



# SMUD and a clean energy future

CEAC Policy Conference | Aug. 21, 2025

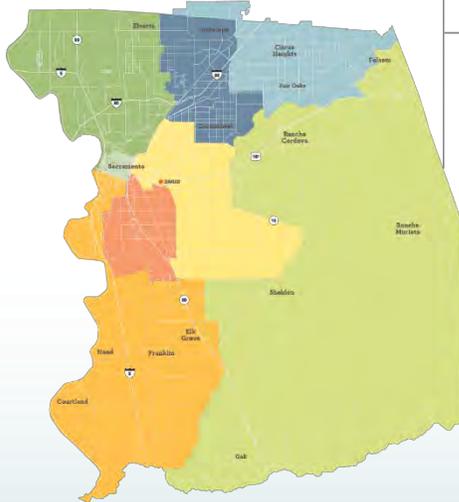
Gregg Fishman  
SMUD Board President

# Introduction to SMUD

# About SMUD

*SMUD is your community-owned, not-for-profit electric service.*

**6th** largest  
community-owned  
in the U.S.



**75+**  
Years  
Est. 1946

2023  
Power mix  
about  
**78%\***  
carbon-free



The most  
ambitious goal  
of any large  
utility in the  
United States

~**645,000** Customers

~**2,300** Employees



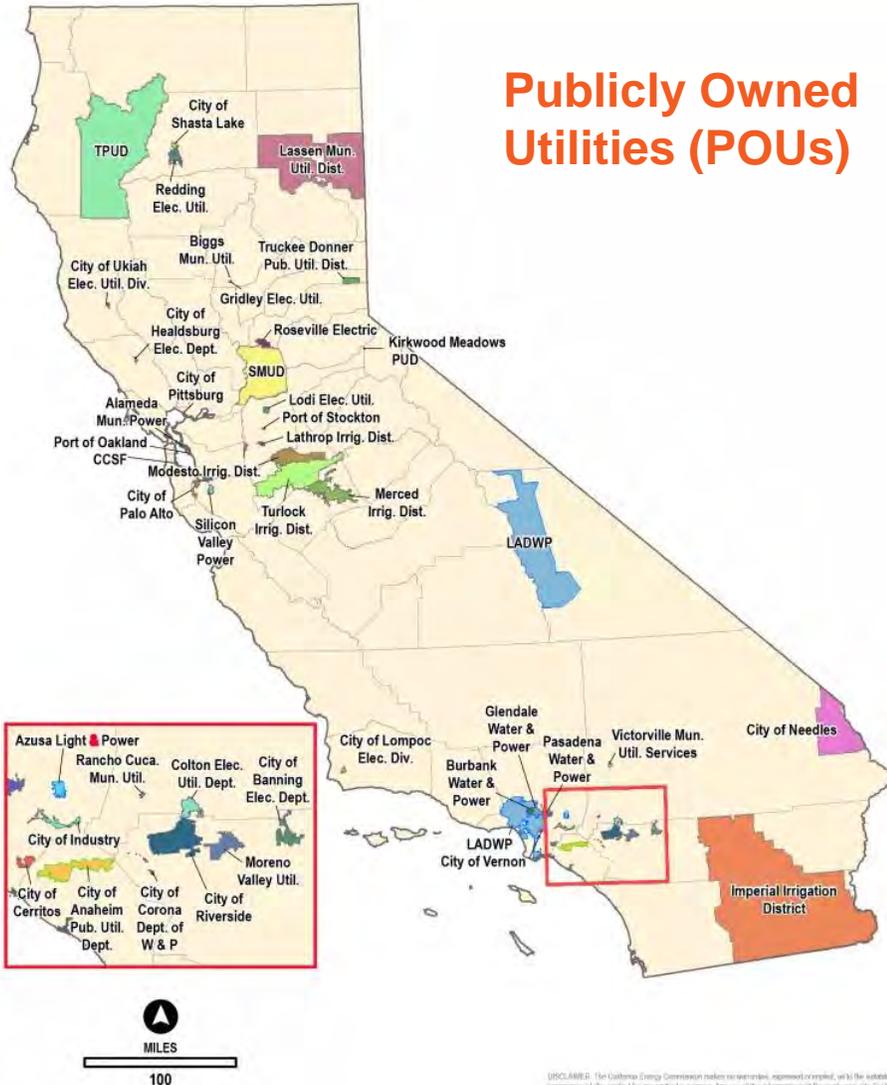
**7** member  
Elected  
Board of Directors

**SMUD's rates are among the lowest in California,**  
and on average more than **50% lower** than those of neighboring PG&E.

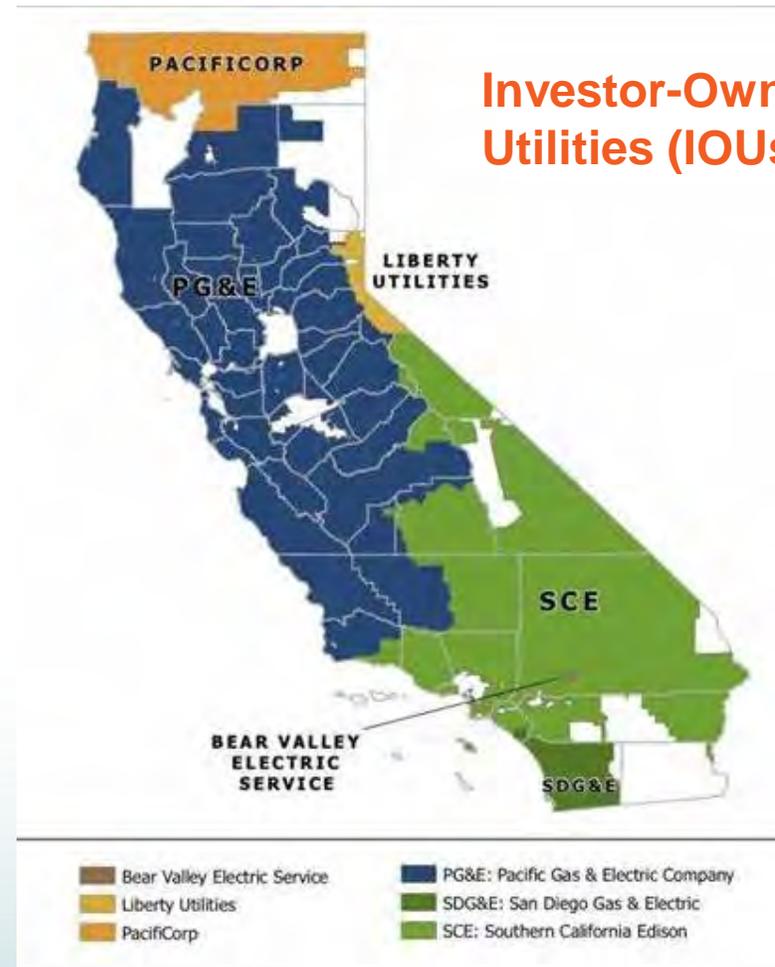


# Public power vs investor-owned

## Publicly Owned Utilities (POUs)



## Investor-Owned Utilities (IOUs)

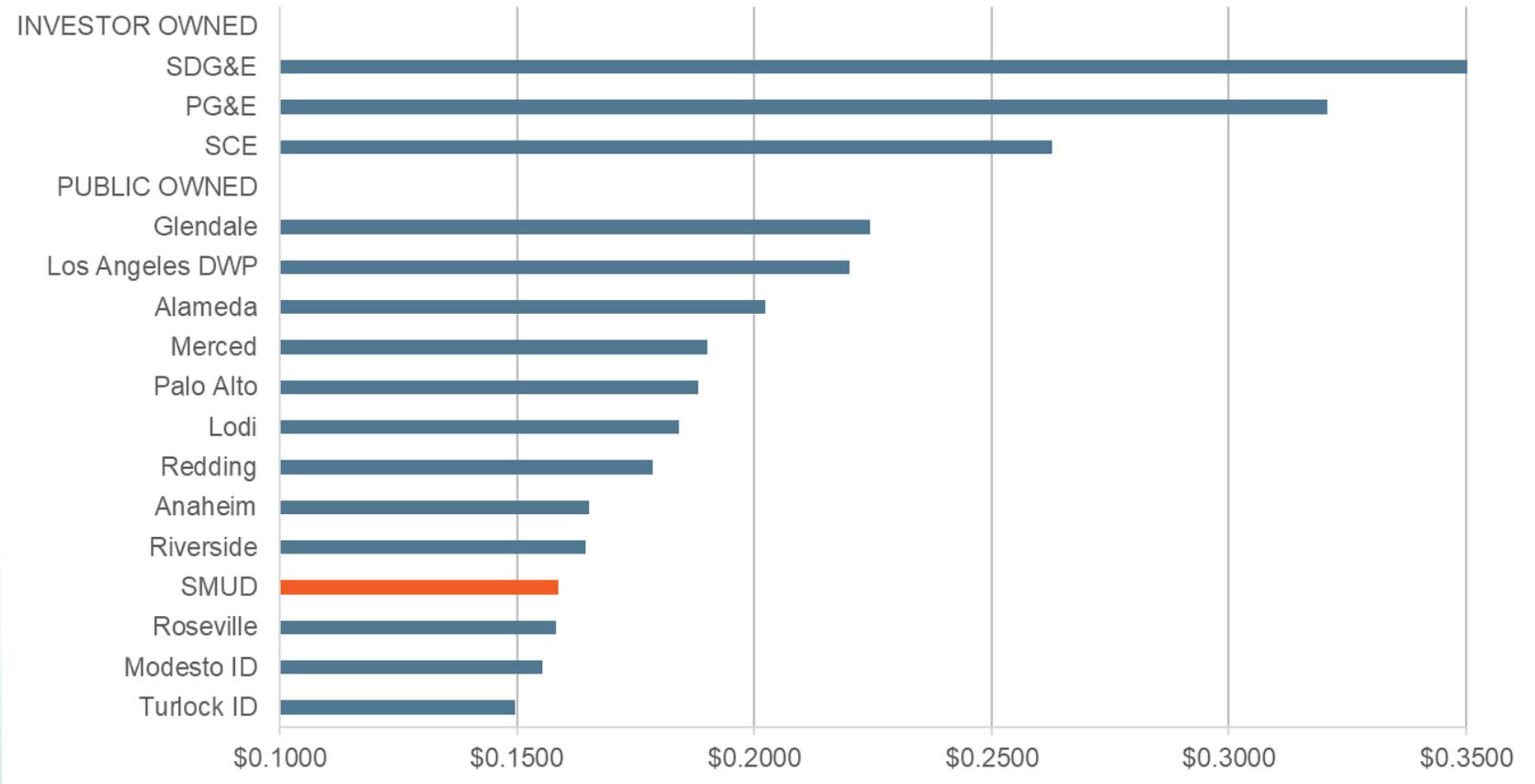


DISCLAIMER: The California Energy Commission makes no warranties, expressed or implied, as to the suitability or accuracy of the product for any particular purpose. Any use of this information is at the user's own risk. For further information or suggestions concerning this data, contact the Energy Commission Cartography Unit (916) 654-2900.



# How our rates compare

## California utilities system average rates (\$/kWh)



Source: EIA 861 2023.

# 2030 Zero Carbon Plan



# Where we're headed



## Repurpose natural gas generation

Replace 2 power plants with renewable and storage resources and retool remaining 3 to minimize emissions.



## Expand proven clean technology

Grow SMUD's renewable and battery storage by 3.5x. Support customer's resources via solar and battery storage.

## Remaining 10%+



## Pilot & scale new technology and business models

Increase education and demand flexibility, spread adoption of customer-owned virtual power plants & invest in grid-scale technology.



## Pursue grants, partnerships and limit rate impacts



## Maximize community benefits

Stay affordable and reliable, improve air quality and overall community health while supporting under-resourced communities.

Up to 90% reduction

## Goal:



Eliminate CO<sub>2</sub> from SMUD's power supply



Zero carbon by 2030

Create thousands of new regional clean tech jobs



# Natural gas generation replacement & repurposing plan update



## Country Acres project can replace McClellan and Campbell.

- Once Country Acres is online, parallel availability of thermals will be needed to ensure a reliable transition.



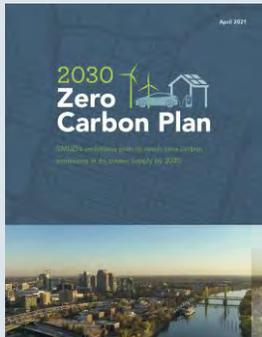
## Cosumnes Power Plant (CPP) retooling project = ~100k MT in GHG reduction.

- Reduced output while keeping both gas turbines online.
- Operational flexibility by running CPP at a lower minimum capacity when generation isn't needed.
- Up to ~\$7 million/year savings in fuel.
- Completion date: Q4 2025.



# Progress so far – Utility scale generation projects

SMUD Board's Climate Declaration



2030 Zero Carbon Plan

Completed



100 MW: Drew solar

Completed



4 MW: Hedge Lithium-ion Battery storage

Completed



100 MW: Calpine Geysers geothermal

Completed



85 MW: Solano Wind Phase 4

Completed



50 MW: Sloughouse solar

PPA Approved



100 MW: Hatchet Ridge wind

ZCP goal: Up to ~3,400 MW by 2030

Local Solar



Local Battery



Regional Wind



Regional Solar



Geothermal



CCS



2020

2021

2022

2023

2024

2025





# In 5 years - Utility scale generation projects



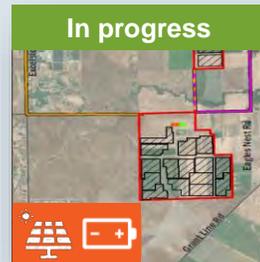
**46 MW Solar**  
Terra-Gen Edsan



**344MW Solar +  
172MW x 4hr Battery:**  
Country Acres



**150 MW Wind:**  
Sunzia



**75 MW Solar +  
37 MW x 4hr Battery:**  
Oveja Ranch



**70 MW Solar:**  
Grace



**160 MW x 4hr Battery:**  
Dry Creek



**156 MW Solar +  
156 MW x 4hr Battery:**  
Curry Creek



**CCS:**  
Calpine @ Sutter

**Additional  
resources  
under  
evaluation:**

	~100 MW
	~300 MW
	~200 MW
	Other: ~400 MW

Customer adoption needed: 160-410 MW of solar & 41-241 MW of batteries

**2026 – 2030+**



# Customer adoption with EVs, solar & storage

2030  
Goal

2024



by  
2030

288,000 light-duty EVs

500 – 750 MW Residential & commercial solar

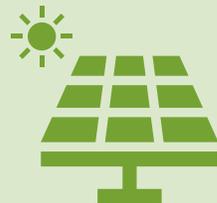
50 – 250 MW Residential & commercial storage

154,000 All-electric equivalent homes

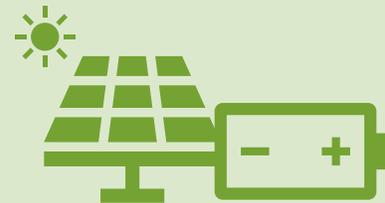
As  
of  
2024



61,900+ light-duty EVs



59,000+ total installs (390+ MW)



2,200+ total installs (14 MW)



68,800+ all-electric equivalent homes



# Rebates & incentives



Heat pump water heaters

HVAC

Battery Storage

EV charging

View all residential customer incentives

up to \$3,000

up to \$2,500

up to \$10,000

up to \$600

[smud.org/Rebates](http://smud.org/Rebates)



Business customer incentives

[smud.org/MyAdvisor](http://smud.org/MyAdvisor)



Multi-family rebate program



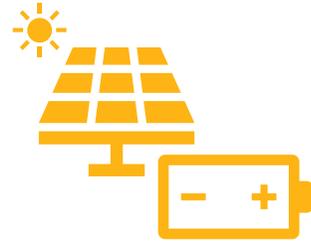


# Participate & save



## MyEnergy Optimizer

- Works with your smart thermostat.
- Shifts energy use out of times when demand is at its highest.
- **\$50** Prepaid Mastercard®, + **\$25** for each summer you participate.



## MyEnergy Optimizer Partner+

- For solar + storage systems.
- reduces energy usage when demand is highest and clean energy resources are scarce.
- One-time enrollment incentive up to **\$10,000** per household + **quarterly incentives** for Tesla.



## Managed EV Charging

- Smart technology to optimize EV charging.
- Ford, GM, BMW & Tesla.
- One-time, initial incentive and a quarterly reward payment.



## Income-qualified offerings

- Bill discounts.
- Medical Discount Rate.
- Billing & financial assistance.
- Free energy audits.
- Customer programs for weatherization & energy-efficiency improvements.



# Significant funding secured

# \$50 million

DOE GRIP Grant for deploying next generation smart meters



# \$25 million

CEC reliability & resilience grant to improve infrastructure on the downtown

# \$337K+

CEC apprenticeship training program

# \$10 million

CEC grant for transportation electrification

# \$250K

DOE reimbursement for hydro power generation

# \$3 million

Congresswoman Matsui earmark for neighborhood electrification

# \$200K

CEC grant for R&D efforts

# \$80K

American Public Power Association grant for workforce development





# Partnerships drive community impact



**Affordability**



**Community  
engagement**



**Equitable  
access**



# Follow along with our progress

## Data-driven dashboards

### Energy outlook dashboard

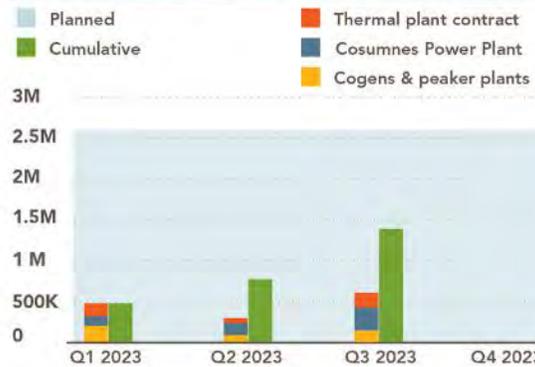


[smud.org/EnergyOutlook](https://smud.org/EnergyOutlook)

### Emission & zero carbon progress dashboard

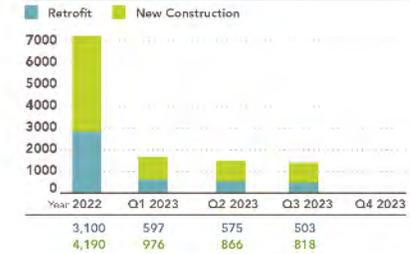
#### Quarterly generation and emissions from gas plants

2023 Planned GHG = 2.6 million metric tons

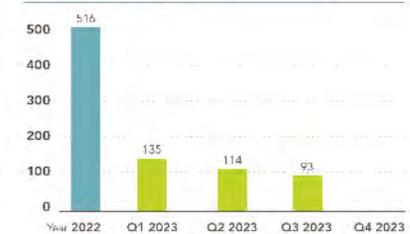


	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Thermal plant contract	153k MT CO2e	33k MT CO2e	175k MT CO2e	--
Cosumnes Power Plant	138k MT CO2e	168k MT CO2e	388k MT CO2e	--
Cogens and peaker plants	208k MT CO2e	103k MT CO2e	169k MT CO2e	--
<b>Total</b>	<b>499k MT CO2e</b>	<b>304k MT CO2e</b>	<b>732k MT CO2e</b>	

#### Solar installations (Residential + commercial)



#### Battery storage installations (Residential + commercial)



[smud.org/2030Progress](https://smud.org/2030Progress)

# Wildfire mitigation

# Wildfire Mitigation Plan



Deliver safe, reliable, sustainable and economic electric service.



Minimize the probability that SMUD's transmission & distribution (T&D) system may be the origin or contributing source for the ignition of a wildfire.



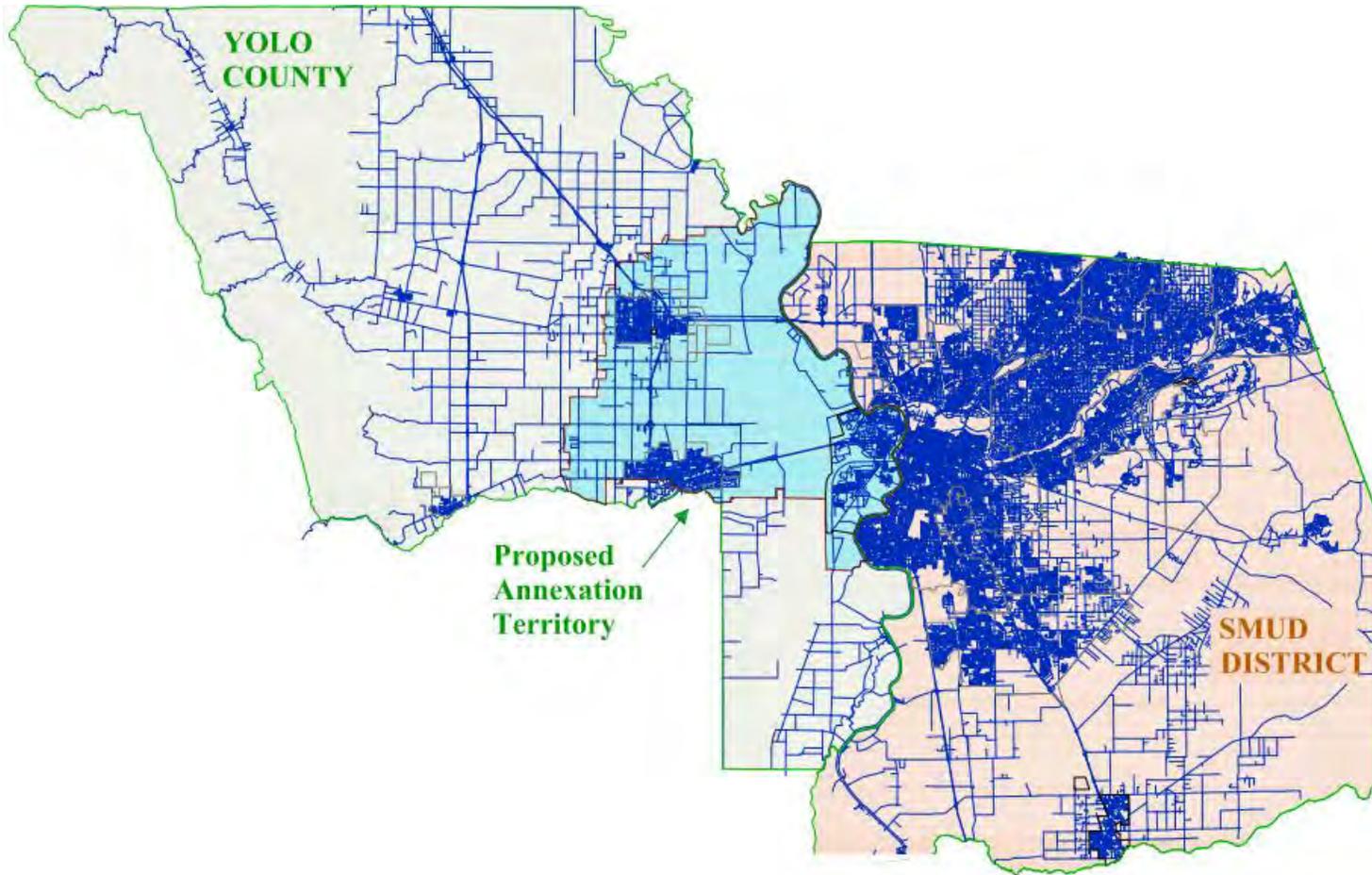
Implement a WMP that embraces safety, prevention, mitigation and recovery as a central priority for SMUD.



Implement a WMP that is consistent with state law and objectives.

# **Creating new municipalities**

# Yolo County annexation effort: 2003-2006



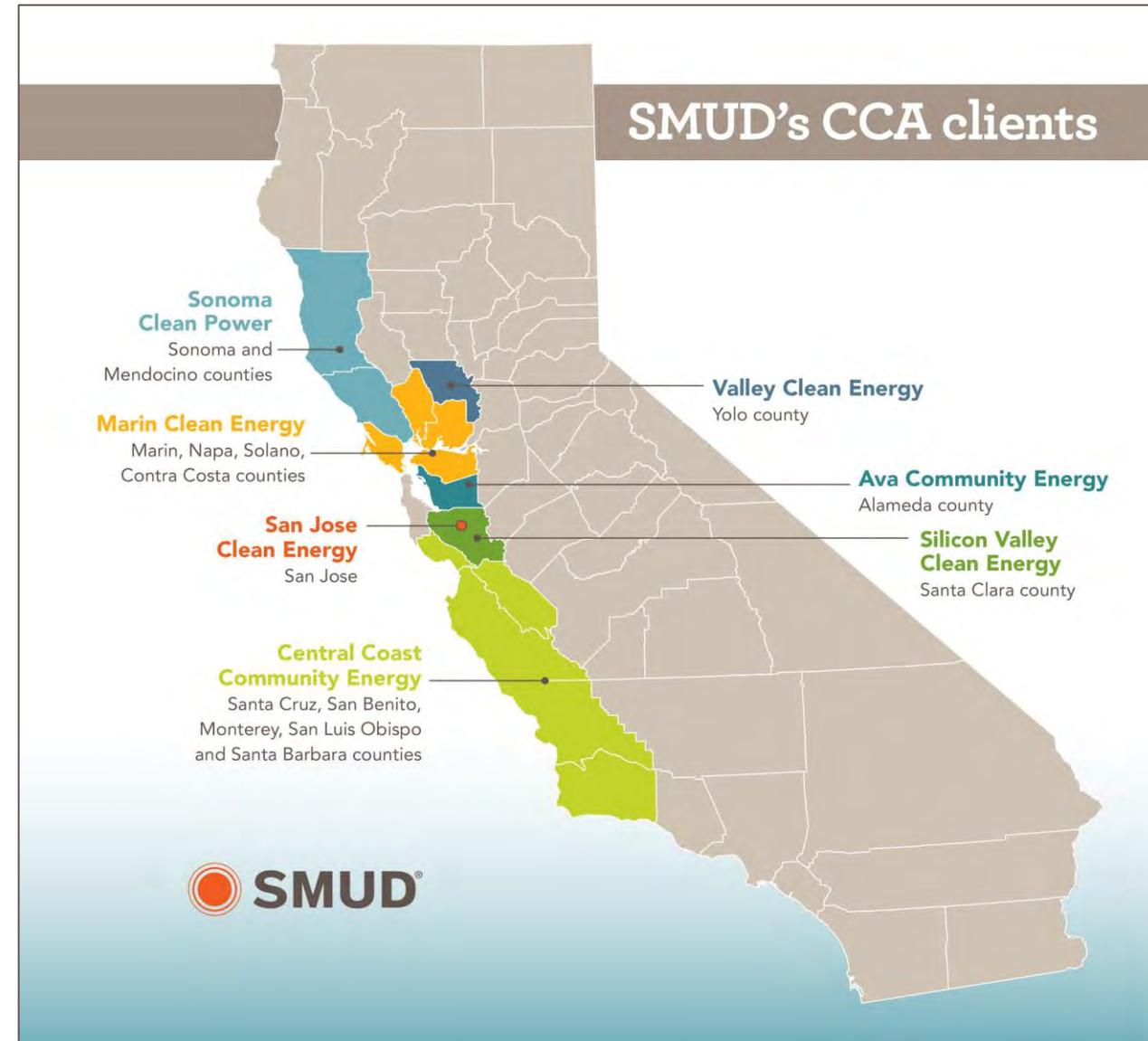
- Feasibility study projected \$180-254 million in savings over 20 years.
- Existing SMUD customers voted against providing electric service to portions of Yolo County w/ Yolo customers paying full cost of annexation.
- PG&E put \$11 million+ into the anti-annexation campaign.

# Community Choice Aggregators (CCAs)

**CCAs:** groups of cities or counties that have joined together to procure power on behalf of their community members - often providing **lower rates and cleaner energy.**

**SMUD works with 7 CCAs** to provide:

- Data management and billing.
- Customer care and operations.
- Engagement and branding.





# CleanPowerCity.org

## Show your support to create a healthier environment & cleaner air:

- Discover rebates & incentives.
- Get **99 tips** on being energy smart and reducing your carbon footprint.
- Find local events to get involved in.
- Check out our Road to Zero blog.
- Join the charge and officially become a Clean PowerCity Champion today!

