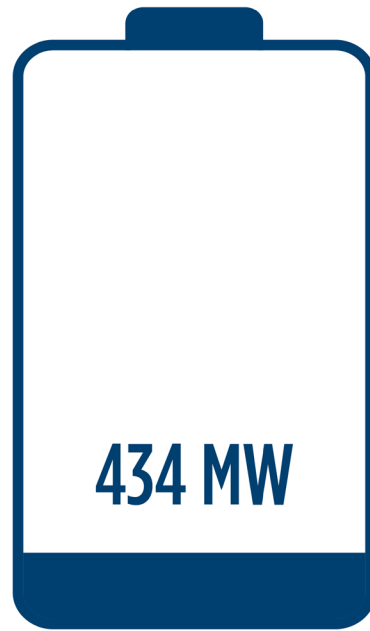


Growth in California's Battery Storage Resources

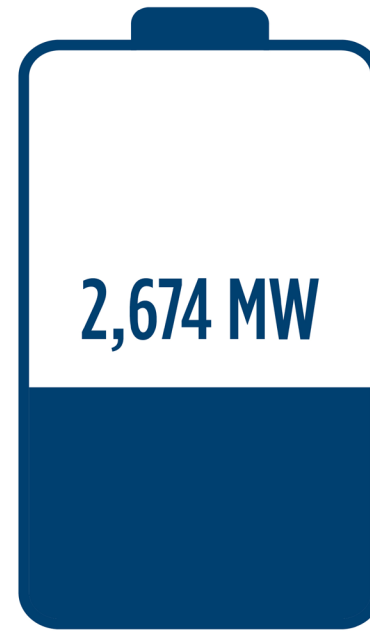
2019



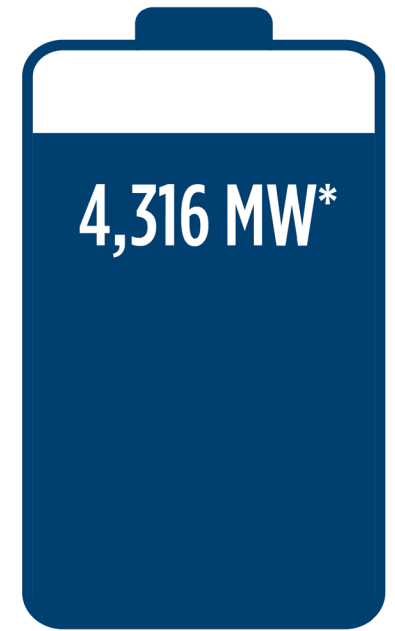
2020



2021



2022



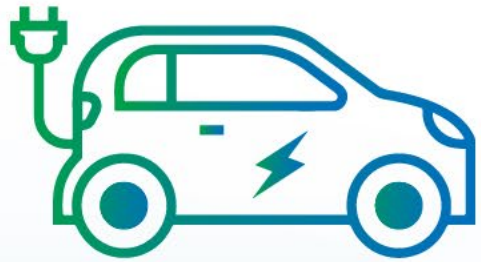
*Projected based on ISO interconnection queue





Governor's 2022-23 Budget

New CEC Funding



\$2 Billion

ZEV Infrastructure Package
(2022-2026)



\$1.8 Billion

Clean Energy Package
(2022-2024)

**\$3.8
BILLION
TOTAL**

California's Zero-Emission Vehicle Market

As of February 2022



1,054,095
ZEVs Sold

57
Light-Duty
Models Available

#1
California Export in 2020
(\$5.6 Billion Value)



71,236
Level 2 EV
Chargers
Installed



54
Retail Hydrogen
Stations Open



12.41%
of All New
Cars Sold

\$10 BILLION
in Additional Funding
Proposed by Governor
Gavin Newsom



7,158
DC Fast
Chargers
Installed



7
Heavy-Duty
Hydrogen Stations
Operating

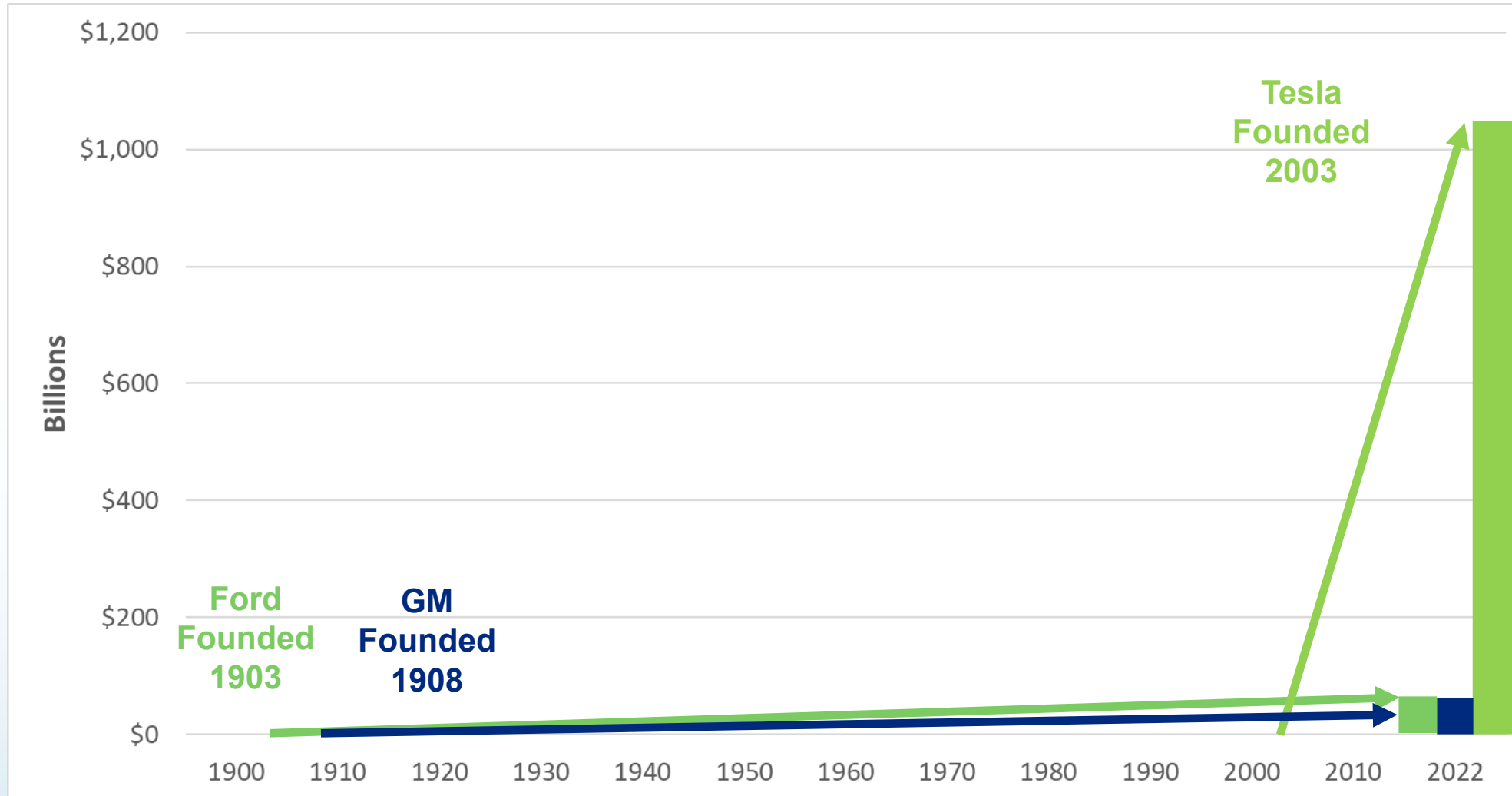


43
Electric Vehicle
& Equipment
Manufacturers

UP TO \$9,500
in Grants &
Rebates Available for
Low-Income Californians



TESLA VS FORD AND GM



**19 Years:
Tesla is a \$1
Trillion
Company**

**114 Years: GM
is a \$63 Billion
Company**

**119 Years:
Ford is a \$66
Billion
Company**



Governor's 2022-23 Budget

New CEC Funding: Clean Energy & Building Decarbonization



\$922 Million

Equitable Building Decarbonization



\$380 Million

Long Duration Storage Projects



\$100 Million

Green Hydrogen Grants



\$210 Million

Industrial Decarbonization



\$85 Million

Food Production Investment Program



\$45 Million

Offshore Wind Infrastructure



\$7 Million

Energy Modeling



\$1.5 Million

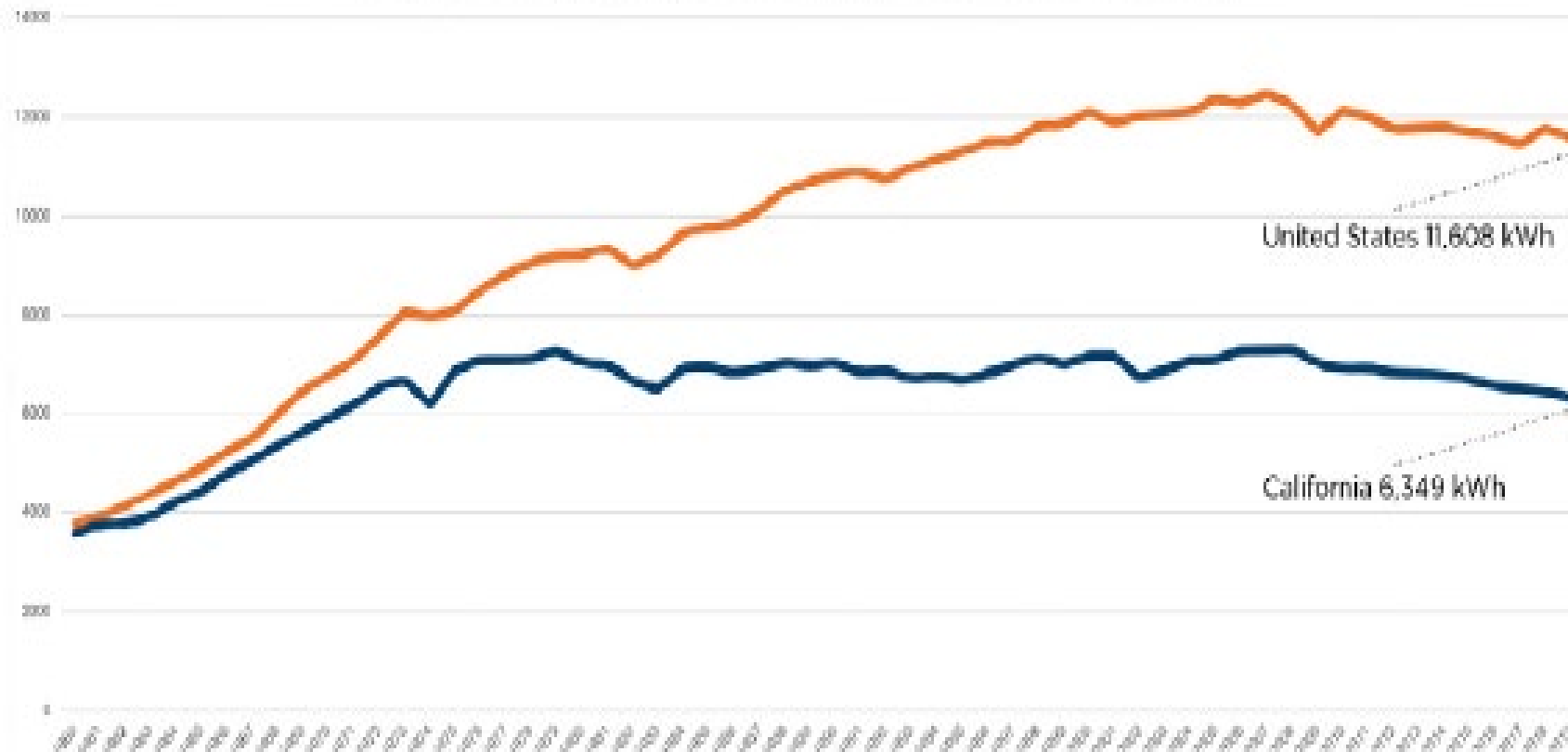
AB 525 (Offshore Wind) Implementation

\$1.8 BILLION TOTAL



BUILDING DECARBONIZATION

Annual Electricity Consumption Per Capita in United States and California



2022 Energy Code Benefits



Increases on-site renewable energy generation from solar.



Increases electric load flexibility to support grid reliability.



Reduces emissions from newly constructed buildings.



Reduces air pollution for improved public health.



Encourages adoption of environmentally beneficial efficient electric technologies.



THE FUTURE IS FLEXIBLE (DEMAND)

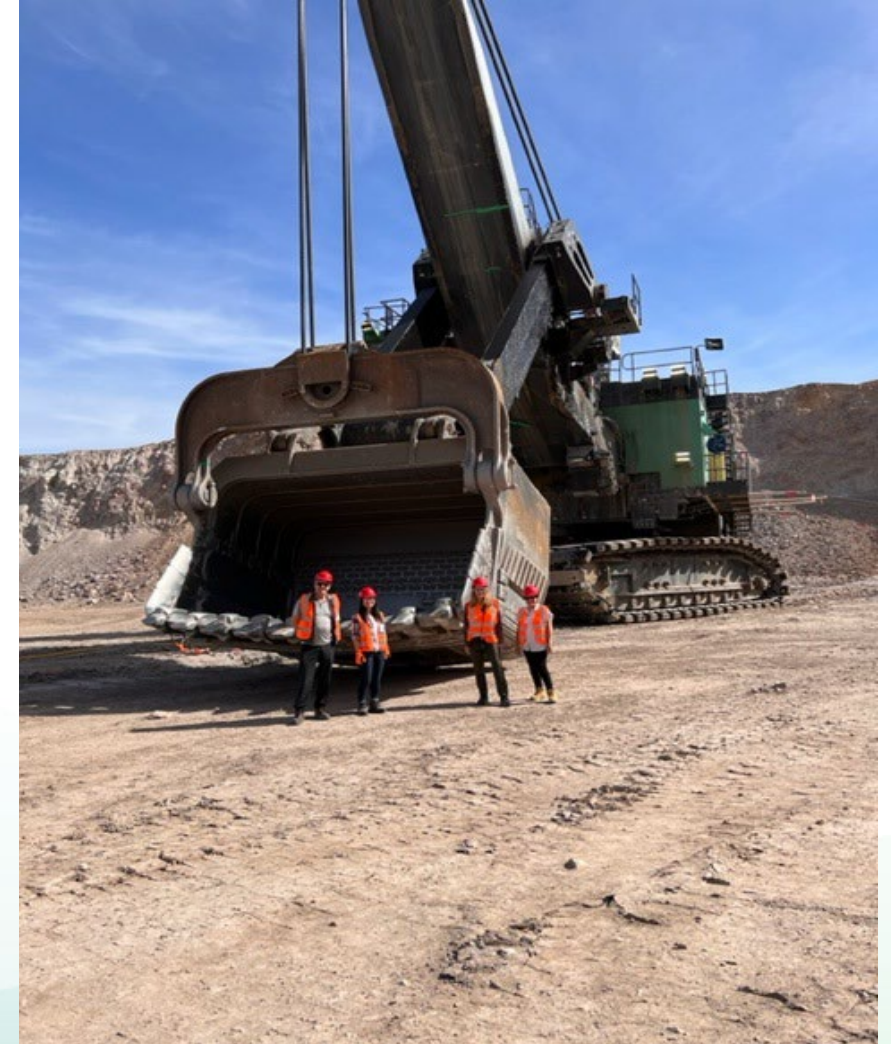
Active Efficiency and Load Flexibility

- Highly efficient, grid-interactive buildings and appliances facilitate integration of renewable generation, distributed energy resources and demand-side services.
- Automated communications and control will enable cost-effective load shifting.
- Demand flexibility can minimize the grid's cost drivers and carbon content **AND** enhance reliability.





LITHIUM VALLEY





RESILIENCE AND SAFETY

Blue Lake Rancheria Microgrid
Blue Lake, CA





OFFSHORE WIND: CALIFORNIA'S NEW RENEWABLE RESOURCE





THANK YOU!