



# MCE

Contra Costa County Sustainability Committee – 3/20/2023



## OUR MISSION

Confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.

## OUR VISION

Lead California to an equitable, clean, affordable, and reliable energy economy by serving as a model for community-based renewable energy, energy efficiency, and cutting-edge clean-tech products and programs.

# Not-for-Profit Public Agency

Solano County



Marin County



Contra Costa County



Napa County



*Directors Scales-Preston & Quinto serve as Chair and Vice Chair, respectively.*

# MCE & Contra Costa County Highlights

- **Over 331,000 Customers served by MCE** - 6000+ Deep Green Accounts
- **Over 307,000 Metric Tons of CO<sub>2</sub>** reduced to date through MCE electricity generation
- **387 Electric Vehicle Charing Ports** installed since 2018 – included rebates and technical assistance from MCE
- **Battery Storage** at 10 Pittsburg Unified School District Campuses - \$715,000 in funding through MCE – estimated \$2.8M in energy bill savings
- **Saving energy from 4-9pm** – County participated in inaugural MCE Peak Flex program in 2022 – over \$15k in savings



# BayREN & MCE

- **Partnering** to lower energy bills, improve comfort of homes, and connect medically vulnerable residents to energy efficiency services
  - **County** - Asthma trigger remediation via contractors, Asthma & Energy Assessments
  - **BayREN & MCE** - Leveraged funds for lighting, heat pumps, energy-efficient appliances, HVAC

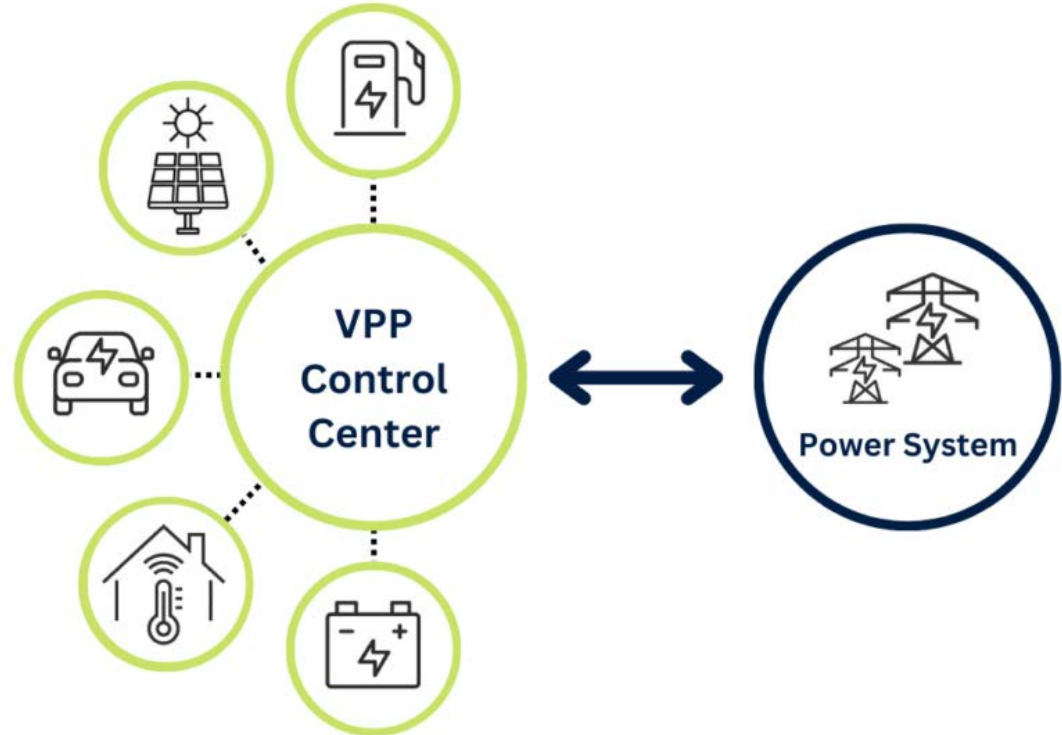


# Creating a Clean, Reliable Grid

MCE requires battery storage on all new local solar projects

More than 325MW of battery storage under contract

Distributed Energy Resources - MCE Virtual Power Plant (2025)



# Case Study: PUSD



Shanellia Sudder-Preston  
State Mayor, City of Pittsburg,  
State (Texas) MCE

[https://www.bayren.org/sites/default/files/2021-11/05\\_kent\\_contra-costa-asthma-initiative-presentation.pdf](https://www.bayren.org/sites/default/files/2021-11/05_kent_contra-costa-asthma-initiative-presentation.pdf)

some talking points that may be helpful 1. as a part of our CPUC funding, we are required to coordinate with BayRen team: our CP team has





# Energy Affordability for Residents



**Energy Burden:** the percentage of gross household income spent on energy costs.

- 18% of Contra Costa County customers enrolled in California Alternate Rates for Energy (CARE)
- \$90 bill credit from California Public Utilities Commission on February bills

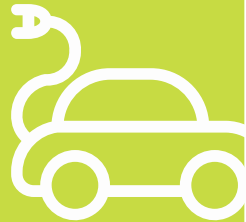
MCE offers local control and transparent rate setting



## Energy Efficiency

Audits, Rebates,  
Usage Reduction

- \$2.4M in rebates
- Over 1,200 customers served



## Electric Vehicles

Vehicle and Charging Station Rebates

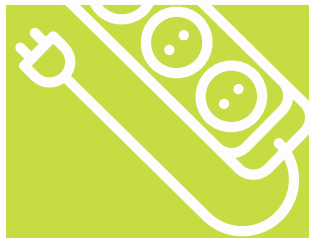
- Over 1,100 EV charging ports installed
- 150 vehicle rebates



## Energy Resiliency

Distributed Resources, Demand Response, Virtual Power Plant, and Behavioral Programs

- Shifting load out of peak hours



## Electrification

Heat Pump Installs and Contractor Training

- 25+ contractors engaged and 125 pumps installed



## Equity, Health, & Safety

Health, Safety, and Resiliency Upgrades

- 200 portable batteries distributed
- \$750,000 in solar rebates

# Your Dollars at Work

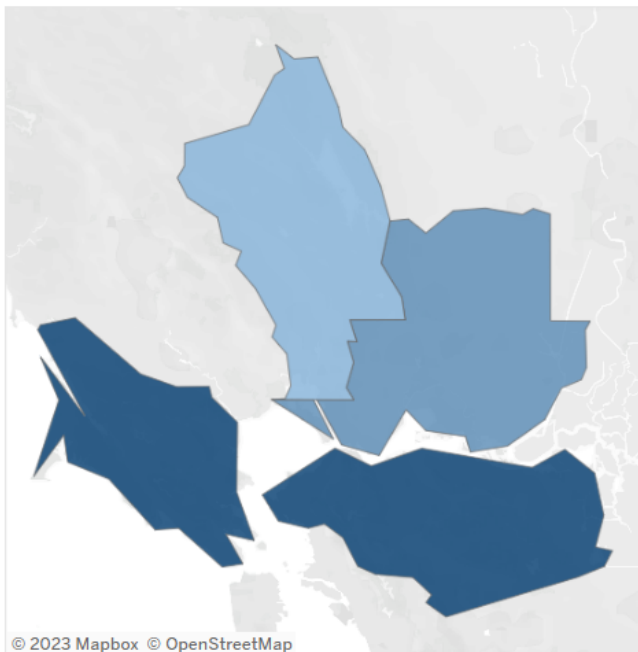
# ELECTRIC VEHICLE CHARGERS

## Total Public and Shared Private Electric Vehicle Chargers

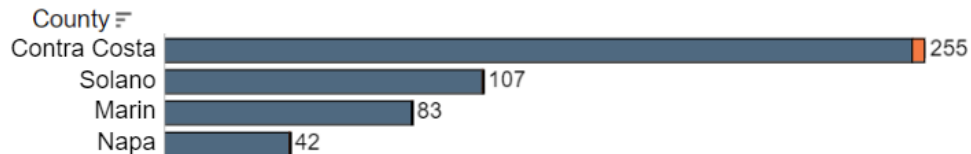
**3,284**

**Public**  
**64.49%**  
**2,118**

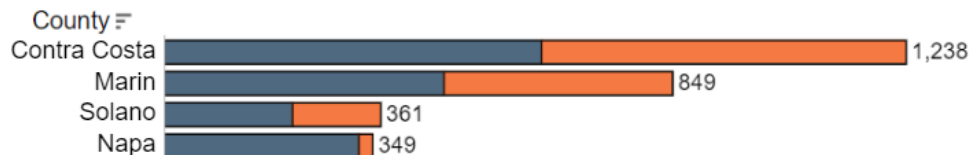
**Shared Private**  
**35.51%**  
**1,166**



### DC Fast Chargers by County



### Level 2 Chargers by County



County

(Multiple values)

Access

(All)

Public

Shared Private

Legend

■ Public

■ Shared Private



	Public	Shared Private	Grand Total
Level 2	1,635	1,162	2,797
DC Fast	483	4	487
Total Chargers	2,118	1,166	3,284

# MCE Charging

## Meeting the Demand for Charging Stations & Shaping EV Charging Load

### Benefits

- For workplaces and multifamily properties
- \$3,000 per charging port for 2-20 charging ports
- \$500 extra per charging port for charging stations that have opted up to Deep Green 100% renewable energy
- Free technical assistance



# MCE Vehicle Rebate

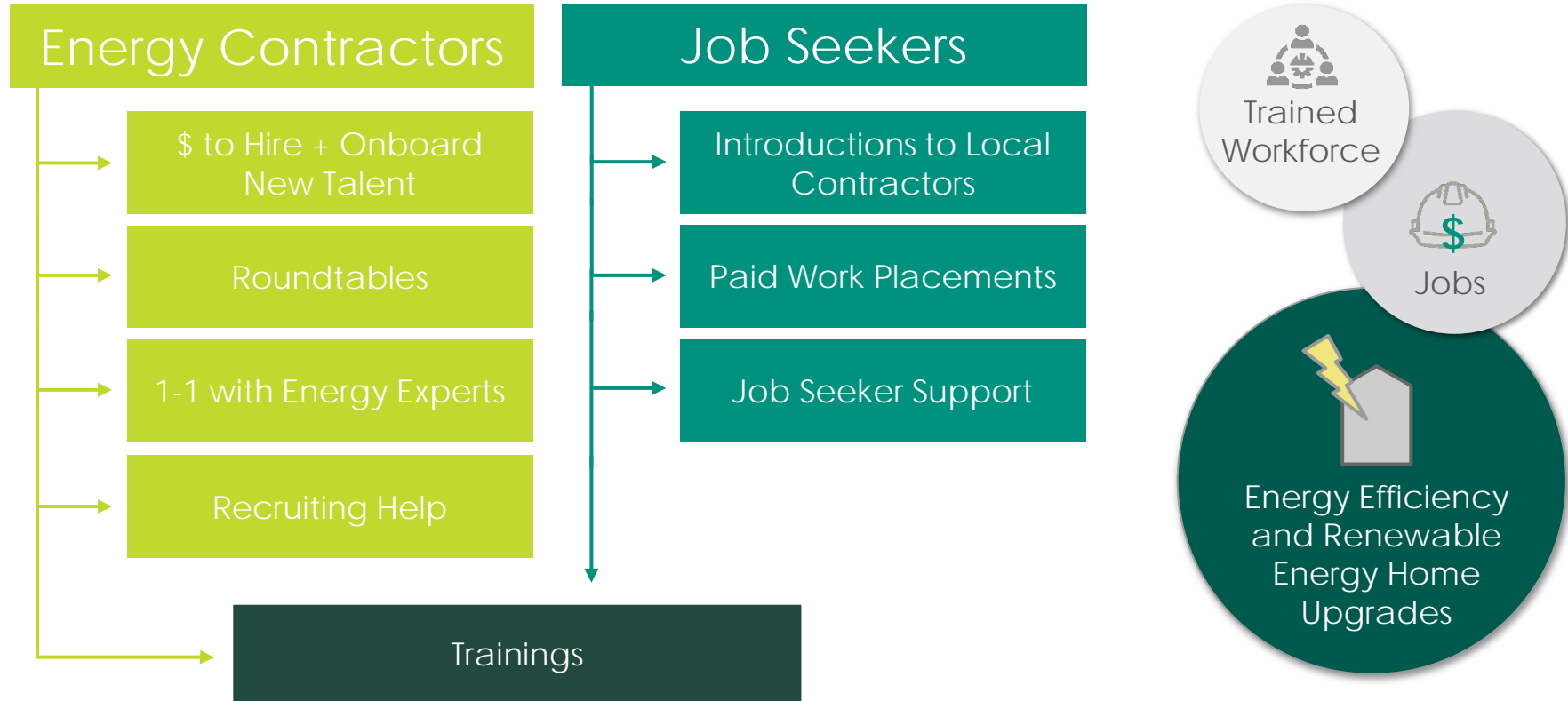
Providing Access to EVs for Income Qualified Customers

## Benefits

- Provides a \$3,500 rebate on a new or used electric vehicle for income eligible customers
- Stackable with other rebates up to \$14,500
- **\$1 million in rebates distributed to date**



# Green Workforce Pathways Program



# The Power of MCE

**700K** metric tons of GHGs eliminated since 2010

**60%** renewable since 2017, **100%** renewable default

**95%** carbon-free by 2023

**\$214 M** reinvested in MCE communities since 2010

**\$2.4 B** committed to building new CA renewable projects

**48 MW** of new renewable projects built in our service area

**2.8 M** labor hours supported

**6,000** jobs created

# Thank You!

Sebastian Conn

Senior Community Development Manager

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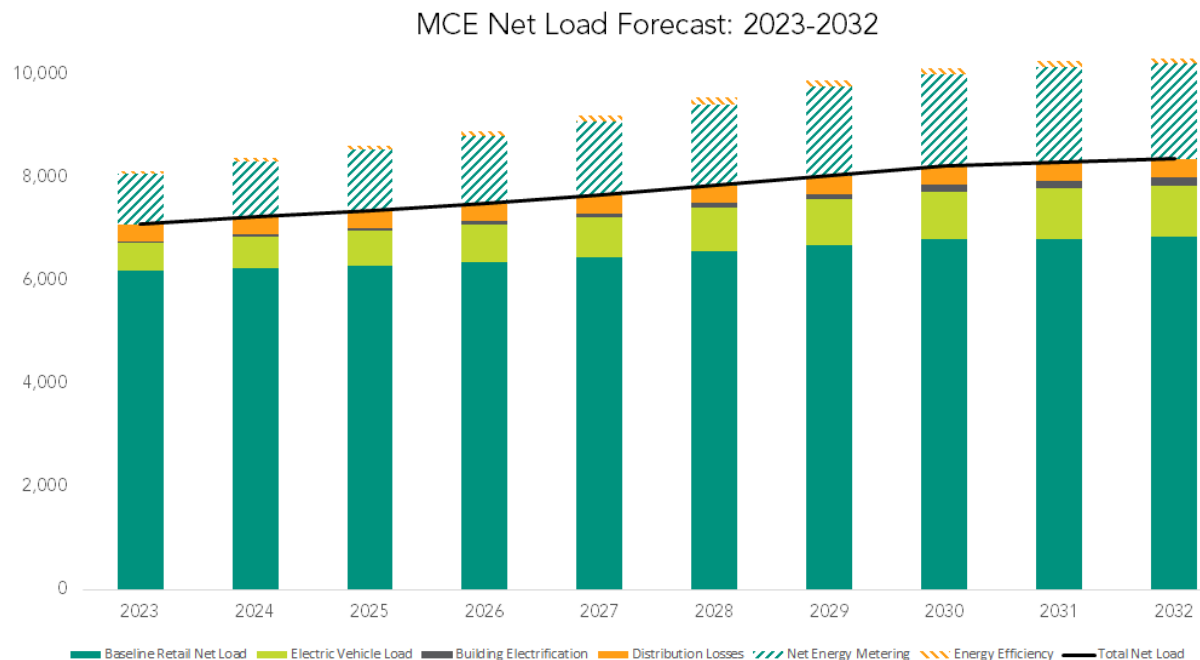




# Appendix

# Power Purchasing

- Annual assessment of energy needs
- Meeting state mandates for 118% of peak load
- Focusing on clean resources



Long-term forecasting ensures proper planning

# Forecasting Energy Demand

- Load Serving Entities, like MCE and PG&E, **forecast electricity demand years in advance**
- On an annual basis, MCE **posts our Operational Integrated Resource Plan (OIRP)**, which documents MCE's load and electric procurement resource objectives over a ten year planning period
- **Current planning period: 2023 - 2032**



# Power Purchasing: Authoritative Bodies



- **California Energy Commission (CEC):**
  - MCE must submit periodic load forecasts to the CEC. The CEC takes MCE's monthly peak demand estimates and adjusts values based on the California system peak demand.



- **California Public Utilities Commission (CPUC):**
  - The CPUC receives adjusted peak demand data from the CEC and annually provides MCE with its monthly Resource Adequacy (RA) requirements.



- **California Independent System Operator (CAISO):**
  - The CAISO develops RA requirements for the entire California system, including local areas, on an annual basis.

# Infrastructure Planning



Image Source: California Independent Systems Operator

- CAISO conducts annual transmission planning process to identify potential system limitations and areas that need reinforcements over a 10-year horizon.
- *“The annual planning process, set out in CAISO’s federal tariff, provides for the approval of new transmission infrastructure and triggers permitting and construction activities.”*
- Plan is closely coordinated with CPUC and CEC.

Source: <https://www.caiso.com/about/Pages/Blog/Posts/2021-22-Transmission-Plan-approved-by-ISO-Board.aspx>