

SoCalREN Advisory Committee Meeting

December 11th, 2024 10:30 am - 12:00 pm













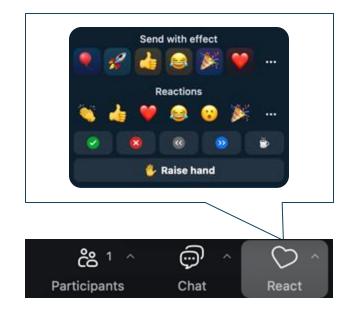


Administration

- This webinar is being recorded
- Please keep microphone muted unless you want to speak
- If you are experiencing any technical issues during the webinar,
 please contact Amanda Hassan at ahassan@energycoalition.org

Directions for Chat

- We will be having an open discussion throughout the meeting!
- If you would like to ask your question verbally click on the "raise hand" function.
- If you would like to stay muted, send us your question or comment through the chat!



Who is Participating Today?







Advisory Committee Members









































SoCalREN Staff, Implementers & Regional Partners

















SoCalREN Advisory Committee



Guide and Advise



Collaborate and Innovate



Be Informed



Be an Advocate

Agenda

Lujuana Medina	7 min
All	13 min
Jeffery Liang	20 min
Courtney Owen	20 min
Ben Lucha	15 min
Lujuana Medina	5 min
All	
	All Jeffery Liang Courtney Owen Ben Lucha Lujuana Medina



SoCaIREN Welcome

Lujuana Medina, County of Los Angeles

















Networking















Networking Activity - Break Out Rooms

- What is your favorite holiday tradition?
- What are you looking forward to in 2025?







TECH & HEERA Program Updates

Jeffery Liang, Energy Solutions















Policies and Programs for Residential Electrification

December 11, 2024





Climate Goals

SB 32:

40% GHG reduction below 1990 levels by 2030

SB 100:

100% clean electricity by 2045

Executive Order B-55-18:

Economy-wide carbon neutrality by 2045 (In July 2021, Governor Newson directed CARB to review feasibility of carbon neutrality by 2035)

	2027	2029	2029	2030	2031
Agency	Bay Area Air Quality Management District	Bay Area Air Quality Management District	South Coast Air Quality Management District	CARB (in development)	Bay Area Air Quality Management District
Water Heating	Zero NOx (small)		Zero Emissions	Zero Emissions	Zero NOx (medium)
HVAC		Zero NOx (res + com)	(res + com)	(res + com)	

Leverage California's Heat Pump Investment to Help your Business

California has a goal of 6 million heat pumps by 2030....and they are investing big to get there

TECH Clean California

- \$120M
- \$50M added
- \$95M added

SGIP HPWH: \$80M

Equitable Electrification: \$600M+

Inflation Reduction Act: \$292M

TECH Clean California Overview

What is TECH Clean California?

- California's flagship heat pump market transformation initiative for space/water heating is designed to help put California on a path towards carbon-free homes by 2045
- Guiding principles of scale, equity, regulatory simplicity, and market transformation
- Incentives offered statewide
- \$95M in new funding from the Greenhouse Gas Reduction Fund (AB 209 & AB 102)

For a more complete overview of TECH Clean California, check out the slides and recordings from our previous quarterly Stakeholder Meetings at techcleanca.com/about/reporting.

California Heat Pump Goals



6 million heat pumps installed by 2030

Climate ready / friendly homes:

- 3 million by 2030
- 7 million by 2035



50% of funding

delivered to low-income households or disadvantaged communities

Source: California Office of Governor website. July 2022.

"Governor Newsom Calls for Bold Actions to Move Faster Towards Climate Goals"























The TECH Clean California initiative is funded by California ratepayers and taxpayers under the auspices of the California Public Utilities Commission.

What is TECH Clean California?

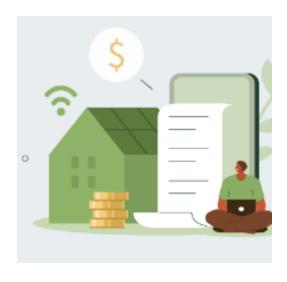


- California's statewide program to promote adoption of heat pump space heating and heat pump water heating.
- Over 800 California contractors already participating.
- Over \$110 million in heat pump incentives paid.
- Over 46,500 heat pump projects funded.

Overview: Home Energy Rebate Programs – Inflation Reduction Act

- \$8.8 billion for Home Energy Rebates under Inflation Reduction Act
 - Section 50121: Home Efficiency Rebates
 (HOMES)-- \$4.3 billion for single-family and multifamily discounts on efficiency upgrades
 - Section 50122: Home Electrification and Appliance Rebates (HEAR)-- \$4.5 billion for single-family and multifamily discounts on high-efficiency home appliances and equipment





DOE estimates federal rebates will support more than 50,000 jobs and save Americans \$1 billion every year across the nation.

TECH Single Family HVAC

Program Design Category	2024
Total Statewide Budget	\$22M
Incentive Structure	Flat
Incentive Level	\$1,000/\$1,500 HP rebate only
Eligible Customers	All customers in California
Eligible Equipment	EnergyStar Listed/2-speed or variable speed No hybrid systems
Project Limitations	Up to 2 incentives per household
Furnace Backup	Accepted, must be part of AHRI matched system
Replacements Types Required	Must be replacing an existing non-heat pump heating system

TECH incentives can be **stacked** with other local, State and Federal incentives

HEEHRA Phase I:

Program Overview HEEHRA TECH Clean California

Existing Single and Multi Family Homes

\$45M and \$35M

Low- to Moderate-Income Residents

150% or less AMI



Efficient Electric Equipment



HEEHRA-TECH
Clean California
Contractors



Statewide

HEEHRA Phase I: Rebate Table

Single Family – Low-to-moderate income	Rebate Amount
Low-Income: Heat Pump for Space Heating or Cooling (Heat Pump HVAC) (<80% Area Median Income, AMI)	\$8,000
Moderate-Income: Heat Pump for Space Heating or Cooling (Heat Pump HVAC) (80%-150% AMI)	\$4,000
Multifamily – Low-to-moderate income, max rebate per residential unit of \$14,000	Rebate Amount
Heat Pump for Space Heating or Cooling – Dual Speed (Heat Pump HVAC)	\$7,500
Heat Pump for Space Heating or Cooling – Variable Speed (Heat Pump HVAC)	\$8,000
Heat Pump Water Heater (Electric to Electric Heat Pump, cannot replace existing Heat Pump)	\$700
Heat Pump Water Heater (In-Unit)	\$1,750
Central Heat Pump Water Heater	\$1,750
Electric Load Service Center (Electric Panel)	\$4,000
Electric Wiring	\$2,500
Electric Stove, Cooktop, Range, or Oven	\$840
Heat Pump Clothes Dryer *Program and equipment eligibility requirements apply **Rebate incentive may be adjusted	\$840
TECH Clean California – SoCalREN Advisory Committee	19

TECH Single Family HPWH

Program Design Category	2024
Total Statewide Budget	\$11M
Incentive Structure	Flat
Incentive Level	\$1,100 HPWH rebate \$700 > 55 gallon capacity \$1,500 Low-GWP Kicker \$2,000 Electrical upgrade
Eligible Customers	All customers in California
Eligible Equipment	JA13 compliant with NEEA QPL with EcoPort or EnergyStar Residential 4.0 Connected Product
Customer Requirements	Must enroll on a TOU rate and demand response program and water heater rewards where available.

TECH incentives can be **stacked** with other local, State and Federal incentives

Incentive Process

Step 1: Enroll and complete onboarding

Step 2: Make heat pump sale and submit incentive reservation to hold incentive money

Step 3: Complete installation and any required HERs testing, making sure to note information required on claim.

Step 4: Submit application!

Step 5: Receive incentive payment!

Sign Up Process and Resources

Ready to Sign Up?

- Navigate to https://switchison.cleanenergyconnection.org/form/enrollment-form
- Enrollment requirements include:
 - 1. Active California contractor license in good standing
 - 2. Adherence to the requirements outlined in the <u>Trade Professional Participation</u> <u>Agreement</u> including insurance coverage
 - 3. Brief program training completion



Resources

- Program Resources: https://switchison.org/contractors/tech-clean-california/
- Multifamily Resources: https://techcleanca.com/incentives/multifamily-information/
- Public Reporting Website: https://techcleanca.com

Expanded TECH Clean California Training

Goal: Reduce the economic burden for taking time off work for training

Goal: Give contractors the technical support they need, when they need it

- Stipends available to contractors enrolled in TECH Clean California
- On-demand phone support through National Comfort Institute for 100 TECH Clean California contractors



TECH Clean California Electrify My Home Training

<u>switchison.org/contractors/training-hub/</u>

Thank You

For more information or to get involved, contact:

TECH.info@energy-solution.com

TECH.Contractor@energy-solution.com



























www.techcleanca.com www.switchison.org

Q&A



Regulatory and Policy Updates **Q1 2025 Regulatory Priorities**

Courtney Owen, ICF on behalf of SoCalREN















Q1 2025 Regulatory Priorities

- 1) Executive Order N-5-24
- 2) R.18-04-019 Climate Change Adaptation Proceeding
- 3) CA Proposition 4 (\$10B Climate Change Bond)

Executive Order N-5-24

Signed by Governor Newsom on October 30, 2024. CPUC is requested to report its analysis of programs and recommendations by Wednesday, January 1, 2025 ahead of the legislative session beginning Monday, January 6.

Purpose	Actions	Potential Impacts and Risks
 Address rising electricity costs and provide electric bill relief 	 Identify underperforming programs and return unused funds to customers 	Potential reduction in funding for energy and climate initiatives
 Aimed at making electricity more affordable while maintaining clean energy goals 	Maximize the California Climate Credit to deliver enhanced direct financial relief to ratepayers	 Increased pressure on local governments to maintain and implement climate programs with limited resources
	Evaluate utility wildfire mitigation expenses for potential savings	 Potential delays or scaling back of local climate adaptation and resilience projects
	Pursue federal funding to lower electricity costs	

R.18-04-019 Climate Change Adaptation Proceeding

Objective: Integrate climate change adaptation into relevant CPUC proceedings to ensure the safety and reliability of utility services in the face of climate impacts. Phase 1 focuses on electric and natural gas utilities.

- Defines climate change adaptation for energy utilities and identifies the California Fourth Climate Assessment as the primary source for climate data and projections.
- Establishes criteria for additional data or models to understand climate impacts:
 - Rising sea levels threatening power plants and substations
 - Increased temperatures causing strain on transformers
 - Higher electric demand during heat waves
- Ensures that California's utility infrastructure is resilient and can adapt to the changing climate.
- · Promotes strategic, data-driven, community-informed planning to maintain safe, reliable, and affordable utility services.

CA Proposition 4 (\$10B Climate Change Bond)

- On November 5, California voters approved a bond to fund significant climate resilience, conservation, air quality, and environmental protection efforts.
- The \$10 billion climate bond funds will be available to local governments, Native American Tribes, non-profits, and businesses through loans and grants starting in 2025, with communities potentially seeing impacts by mid-2025.

\$3.8 Billion	\$1.5 Billion	\$1.2 Billion	\$3.5 Billion
Safe drinking water and drought/flood protection	Wildfire prevention	Coastline protection and land conservation	Energy infrastructure, parks, extreme heat mitigation, and agriculture



City of Palmdale Energy Programs Update

Benjamin Lucha, City of Palmdale

















City of Palmdale

Energy Programs Update

Solar + Storage Project

- Project at local park
 - Connected to meter to pool
 - 79 kW solar
 - 3-hr Battery Back-Up (load shedding)
 - Anticipated savings of \$1.3M for 30-year life of project (solar and battery only)
 - 12 Level 2 EV charging units



ESCO Project

- Currently wrapping phase 2 of ESCO energy efficiency projects.
 - Interior and Exterior Lighting
 - LS-3 Custom Retrofits
 - Sports Field Lighting Retrofit
 - HVAC Replacements
 - EMS Replacements/Upgrade
 - Irrigation Control Upgrades



Maintenance Microgrid/ZEV Fleet Study

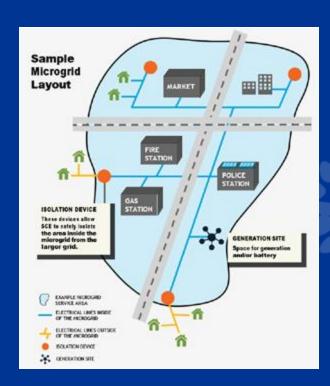
Categories ⁸	COA #1: Utility Only	COA #2: Optimized with Solar and BESS	COA #3: Fully Resilient
Diagram	Maintenance Yard SWGR	Maintenance Yard BESS SWGR	Mannisemence Yard O
Equipment	4MW utility upgrade	4MW utility upgrade; 0.8MW Solar PV; 1MW, 4MWh BESS	4MW utility upgrade; 0.8MW Solar PV; 1MW, 4MWh BESS, 4MW Generation
Renewable Contribution ⁶	0%	70%	70%7
Resilience	0%	Variable ⁸	100%

No.	Infrastructure	CapEx	Resilience	Clean Energy Contribution	DER Cost Savings
1	Utility Only				
2	Utility + Solar + Battery and Energy Storage Systems (BESS) [Optimized Microgrid]		•		
3	Utility + Solar + BESS + Generator [Fully redundant Microgrid]				

Figure 9: Microgrid COA Summary

Civic Center Microgrid

- Currently working on a potential microgrid project.
- Would cover:
 - City Hall
 - Majority of City Administrative Staff
 - EOC
 - One Fire Station
 - Library/City Cooling Center



Public EV Charging Stations Program

	Stations	Ports	Coming Soon	Stations	Ports
Dev Svcs	1 - Lvl 2	4	McAdam Park	6 - Lvl 2	12
	1 - Lvl 3		Ave S P&R	1-Lvi3	1
PTC	6 - Lvl 2	12	Library	2 - Lvl 2	6
Oasis Park	2 - Lvl 2	4	Cordiy	1-Lvl3	
Ave S P&R	4 - Lvl 3	4	Domenic Massari Park	6 - Lvl 2 1 - Lvl 3	12
RVP	1 - Lvi 2	1	Poncitlan Square	4 - Lvl 2 2 - Lvl 3	12

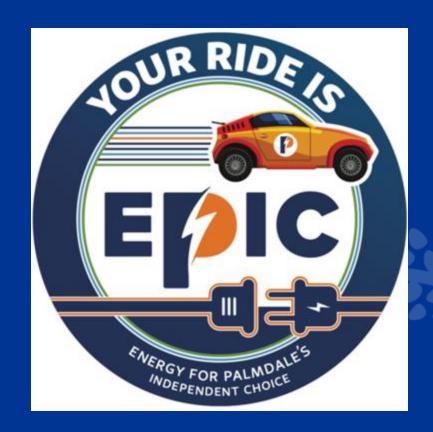
In Q3, current stations were used for 9,418 charging sessions and used 179.9 MWh of electricity.

EPIC Power Choice Program



Your Ride is EPIC

- \$250 for Residential EV Charger
- \$550 for Wall Mounted/Level 2 Residential EV Charger



Planned Building Electrification Program



Purchase of Electric Ranges for Four Neighborhood Homes

Find and Compare

Change Product



Electric Cooking Products

Visit the <u>Residential Electric Cooking Products</u> page for usage tips and buying guidelines.



Electric Range Demonstrations

Home Electrification
Organics Program
Food Rescue
Digital Equity

Thank You

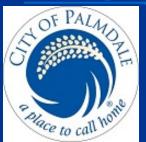
Innovation & Environmental Division/Energy for Palmdale's Independent Choice (EPIC)

661/267-5300

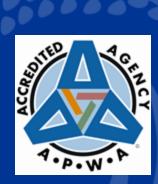
Envirotech@cityofpalmdale.org

Benjamin Lucha
Innovation and Environmental Manager

blucha@cityofpalmdaleca.gov









Closing Remarks

Lujuana Medina, County of Los Angeles















Quarterly Regulatory Report





We want to hear your feedback!

Please take a minute to

complete our

December 2024 Meeting Survey!

2025 Meeting Proposed Schedule

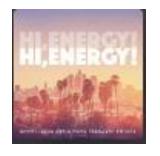


Date	Time
Q1 - March Options Thursday, March 6th Wednesday, March 19th Thursday, March 20th Tuesday, March 25th Wednesday, March 26th	In-person - Orange County (TBC) 10:30 am - 2:30 pm
Q2 - June 11th	Virtual 10:30 am - 12 pm
Q3 - September 10th	In-person or virtual 10:30 am - 2:30 pm
Q4 - December 3rd	Virtual 10:30 am - 12 pm

SoCalREN Podcast & Social



Don't forget to listen to SoCalREN's podcast and follow us on social media!











- SoCalREN's twenty-first podcast episode, The Urban Heat Island Effect, was recently released and ReEnergizing Communities has been rebranded into Hi, Energy!
- Currently available on <u>Spotify</u> and <u>Apple</u> <u>Podcasts</u> platforms.

@SoCalREN

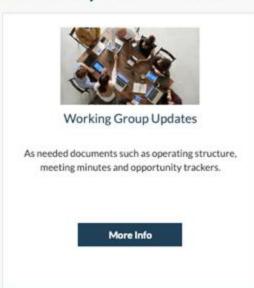
linkedin.com/compa ny/southerncalifornia-regionalenergy-network @ SoCalREN

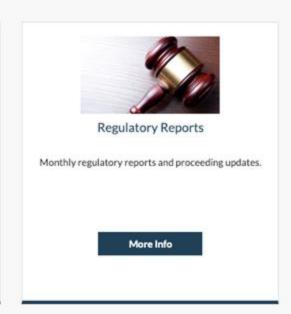
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Online Resource for Advisory Committee Members



Advisory Committee









Adjourn













