

State & Local Energy Climate Coordination (SLECC)

Meeting #9 | December 12, 2024
Virtual

*Coordination meetings between State and local
leaders across California*

Co-facilitated by



CALIFORNIA
STRATEGIC
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And coordination with ...





Welcome to SLECC!



Purpose

SLECC will serve as a **statewide communication and ideation hub to help State and local leaders improve coordinated efforts** to more rapidly unlock the unique potential of California regions and communities to address energy, climate, and land use goals.

SLECC will **identify priority needs and co-create operational solutions to advance place-based energy and climate action.**

TODAY'S AGENDA

- **Welcome & Purpose/Progress of SLECC**
- **Roundtable Updates**
- **Discussion Topic: *Progress on Barriers to Local Climate Action***
 - Overview of progress
 - Breakout 1: *Climate action planning Technical Advisory group and general plan guidelines*
 - Breakout 2: *GHG data inventory access*
 - Breakout 3: *Load capacity constraints*
 - Report out
- **Closing**



Purpose & Progress of SLECC

We set out to: Build deeper understanding and stronger collaborative relationships between State and local agencies to identify barriers and streamline/improve delivery of energy and climate information, resources, and services.

Key Priorities	Actionable Operational Solutions in Progress
<p>Improve and streamline communications and messaging between State and local agencies</p>	<p>SLECC has 300+ registrants, including 10+ state agencies. Tracking active input opportunities. SLECC regional convenings launched in IE. Evaluation of local roles.</p>
<p>Advance access to flexible recurring funding/assistance for local energy and climate initiatives</p>	<p>Priority 3, E.O. Better Funding report submitted to agencies, resulted in launch of Statewide Funding Solutions Workgroup. Addendum in progress to scope ICC & REACH pilots for various policy pathways. 3 years of LERN + guideline input. EE & GGRF.</p>
<p>Develop capacity & GHG source data for local climate action</p>	<p>Regional inventories. CARB's CPRG consortium. Berkeley tool and CARB tool analysis. CPUC/UCLA working group. LCI/CARB CAP TA group and general plan guidance.</p>
<p>Expand State agency leadership to address local policy needs (e.g. overcoming load constraints, reliability, and interconnection issues; meaningfully addressing energy affordability, bill relief, and preserving EE; community solar)</p>	<p>LGSEC service capacity workgroup and filings. CCEC SB 100 comments. CPUC electrification proceeding. Go-Biz Energy Project Permitting Guidebook & Toolkit. More constructive dialogues on the real drivers of energy affordability crisis.</p>
<p>Achieve coordinated, customer-friendly residential energy/electrification programs, including capital/incentive stacking. Addressing impacts on housing affordability.</p>	<p>Coordination among RENs, EBD, TECH Clean CA, Solar for All.</p>



Roundtable Updates

*What does **your** organization want State and local governments to know more about?*

- *Assistance, learning, or engagement opportunities*
- *Recent successes/lessons*
- *Information needs*
- *Invitations to partner*



California Energy Commission

Deana Carrillo, Director

Reliability, Renewable Energy & Decarbonization Incentives Division

SLECC meeting December 12, 2024



CEC Building Decarbonization Incentives: Launching

Launch Date	Program	Funding	Eligibility	Measures
Oct. 2024 ✓	IRA HEEHRA Phase I / TECH Clean CA	\$80 Million	Low and Moderate Income	Rebates existing single-family and multifamily air and water heat pumps, electrification, and appliance rebates
Nov. 2024 ✓	GoGreen	\$30 Million	All incomes	Loan loss reserve and interest rate buydown to support home energy retrofit loans
Mid 2025	IRA TREC	\$9 Million	Contractor	Pre-apprenticeship and apprenticeship programs and workforce enablement
Mid 2025	Equitable Building Decarbonization / HOMES Direct Install	\$567 Million	Low Income in DAC	Decarbonization retrofits. All projects must replace gas heating/HVAC and water heating with heat pumps
Late 2025/ Early 2026	IRA HOMES Pay-For Performance	\$102 Million	All Incomes	Existing residential. 15% overall energy savings
2026	IRA HEEHRA Phase II	\$152 Million	Low and Moderate Income	ENERGY STAR® certified electric appliance rebates for existing residential
2026	Equitable Building Decarbonization Tribal Direct Install	\$30 Million	CA Native American Tribes	Under development. Existing residential.



California Allocation of IRA funds

Pending DOE Approval

HOMES

Whole Home Efficiency Rebates

\$291 million

Awarded

HEEHRA

Electrification & Appliance Rebates

\$290 million

Pending DOE Approval

CA-TREC

Training for Residential Energy Contractors

\$10 million

Home Energy Rebate Programs



CA's HEEHRA Rebates Launched in October!

**\$80M for
Home
Appliance
Rebates**

Phase I: HEEHRA TECH Clean CA

- Multifamily rebates available today
- Single-family rebates available later this month

Phase II:

- \$152 million
- Seeking public Input



Phase I Overview: HEEHRA TECH Clean California

Statewide

Efficient electric
equipment

Existing single
and multifamily
homes

Low- to
moderate-
income residents

HEEHRA equity
funding allocation:
41% low-income
10% low-income multifamily

HEEHRA-Tech Clean
California Contractors



HEEHRA Phase I

\$80M Rebates by Building Type & Income Level

Single-Family

Rebate Amount

<u>Low- Income:</u> Heat Pump for Space Heating or Cooling (HP HVAC) (<80% AMI)	\$8000
<u>Moderate-Income:</u> Heat Pump for Space Heating or Cooling (HP HVAC) (80%-150% AMI)	\$4000

Multifamily – Low-to-moderate income

Heat Pump for Space Heating or Cooling (HP HVAC)	\$1000
Heat Pump for Space Heating or Cooling – Variable Speed (HP HVAC)	\$1500
Heat Pump Water Heater (Electric to Electric HP, cannot replace existing HP)	\$700
Heat Pump Water Heater (<55 Gallons)	\$1400
Heat Pump Water Heater (>=55 Gallons)	\$1750
Central Heat Pump Water Heater (<15 Gallons per bedroom)	\$1200
Central Heat Pump Water Heater (>=15 Gallons per bedroom)	\$1750
Electric Load Service Center*	\$3000
Electric Wiring	\$1000
Electric Stove, Cooktop, Range, or Oven	\$840
Heat Pump Clothes Dryer	\$840



How does your community get engaged in HEEHRA?

Apply for Home Rebates

<https://techcleanca.com/incentives/heehrarebates/>

Enroll as a Contractor

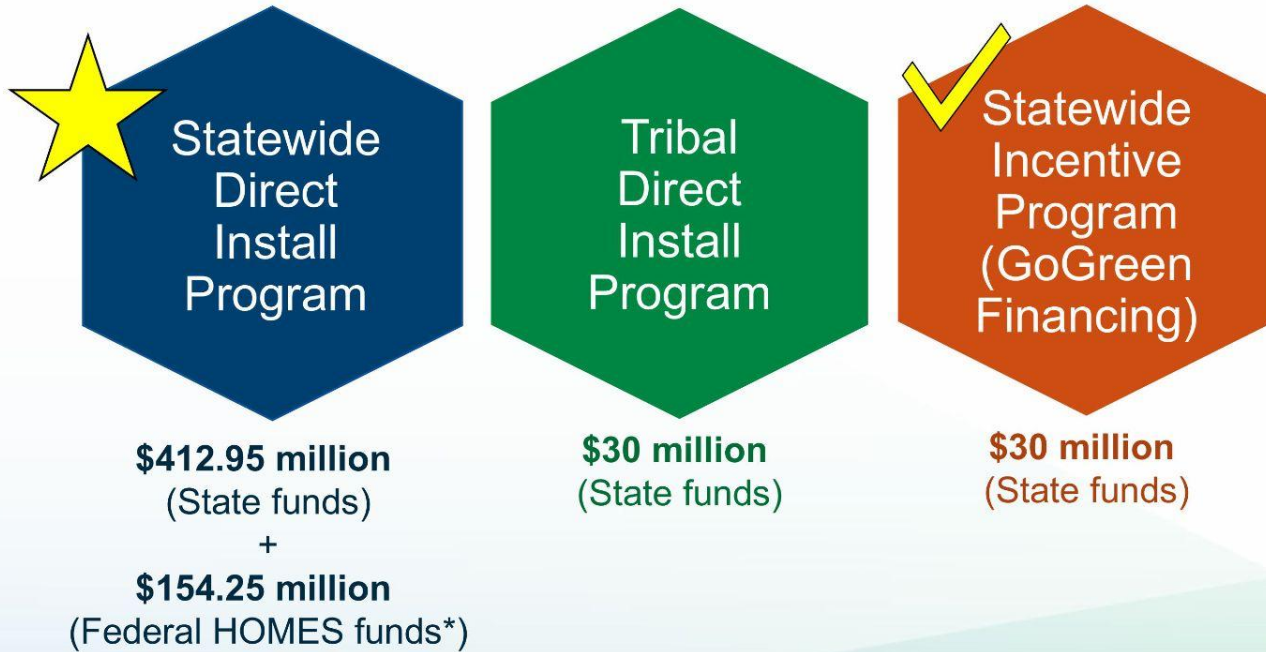
<https://www.switchison.org/ca/pros>

Join the Energy Ambassadors

- The Switch Is On Ambassador Program:
<https://www.switchison.org/be-an-ambassador>
- Low Income Ambassador Panel (LIAP):
contact Rachel Etherington retherington@ortiz-group.com



Equitable Building Decarbonization Programs



* Federal funds contingent on U.S. Department of Energy approval



Benefits to Californians



Reduce Greenhouse Gas Emissions from Buildings



Advance Energy Equity



Improve Resiliency to Extreme Heat



Improve Air Quality



Improve Energy Affordability



Support Grid Reliability



Support Local Workforce



Statewide Direct Install Program Overview

The direct install program will serve...



Low-Income Households

- Single-family
- Multifamily
- Manufactured and mobile homes



Underresourced Communities

- Disadvantaged communities
- Low-income communities

First phase of the program will serve “Initial Community Focus Areas”



Eligible Measures: EBD Direct Install Program

Heating and Cooling

- Heat pump
- Duct testing/sealing
- Smart thermostat
- Ceiling fan, whole-house fan

Building Envelope

- Insulation
- Air sealing
- Solar window film

Water Heating

- Heat pump water heater
- Low-flow showerheads and faucets

Cooking, Laundry

- Induction range or cooktop
- Electric clothes dryer

Air Quality, Lighting

- Air filtration
- LED lights

Electrical and Remediation

- Electrical wiring and panel upgrades
- Remediation and safety



Regional Funding Allocation



Region	Population of Underresourced Communities	Percentage of Statewide Direct Install Program Funds
Northern	5.3 million	23%
Central	4.3 million	19%
Southern	13.6 million	58%
Total	23.2 million	100%



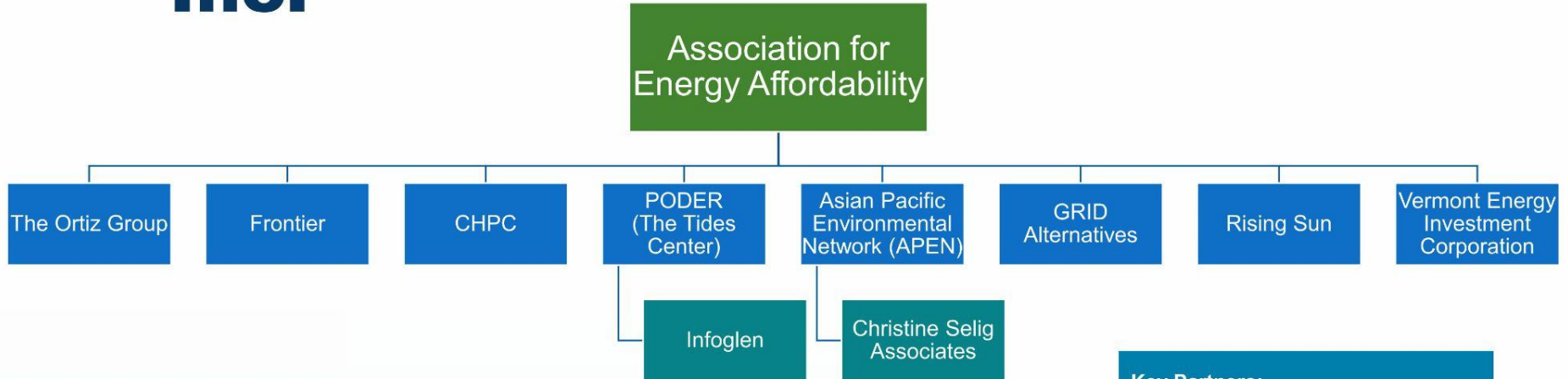
Regional Administrator Awardees

Region	Proposed Awardee	Proposed Funding: State	Proposed Funding: Federal*	Proposed Funding: Total
North	Association for Energy Affordability, Inc.	\$94,978,500	\$35,478,190	\$130,456,690
Central	Center for Sustainable Energy	\$78,460,500	\$29,308,070	\$107,768,570
South	County of Los Angeles	\$239,511,000	\$89,466,740	\$328,977,740
Total	All Regions	\$412,950,000	\$154,253,000	\$567,203,000

* Federal funds contingent on U.S. Department of Energy approval



Northern Region: Association for Energy Affordability, Inc.

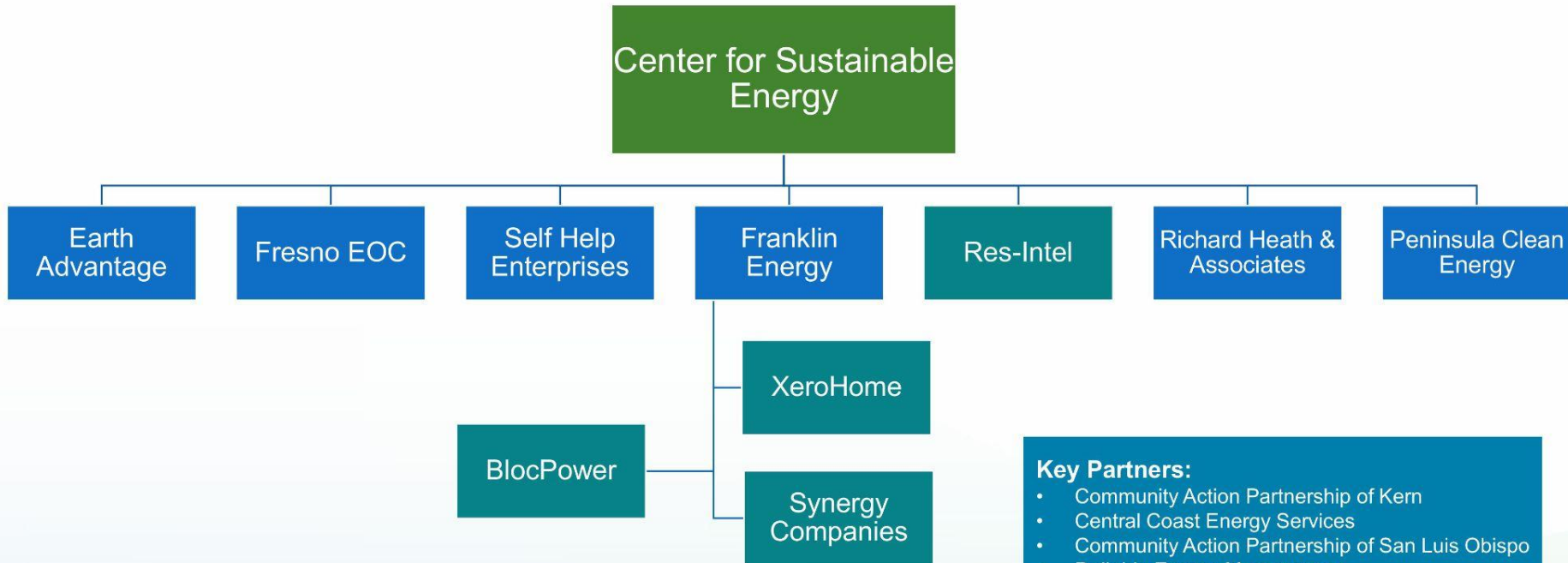


- Regional Administrator
- Subcontractors
- Vendors

- Key Partners:**
- Marin Clean Energy
 - Peninsula Clean Energy
 - Silicon Valley Clean Energy
 - San Francisco Environment Department
 - Bay Area Regional Energy Network
 - San Jose Clean Energy
 - Sacramento Municipal Utility District
 - Redwood Coast Energy Authority



Central Region: Center for Sustainable Energy

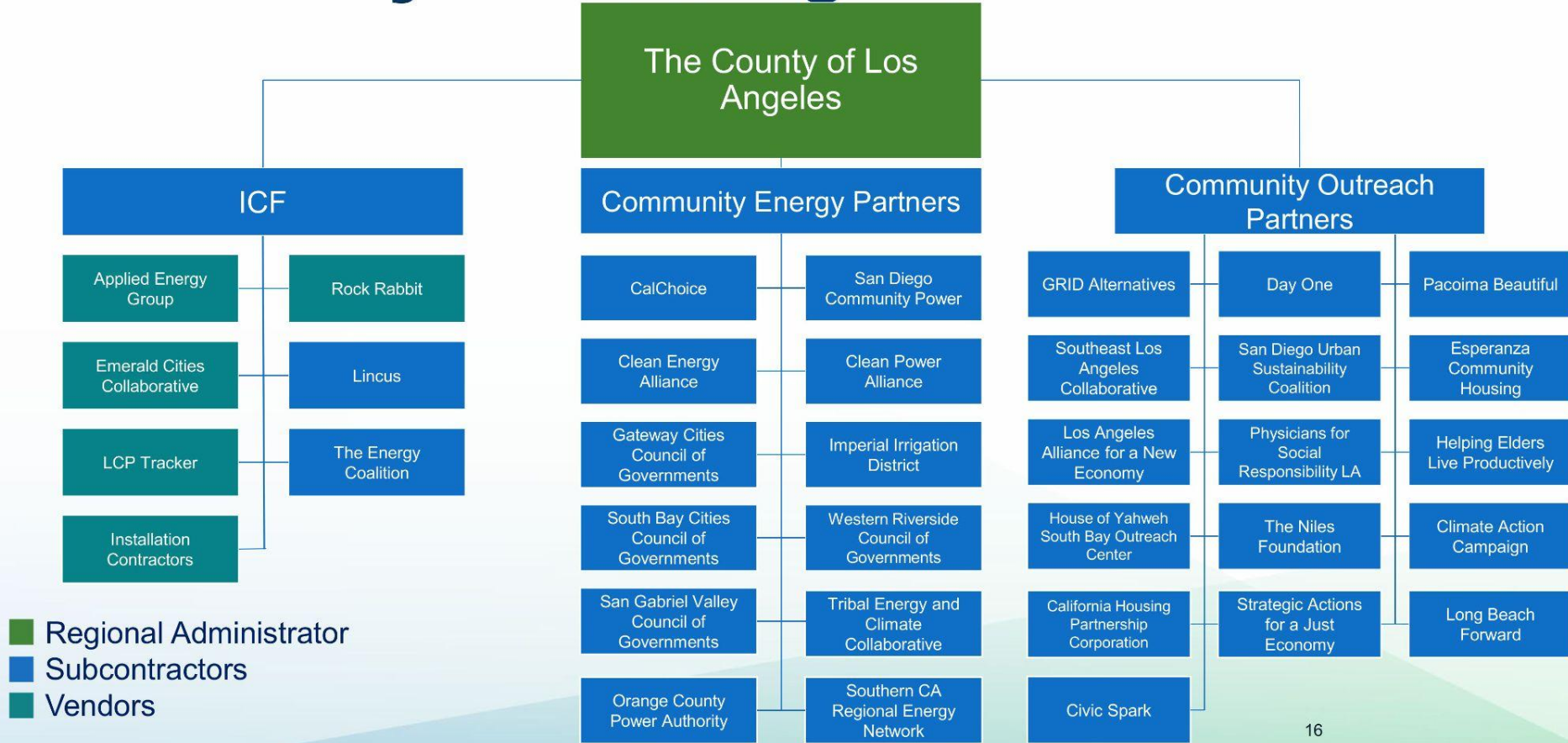


- Key Partners:**
- Community Action Partnership of Kern
 - Central Coast Energy Services
 - Community Action Partnership of San Luis Obispo
 - Reliable Energy Management
 - Kings Community Action Organization
 - Community Services & Employment Training
 - Merced County Community Action Center
 - Central Valley Opportunity Center

- Regional Administrator
- Subcontractors
- Vendors



Southern Region: County of Los Angeles





Proposed Awardee, Southern Region: Los Angeles County



	South San Diego	North San Diego	Orange County	LA Ports and South Bay	LA San Gabriel and San Fernando Valley	LA Gateway Cities	Inland Empire San Bernardino	Inland Empire Riverside	Imperial County
Community Energy Partners	<ul style="list-style-type: none"> • SDCP 	<ul style="list-style-type: none"> • CEA • SDCP 	<ul style="list-style-type: none"> • OCPA 	<ul style="list-style-type: none"> • CPA 	<ul style="list-style-type: none"> • CPA 	<ul style="list-style-type: none"> • CPA 	<ul style="list-style-type: none"> • CalChoice • IREN 	<ul style="list-style-type: none"> • CalChoice • IREN 	<ul style="list-style-type: none"> • IID
Community Outreach Partners	<ul style="list-style-type: none"> • SDUSC • SCTCA • CHP • GRID • ECC • TEC 	<ul style="list-style-type: none"> • SDUSC • SCTCA • Climate Action Campaign • CHP • GRID • ECC • TEC 	<ul style="list-style-type: none"> • CHP • Climate Action Campaign • GRID • ECC • TEC 	<ul style="list-style-type: none"> • SBCOG • PSR-LA • ECH • SAJE • LAANE • SELA • Long Beach Forward • HELP • Niles Foundation • House of Yahweh • CHP • GRID • ECC • TEC 	<ul style="list-style-type: none"> • SGVCOG • PSR-LA • ECH • SAJE • Niles Foundation • Day One • Pacoima Beautiful • CHP • GRID • ECC • TEC 	<ul style="list-style-type: none"> • GCCOG • PSR-LA • ECH • SAJE • CHP • GRID • ECC • TEC 	<ul style="list-style-type: none"> • SBCOG • CHP • SCTCA • GRID • ECC • TEC 	<ul style="list-style-type: none"> • WRCOG • CHP • SCTCA • GRID • ECC • TEC 	<ul style="list-style-type: none"> • CHP • SCTCA • GRID • ECC • TEC



EBD Regional Administrator Contacts

- For Northern Region – Association for Energy Affordability
 - Andrew Brooks at ABrooks@aeacleanenergy.org
- For Central Region – Center for Sustainable Energy
 - Jin Zhu at Jin.Zhu@energycenter.org
- For Southern Region – County of Los Angeles
 - Frederick Chung at: FChung@isd.lacounty.gov



Thank You

Deana Carrillo
Director, RREDI Division
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Roundtable Update

REACH Inland Empire

Thursday, December 5, 2024
Morongo Conference Center

Presented by:



CALIFORNIA
STRATEGIC
GROWTH
COUNCIL

Sponsored by:



MORONGO
BAND OF
MISSION
INDIANS
A SOVEREIGN NATION



Strategic Growth Council Engagement Opportunities

Open RFI: Streamline Infill Housing Development

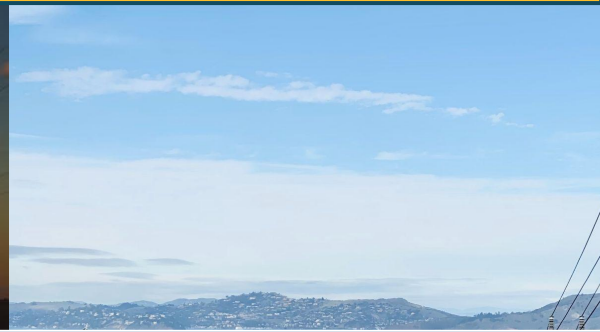
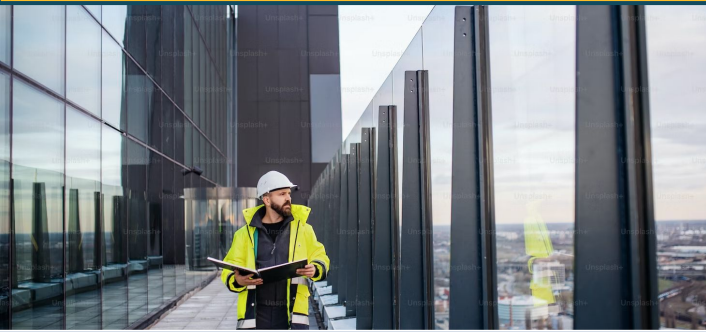
- **Deadline:** Dec. 31, 2024
- **About:** Seeking input on processes, permits, and other administrative actions that can be adjusted to create more flexibility and lower costs of infill housing.

Virtual Workshop: Shape 2025 Regional Roundtables with LCI & SGC

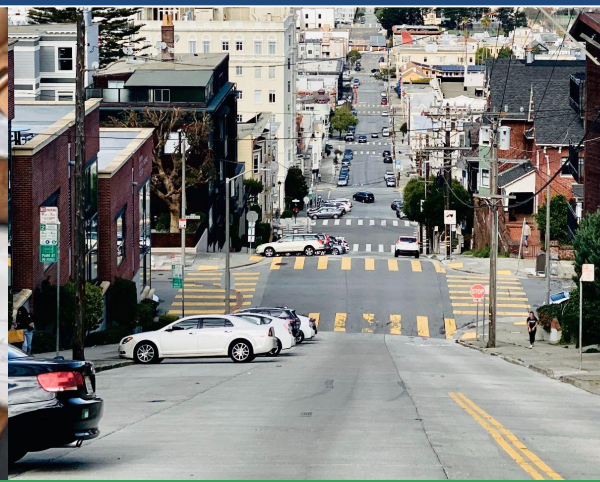
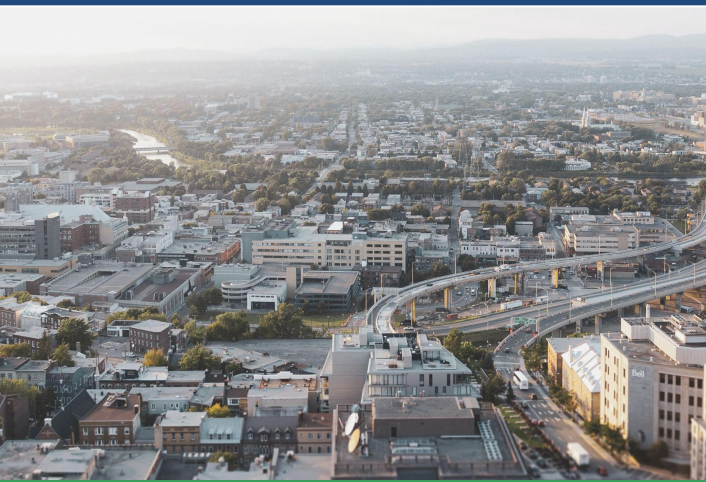
- **Date:** Friday, December 13, 2024
- **Time:** 10:30AM - 12:30PM
- **About:** You and regional stakeholders across the state will help inform the 2025 roundtable structure, format, and topics



Featured Discussion



Progress on Barriers to Local Climate Action





Discussion: Progress on Barriers to Local Climate Action

Recap and Overview of Progress - [Summary Report](#)

Key Barriers

- **PLANNING CAPACITY:** Too much capacity (staff time/resources) and technical expertise is needed to develop/ track/ update GHG inventories and CAPs (takes away from implementation)
- **SOURCE DATA:** Problems accessing GHG source data (e.g. utility or VMT data) cause long delays in developing, updating, and monitoring CAPs
- **LEGAL HURDLES:** Locals are discouraged from developing or implementing CAPs due to potential lawsuits, litigation, and compliance enforcement of CEQA mitigation measures in an EIR
- **TRANSITIONING TO ACTION:** Implementing emission reduction measures is difficult due to budgetary and structural constraints limiting individual action and regional collaboration
- **LOAD CONSTRAINTS:** Transitioning vehicles and buildings to electric fuels is challenging due to electrical capacity constraints coordinated by the utilities

Key Needed Solutions

- **Develop systems to provide easy access to reliable and up-to-date GHG inventory source data**
 - Fund an agency or 3rd party to produce standardized regular local GHG inventories
 - Conduct an analysis of existing GHG inventory tools
 - Develop statewide energy and VMT data/query tools or portals
 - Address data request barrier by revising CPUC privacy rules and/or advance legislation to remove data control from under the purview of the IOUs
 - Promote regional collaboration on inventories
- **Improve and update state guidance and TA on CAP development** (including general plans, CEQA and methodology/protocols)
- **Provide funding** to conduct CAPs locally or regionally, support core local climate staffing positions, engage with State on topic, and implement the most emission-reducing measures
- **Develop a working group** to continue pursuing these solutions across local and state agencies



Discussion: Progress on Barriers to Local Climate Action

Recap and Overview of Progress

Questions we posed for continued coordination...

- To what extent is implementation of local climate action necessary to meet the State's carbon neutrality goals?
- Should local governments dodge the cumbersome local climate action planning process, inclusive of GHG inventories, and simply use State guidance to implement climate actions (e.g. Local Actions Appendix)?
- If CAPs and GHG inventories are essential, what is the best way to economize the process to preserve local capacity for action and how can the State help?
- What protocol(s) are most appropriate for use?
- What quantification methodologies and tools do the protocol(s) require and how should they be used?
- What are the barriers to quantification methodologies and tools and how can they be overcome?
- What data sources are necessary for the methodologies and tools?
- How can the data sources be streamlined and made consistent?
- What are the barriers to obtaining data sources and how can they be overcome?

Poll:

In the last year, what changes have occurred that have made it easier or harder for you to conduct local climate action plans or implement emission reduction measures?



Discussion: Progress on Barriers to Local Climate Action

Recap and Overview of Progress

Potential “fundamental principles” around State-local climate action coordination

- ★ Local government actions are essential to meeting the State’s emission reduction targets and to protecting communities from the worst impacts of climate change.
- ★ CA should not expect or require each local government to do a climate action plan, but we should support those that wish to do one.
- ★ Local climate action plans are a way to conduct analysis that can garner equitable engagement, public and political support, and justify local funding and staff capacity to implement a custom set of beneficial emission reduction strategies to meet targets, which can serve as state pilots. Those that wish to adopt a CEQA-qualified CAP may need guidance.
- ★ A key barrier local communities face is access to data for GHG inventories. Local governments cannot solve this problem individually, we need state leadership.



Discussion: Progress on Barriers to Local Climate Action

Breakouts

Breakouts - Choose a Breakout

45 minutes then report out

- **Breakout 1: Climate action planning Technical Advisory group and general plan guidelines** (*Facilitated by Sean Kennedy (SGC), panelists include Rowena Bush (LCI), Dr. Boswell (Cal Poly), Chris Read (City of SLO)*)
- **Breakout 2: GHG data inventory access** (*Facilitated by Rosheil Ramirez (CCEC), panelists include Miya Kitahara (Stop Waste), Matt Jones (CARB), Maya Ofek (UCLA)*)
- **Breakout 3: Load capacity constraints** (*Facilitated by Angie Hacker (CCEC), panelists include Chris Moore (CPUC), Rohimah Moly (Go-Biz), Steven Moss (LSGEC)*)



Discussion: Progress on Barriers to Local Climate Action

Breakout 1

Climate action planning Technical Advisory group and general plan guidelines (Sean Kennedy to facilitate)

- Brief overview of General Plan Guideline Update sparking CAP TA Project (Rowena Bush, LCI)
- Preparing the Climate Action Plan Technical Advisory (Dr. Boswell, Cal Poly)
- Thoughts from a participating local Technical Advisor (Chris Read, City of SLO)
- CAP Discussion (Dr. Boswell)
- Audience Discussion – what needs to happen next?



Discussion: Progress on Barriers to Local Climate Action

Breakout 2

GHG inventory data access (Rosheil Ramirez to facilitate)

- Berkley Tool (Miya Kitahara, Stop Waste)
- CARB's analysis on GHG inventory data tools (Matt Jones, CARB)
- CPUC Data Access Working Group (Maya Ofek, UCLA)
- Audience discussion - what needs to happen next?

UC Berkeley Climate Action Data & Tools Project

Project Update for SLECC

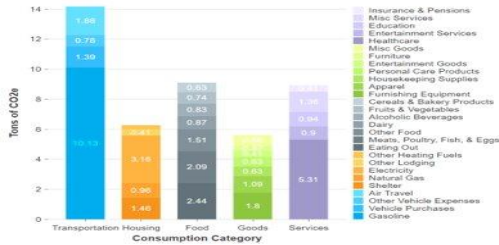
December 12, 2024

Berkeley
UNIVERSITY OF CALIFORNIA

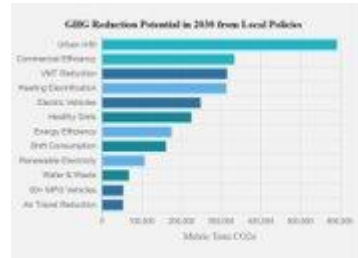
STOPWASTE
at home • at work • at school

UCOP Climate Action Seed Grant Project Deliverables

Territorial & Consumption Based Inventories



Policy Planning Tools



Equity Indicators



Journalism

The Climate Impact of Your Neighborhood, Mapped



Project Team

UCB Renewable and Appropriate
Energy Lab & CoolClimate Network



Dan Kammen



Chris Jones



Kaihui Song



Mariah Padilla

**+ 20
undergrad
researchers**

UCB School of
Journalism



Jason Springarn-Koff



Twilight Greenaway

StopWaste



Miya Kitahara

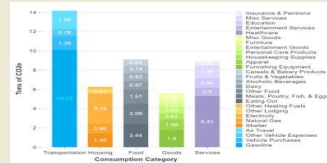
Intended Users

Local Government Staff (and their consultants) Primary Audience	State Agencies	General Public (residents and businesses)	Academics & Researchers
Conduct local GHG inventory for internal reporting, reporting to elected officials and/or constituents. Use to inform CAPs and to track progress.	See trends across the state - by community types, funding distribution, etc.	Information for people who want to take personal action or advocate for actions by their local gov	Analyze the data and gather findings

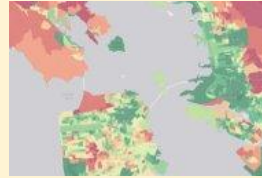
Project Input Process

Methodology
& Policy
Advisory
Committee

Inventories

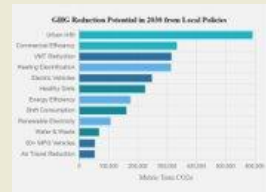


Equity Indicators



Local Government
Needs Assessment

Policy Tools



Journalism



Surveys
Interviews
Webinars
Beta Testing

Methodology and Policy Advisory Committee

State

California Air Resources Board staff
on transportation, buildings, waste

Local

Leading cities and counties,
including those who were active in
advancing SB 511

Regional

Air district and MPO staff

Consultants

Leading climate action planning
consultants

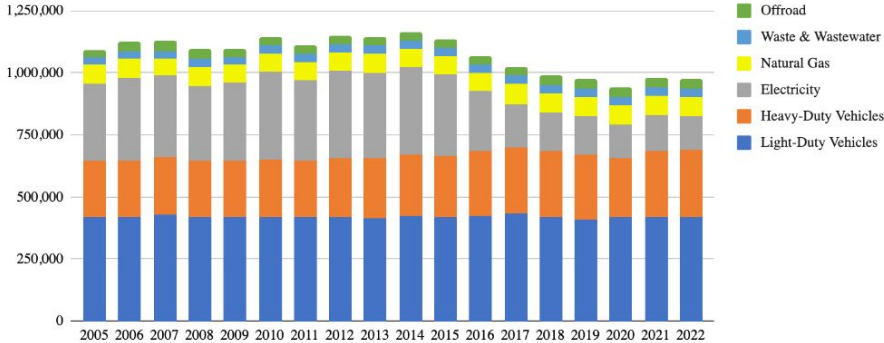
Academics

UC's and CalPoly researchers

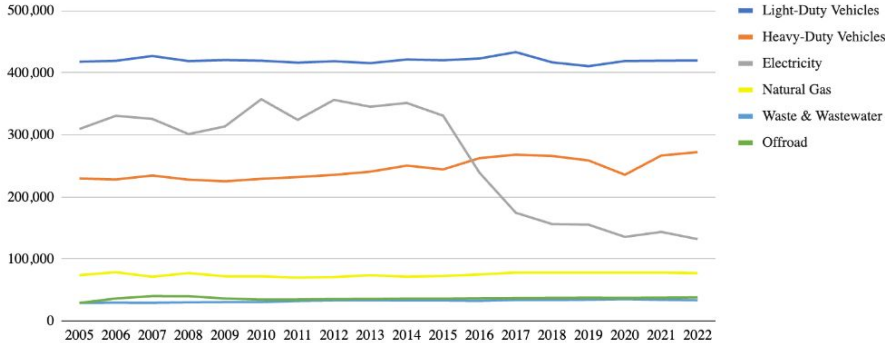
Local Government Functionalities

Sector-Based Greenhouse Gas Inventory

Sector-Based GHG Inventory



Sector-Based GHG Inventory



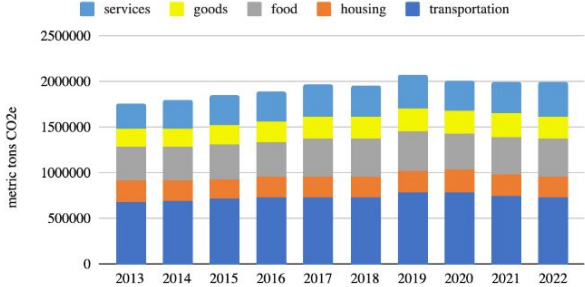
Between 2015 and 2022, total GHG emissions decreased by approximately 34.5%. Light-duty vehicles saw a reduction of about 16.6%, while heavy-duty vehicles decreased by 25.2%. Electricity emissions dropped significantly by 85.7%, and natural gas emissions fell by 20.4%. Waste and wastewater emissions increased by 6.4%.

Local Government Functionalities

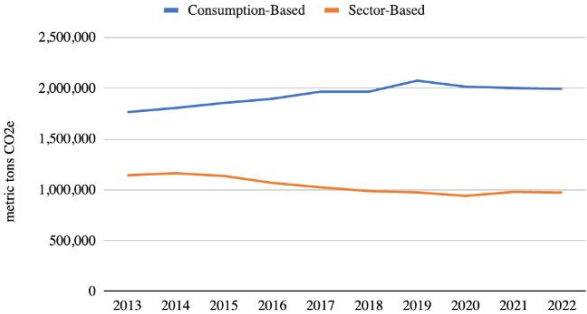
Consumption-Based Greenhouse Gas Inventory

Consumption-Based GHG Inventory

source: EcoDataLab

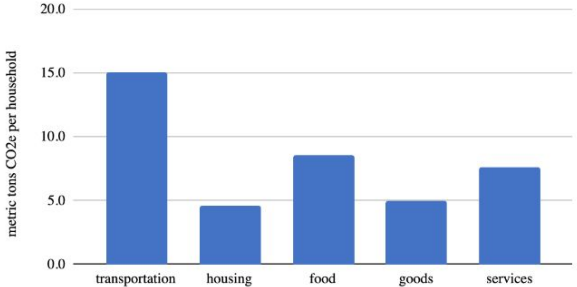


Consumption-Based vs Sector-Based GHG Inventory



Average Household Carbon Footprint

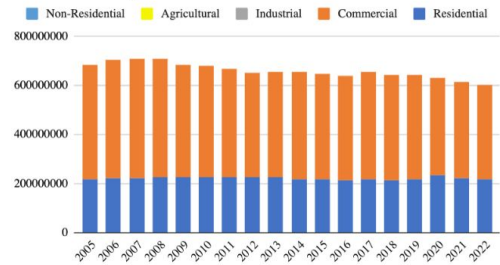
source: EcoDataLab



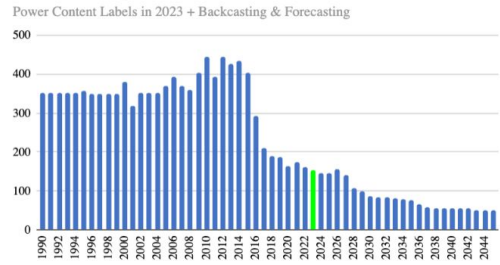
The consumption-based GHG inventory for this city was 2.1 times higher than the sector-based inventory in 2022

B2	A	B	C	D	E	F	G	H	I
1	Location	Hayward	Industrial Energy	Yes	gCO2/kWh source	Power Content Labels			
2	VMT Model	<div style="border: 1px solid gray; padding: 5px;"> Replica Origin-Destination + AADT Replica Origin-Destination + AADT Replica Origin-Destination Replica Residential EMFAC + Fleet Database </div>	Agricultural Energy	No					
14			<p>From 1990 to 2023, with notable fluctuations around 2020. In contrast, California's statewide population growth was more consistent, over the same period. Hayward's growth rate occasionally surpassed the state's average, reflecting localized demographic dynamics.</p>						
15	<h2 style="background-color: #cccccc; padding: 5px;">On Road Transportation - Vehicle Miles Traveled</h2>								
16	<h3>VMT Under Selected Transportation Models</h3>			<h3>Passenger VMT Within, Outbound and Inbound</h3> <p>source: Replica</p>			<h3>Light-Duty VMT Per Capita</h3>		
17	<p style="text-align: center;">Light-duty vehicle miles traveled (VMT) increased by 21.2% between 2013 and 2022</p>								
18	<h2 style="background-color: #cccccc; padding: 5px;">On Road Transportation - Motor Vehicle Fleet</h2>								
19	<h3>Vehicles by Class</h3> <p>CARB Fleet Database</p>			<h3>Vehicle Fuels</h3> <p>Department of Motor Vehicles, August 2024</p>			<h3>gCO2 per mile</h3>		

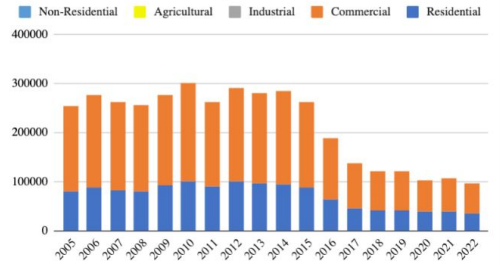
kWh Electricity



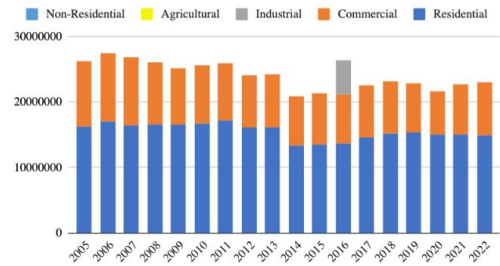
Grams CO2e per kWh



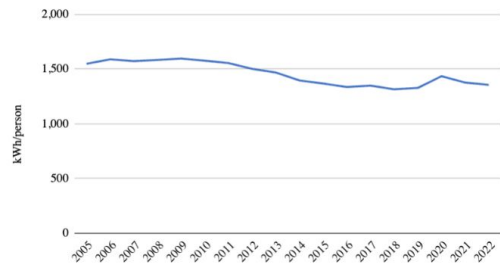
Tons CO2e from Electricity



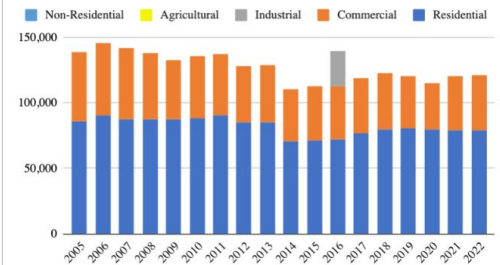
Therms Natural Gas



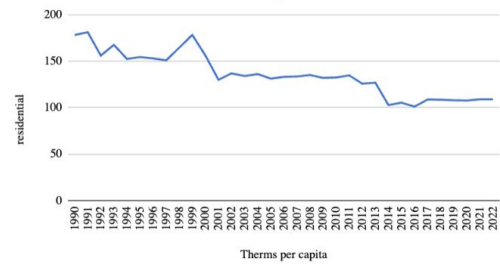
Residential kWh Per Person



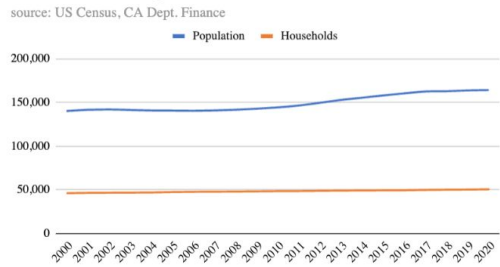
Tons CO2e from Natural Gas



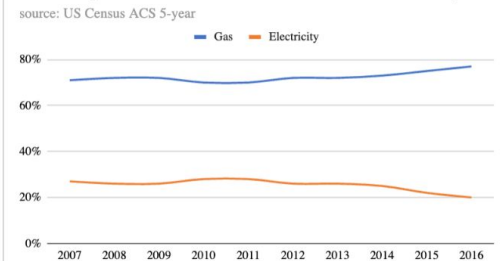
Residential Therms Natural Gas per Person



Households vs Population



Percentage of Homes that Heat with Gas vs. Electricity



From 1990 to 2022, total electricity consumption increased from 657,332,721 kWh to 922,839,995 kWh, a rise of 265,507,274 kWh or 40.4%. Residential, commercial, and industrial sectors saw increases of 46.1%, 32.1%, and 42.1%, respectively. Natural gas consumption rose from 35,291,064 therms to 35,964,753 therms, a modest increase of 1.9%. Carbon intensity decreased significantly from 352.67 grams CO2 per kWh in 1990 to 48.72 grams CO2 per kWh in 2022, reflecting a shift towards cleaner energy sources. This reduction in carbon intensity represents an 86.2% decrease, highlighting significant progress in reducing emissions per unit of electricity generated.

Local Government Functionalities

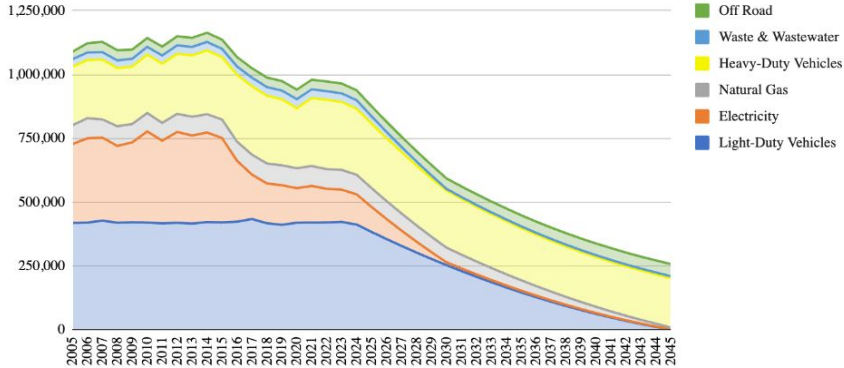
POLICY DASHBOARD

- ZEV penetration by 2045 100% ▼
- By 2045 reduce VMT by 55% ▼
- Improve building efficiency by 70% ▼
- Heat pump penetration by 2045 70% ▼
- Remaining fossil kWh renewable in 2030 80% ▼
- Percent diversion of organics by 2030 80% ▼

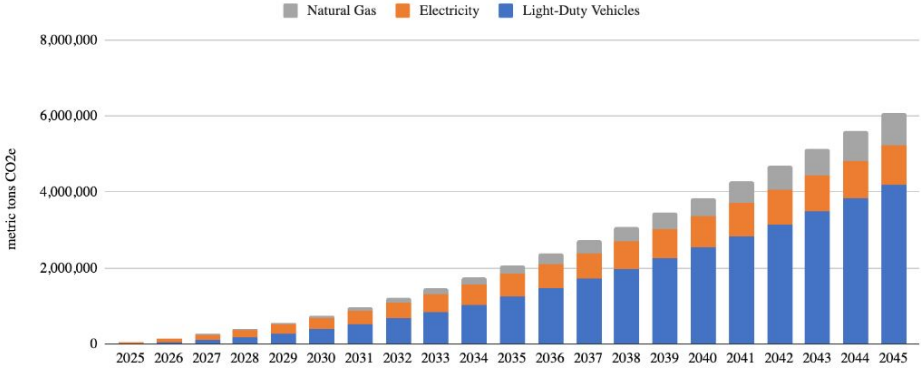
Total GHG Reduction

73%

GHG Inventory and Projections Under Policy Scenario



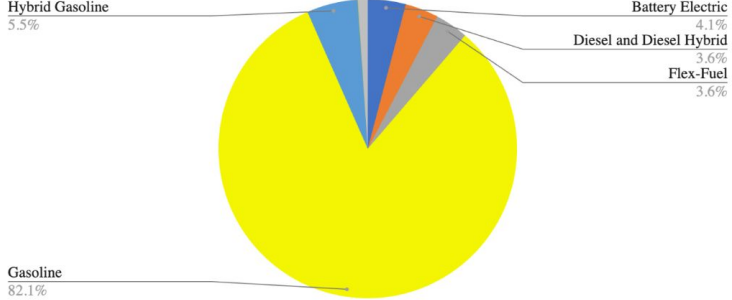
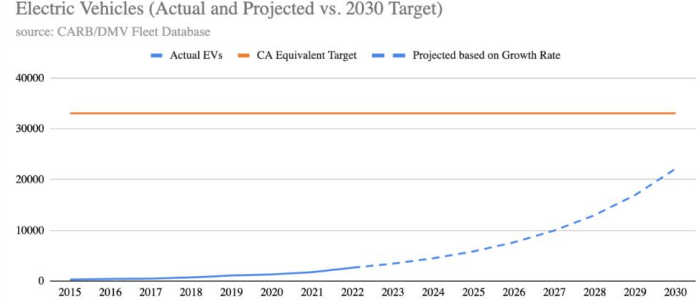
Cumulative GHG Savings from Selected Measures



Local Government Functionalities

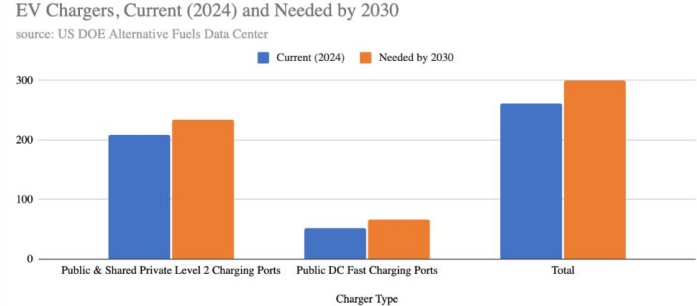
Policy Indicators

Electric Vehicles



Hayward is currently not on track to meet the state equivalent of 8 million zero emission vehicles by 2030

Charging Infrastructure



According to the US DOE Alternative Fuels Data Center, as of October 2024, Hayward has 52 of the 66 DC fast chargers needed by 2030 to meet state goals.

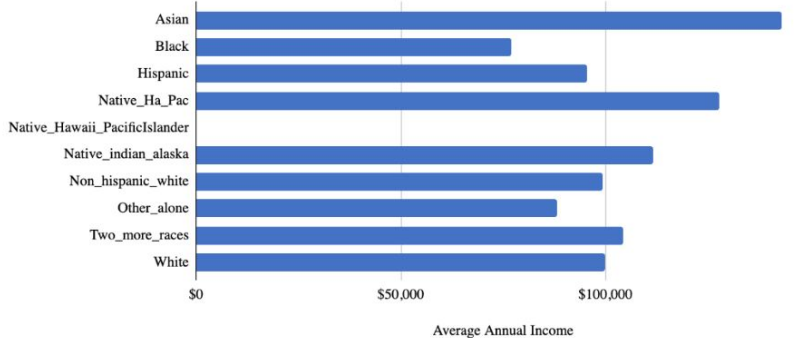
Local Government Functionalities

INDICATORS DASHBOARD

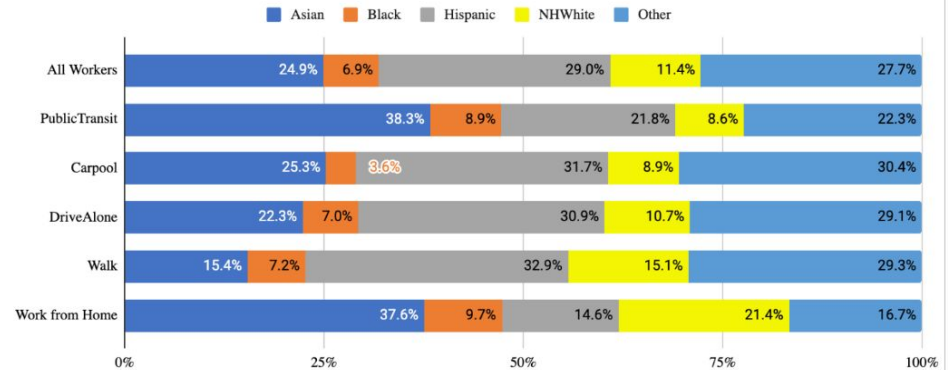
Equity

Average Income by Race

source: US Census, 2022 ACS 5-Year



Commute Mode by Race vs. All Workers

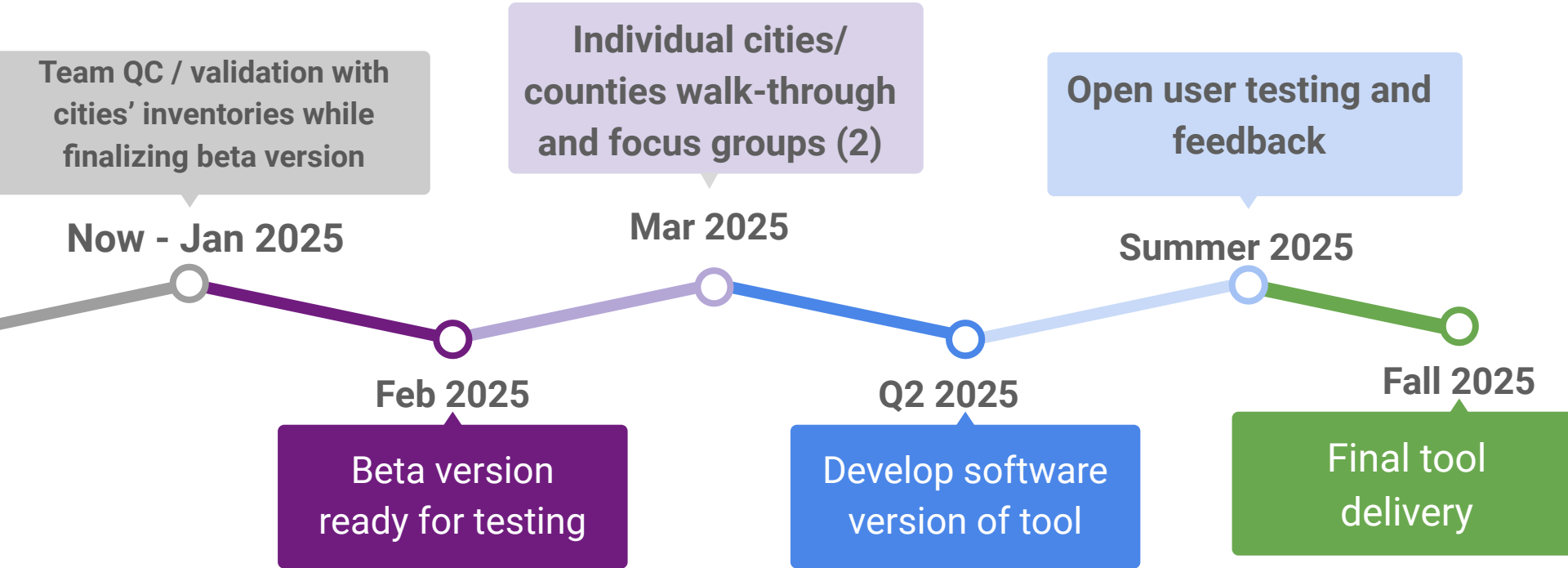


Household income is key to understanding access and ability to take advantage of home retrofit programs and other household sustainability and climate resilience initiatives. Communities of color have higher rates of lower household incomes often resulting in increased risk of displacement as a result of green gentrification and higher rates of energy and housing/rent burden.

The race with the highest income earns 1.9 times the lowest.

Racial disparities in commute modes reflect economic opportunities and access to jobs and housing. Higher income households are also more likely to work from home.

Beta Testing Timeline



We want to hear from you!

Contact form:

- Participate in beta testing
- Sign up for 1:1 interview about the CAP practice
- Share your inventory data for comparison and calibration

<https://forms.gle/YS2wknmsda3CErnd9>

Join the State of Change Newsletter

UC Berkeley Journalism

STATE OF CHANGE

A NEWSLETTER FROM THE CLIMATE EQUITY REPORTING PROJECT

Potential Follow-On Activities

- Connect with CAP tools from other universities
 - CalPoly, UCI, UCLA, UCD
- Future use of data: openly available, student projects, etc.
- Continuation of rich conversations about the practice, e.g.
 - Intersection with housing policies
 - Role of CEQA
 - Further streamlining data analysis with AI
- Post-2025 funding for maintenance and improvement

Thank you!

cmjones@berkeley.edu

miya@stopwaste.org

CPUC R. 22-11-013

Data Working Group

R.22-11-013 - Rulemaking to Consider Distributed Energy Resource Program Cost-Effectiveness Issues, Data Access and Use, and Equipment Performance Standards

Overview of the Data Access & Cost Effectiveness Proceeding (R.22-11-013) – Phase 1

Two Tracks:

- **Track 1: Cost-effectiveness Rules**

- Examines how to make cost-effectiveness assessments more accurate and consistent across DER programs. Covers updates to the Avoided Cost Calculator.

- **Track 2: Data Access for DERs**

- Examines the rules and requirements to **improve data access** to facilitate adoption, evaluation, and utilization of DERs by customers and other entities, and to improve DER integration with the grid.
- *The Data Working Group (DWG) was created to further these efforts.*

The Data Working Group will address

- Rules and requirements on data access to support the selection, adoption, evaluation, and utilization of DERs by customers and other entities,
- Opportunities to increase the accuracy of load forecasting, including as related to DER grid integration,
- Data-related issues specific to environmental and social justice (ESJ) communities and opportunities to support DER adoption in these communities,
- Alignment with other DER-related Commission proceedings, and
- Considerations regarding customer privacy; data sharing and access; standardization or centralization of databases, data models, data collection and data reporting tools; data management best practices; and data reporting redundancies.

Data Working Group Structure

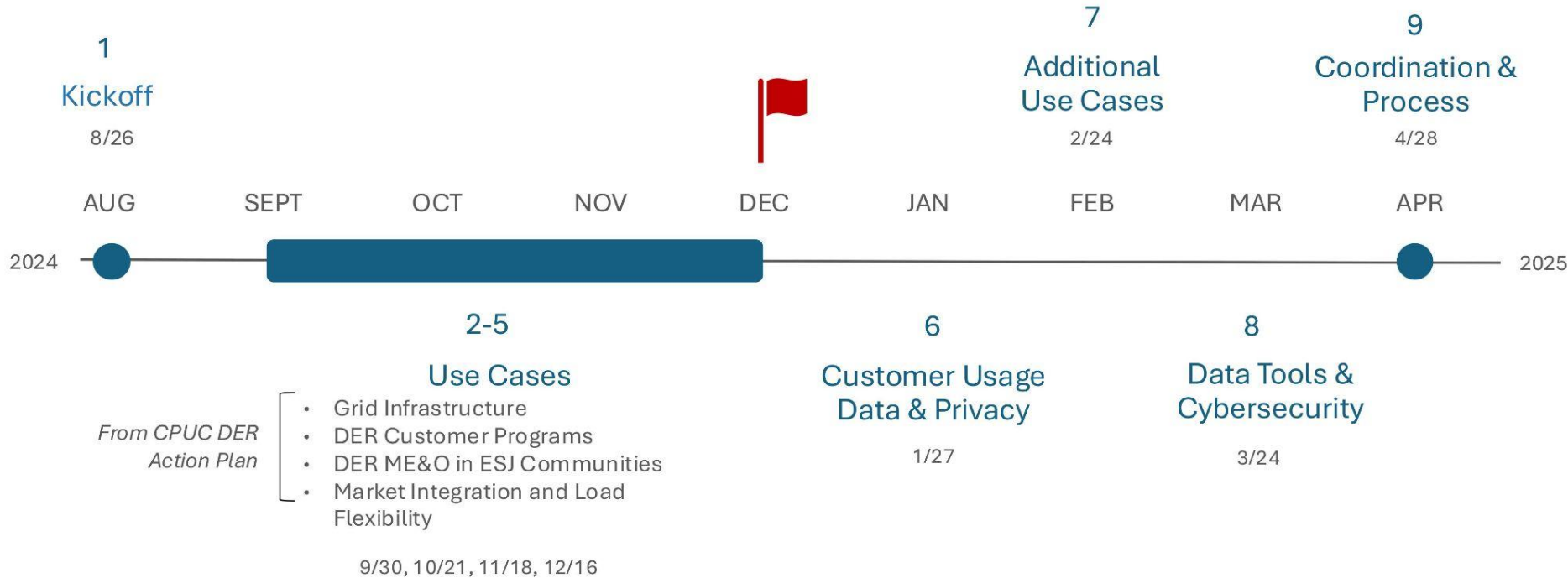
- The California Center for Sustainable Communities (CCSC) at UCLA, with support from the Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC) at UCLA, are facilitating monthly meetings between August 2024 and April 2025
- Produce a report to the CPUC summarizing the DWG findings and recommendations in late Spring/Summer 2025

Use Case Collection and Discussion

A use case is a short description of the scenario for which energy data sharing is relevant.

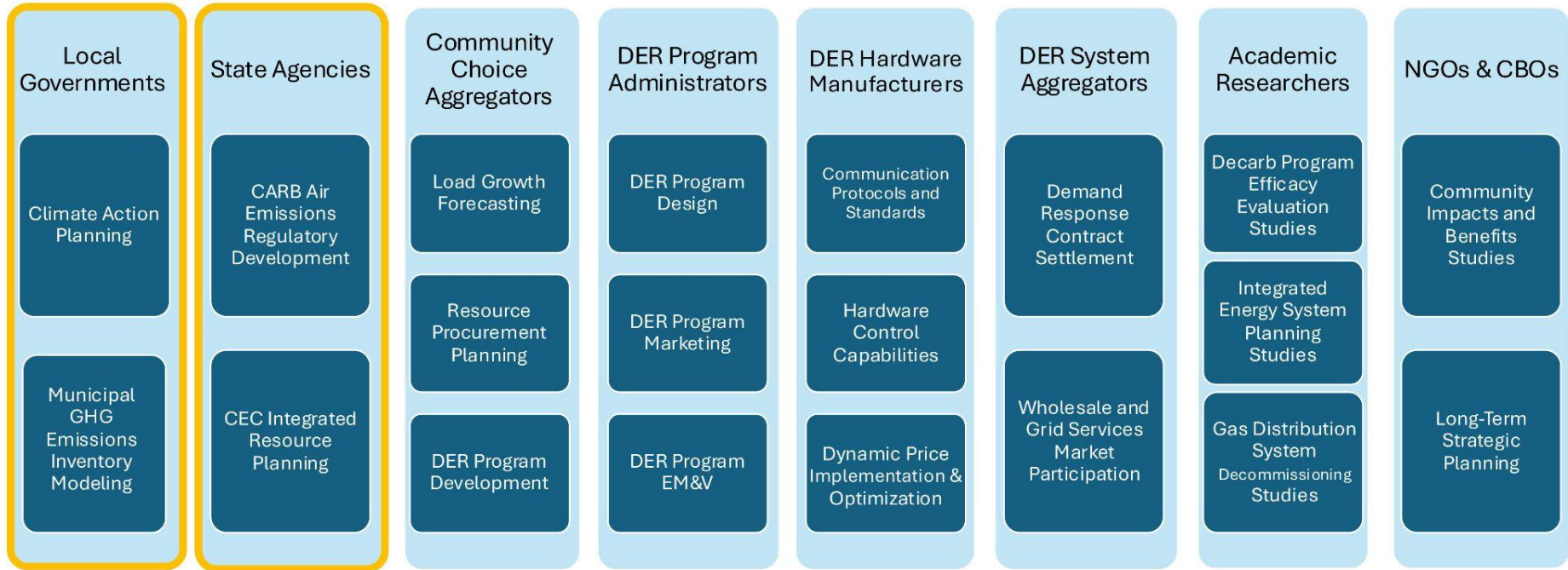
- Asynchronously
 - Use case submission form on LARC website
 - Emails to DWG facilitation team
- Synchronously
 - In-meeting use case identification exercise
 - Stakeholder use case presentations

Data Working Group Timeline



Example Stakeholders & Use Cases

The full list of use cases is being developed with the DWG.



Utilities, Distribution System Operators, CAISO

State/Local Energy & Climate Coordination Relevant Questions from the Order Instituting Rulemaking (OIR)

Q3: What barriers (legal, regulatory, technological capacity, etc.) exist for load-serving entities and DER providers that prevent the greater use of energy consumption data to increase customer awareness and adoption of DERs?

Q4: How can the Commission, utilities, DER providers, and customers better use Smart Meter data? How can Smart Meter data help individual ratepayers, developers, and contractors determine which DER programs are likely to provide the most benefits?

Q6: To what extent should data collected by program administrators, or available from smart devices (including Smart Meters) be available to utilities, non-utility DER providers, and other energy providers or program administrators, for marketing, education, or outreach purposes?

Q8: How can existing data reporting and data collection processes be improved to make them more consistent across resources and more accessible by users?

Local Government Use Cases Collected

Nano/Microgrid Development

Local governments seek on-demand information about customers connected to a specified line circuit or downstream of a specific substation for nano/microgrid development. Data needed include: accurate load data for microgrid sizing; customer specific information on historical, anticipated, and real time outages.

Public Safety Power Shutoff Preparation (PSPS)

Local governments seek information about customer accounts on line segments that were affected by a PSPS. Data is requested biannually at the historical level for PSPS preparation and one day ahead for backup batteries to anticipate their behavior. **Circuit-level historical data** is insufficient.

Greenhouse Gas (GHG) Inventories and Climate Action Planning

Local governments seek customer usage data for GHG inventories/Climate Action Planning, but face barriers in data access due to **limiting aggregation standards** (15/15, 15/20, 100/10). Some request access to customer usage data by sector; some at a site-level.

What's Next

12/16/24 Market Integration + Load Flexibility and Rates

1/27/25 Customer Usage Data and Customer Privacy

2/24/25 Additional Use Cases and Returning to Previous Discussions

3/24/25 Data Tools and Cybersecurity

4/28/25 Coordination and Process

REGISTER FOR DWG MEETINGS

Register on the DWG website: <https://www.laregionalcollaborative.com/data-working-group/>
Additional information on the DWG, including recordings, slides and notes from our previous meetings are available on the DWG website.

NEXT DWG MEETING #5: Market Integration and Load Flexibility

December 16, 2024 at 3 - 5:30pm PDT on Zoom.

DESCRIBE A USE CASE

We encourage you to use the input feature at the bottom of the [DWG website](#) to provide use cases that should be considered by the DWG.

Join the R. 22-11-013 Service List

If you are interested in participating or receiving updates, you can add yourself to the proceeding service list by contacting the CPUC's Process Office at processoffice@cpuc.ca.gov.

CONTACT US

To contact the UCLA facilitation team, please email cpuc-dwg@ioes.ucla.edu.

QUESTIONS?

Please use the "Ask a Question" feature on the DWG website.



Discussion: Progress on Barriers to Local Climate Action

Breakout 3

Load capacity constraints (Angie Hacker to facilitate)

- Electrification proceeding and load capacity study timelines (Chris Moore, CPUC)
- Fast track interconnection progress (Rohimah Moly, Go-Biz)
- Local updates (Steven Moss, LGSEC) and CCEC's SB 100 comments
- Audience discussion - what needs to happen next?

Powering Up Californians

New Energization Targets

To Improve Wait Times for New and Updated Electrical Service



December 12, 2024

Energization Timelines Decision

CPUC approved Decision (D.) 24-09-020 on Phase 1 of the Energization Rulemaking (R.24-01-018)

- Implements portions of the Powering Up Californians Act – Senate Bill 410 (Becker) and Assembly Bill 50 (Wood)
- Designed to expedite the process for connecting homes, businesses, and other loads to the grid
- Provides transparency to the process



Energization Timelines Decision

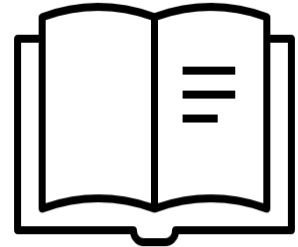
(cont'd)

- The CPUC based the timelines on the utilities' historic energization data and party comments
- The timelines are triggered by a customer energization request
- Timelines are for all types of energization requests
- Timelines apply only to large CPUC regulated utilities: PG&E, SCE, and SDG&E



Definitions

- **Energization:** the process to connect new load to the distribution system
- **Interconnection:** the process to connect new generation facilities to the distribution system
- **Average energization timeline:** average number of days it should take a utility to complete the steps in the energization process under their control for any given energization request
- **Maximum energization timeline:** maximum number of days it should take a utility to complete the steps in the process under their control for any given energization request.



More Definitions

- **Rule 15:** standard energization tariff that covers distribution line extensions (from the primary distribution line to the secondary transformer)
- **Rule 16:** standard energization tariffs that cover service line extensions (from the secondary transformer to the meter)
- **EV Infrastructure Rules (Rule 29/45):** optional alternative to Rule 16 for customers that require a service line extension to support the energization of an EV charging project
- **Upstream Distribution Capacity Projects:** projects that address capacity deficiencies related to customer energization requests

Adopted Timelines - Energization

Energization Type	Average Timeline (calendar days)	Maximum Timeline (calendar days)
Rule 15	182	357
Rule 16, 29/45	182	335
Rule 15 and 16/29/45	182	306
Application Decision	10	45
Main-Panel Upgrade	30	45

Adopted Timeline – Capacity Upgrades

Type of Upgrade	Maximum Timelines (calendar days)
New or Upgraded Circuit	684
Substation Upgrade	1,021
New Substation	3,242

- Constructing a New or Upgraded Circuit
- Substation Upgrades
- New Substations

Reporting

Biannual Data Reports:

- The average time between receiving an application for energization and the completion of the request
- Reasons for any energization projects that exceed the prescribed timelines
- An analysis of constraints and obstacles impacting energization
- Reports shall be filed annually by March 31 and September 30



Reporting (cont'd)

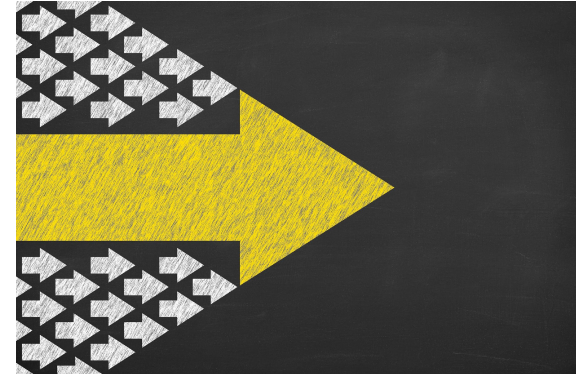
Tracking Progress and Customer Input:

- Utilities will create Customer Engagement Plans, which would improve customer understanding of the energization process
- Customers should begin engaging with their utility early to discuss their energization request
- Customers can file a Customer Delay Report with the CPUC if they experience delays or issues during the energization process
- More information on the reporting process can be found here: [Energization](#)



Expected by End of the Year

- November: utilities to submit proposed reporting template to track requirements directed by the Commission, via Advice Letter.
- November: utilities to submit proposed customer engagement plans via Advice Letter
- December: PU Code 933.5 (AB50) utilities to demonstrate they have energized at least 80% of customers with applications deemed complete by January 2023.



Upcoming Opportunities

Workshop to Discuss Utilities' Initial Data

- Spring/Summer 2025

Utility Customer Engagement Plans

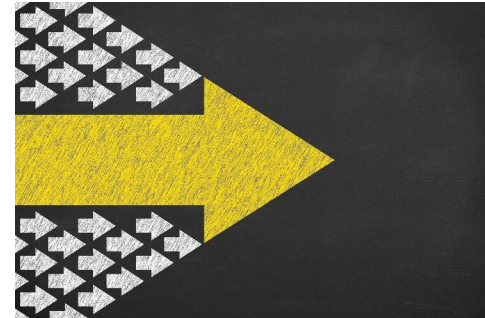
- Currently Being Reviewed for Compliance

Report Energization Delays:

<https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/energization>

Phase 2 of the Proceeding

- The initial scoping memo included potential issues for Phase 2, including:
 - Improvements to adopted timelines.
 - Additional actions requested in the bills to support the timely energization of projects.
 - Penalties for missing deadlines.
 - No timeline set for launch of Phase 2.





California Public Utilities Commission

www.cpuc.ca.gov

christopher.moore@cpuc.ca.gov

213-220-1344

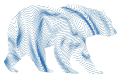


GO-BIZ Energy Project Permitting Guidebook & Toolkit

REACH - Inland Empire
12.05.2024

GO-Biz Energy Unit

- Created in 2021
- Accelerate the planning, financing, and execution of critical energy infrastructure projects
- Work with energy project developers and load-serving entities to identify barriers to construction and development of critical energy infrastructure projects
- Make recommendations to relevant state agencies on how to overcome those barriers



Tracking Energy Project Development

- **Executive Order** in 2021 directed energy agencies to coordinate on deployment of clean energy projects to reach reliability and climate goals.
- **TED Task Force** | Joint interagency effort to provide project development support for new energy projects expected to come online in the near-term



Challenges to Renewable Energy Project Deployment

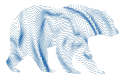
- Permitting
 - Supply Chain
 - Interconnection/Transmission



2024 | MWs Installed



	Total MWs	Total Projects
2024 Total	6,865	108
Jan - Oct Online	5,588	91



Expected New Energy Resources

New MWs Expected - Nameplate By Year and Resource Type, including imports

Data includes projects expected/under contract as of October 2024

Resource Type	Q4 2024	2025	2026	2027	2028	Total
Solar	465	631	835	320	0	2,251
Battery Storage	1,580	3,528	2,346	3,883	290	11,627
Paired/Hybrid	88	1,004	709	1,089	70	2,960
Wind	0	71	1,583	250	0	1,904
Geothermal	0	15	179	30	284	508
Biomass/Biogas	5	11	0	0	0	16
Totals	2,138	5,260	5,652	5,572	644	19,266

Source: CA Public Utilities Commission

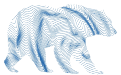
- Over 19,000 MW nameplate of future contracts are executed to meet CPUC's procurement order obligations.
- Majority of new resource MWs are expected to be battery storage and hybrid solar+storage.
- Other types of resources are eligible to meet orders and may be contracted in the future.



GO-Biz Energy Project Permitting Guidebook & Toolkit

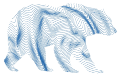


- Funding in 2022-23 Budget Act
- Establish best practices and produce documentation to increase transparency and alignment of local jurisdiction permitting processes to significantly reduce barriers for deployment of energy projects



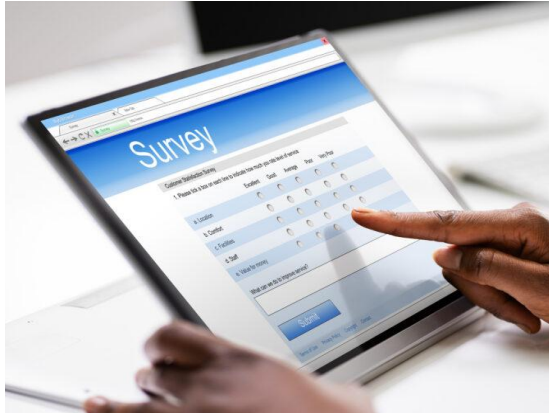
Approach to Developing Guidebook & Toolkit

- Assess local jurisdictions permitting processes for large-scale renewable projects
- Report on findings
- Develop toolkit that will include
 - ✓ smart practices
 - ✓ approaches for process improvements
 - ✓ strategies that enhances connectivity b/w responsible entities



Stakeholder Input

Survey QR Code



Survey Link: <https://tinyurl.com/go-biz>





Discussion: Progress on Barriers to Local Climate Action

Breakout 3

CCEC Comments - 8/24



Senate Bill 100 Scoping Underway

Officially titled “The 100 Percent Clean Energy Act of 2018,”
Senate Bill 100 (SB 100, De León):

- 1 Sets a 2045 goal of powering all retail electricity sold in California with renewable and zero-carbon resources.
- 2 Updates the state’s Renewables Portfolio Standard to ensure that by 2030 at least 60 percent of California’s electricity is renewable.
- 3 Requires the CEC, CPUC, and CARB to use programs under existing laws to achieve 100 percent clean electricity and issue a joint policy report on SB 100 by 2021 and every four years thereafter.

For more information: <https://www.energy.ca.gov/sb100>

August 21, 2024

California Energy Commission
Docket #: 23-SB-100
Project Title: SB 100 Joint Agency Report



RE: California Climate and Energy Collaborative (CCEC) Comments on SB 100 Demand Scenarios

Dear CEC, CPUC, and CARB Leadership and Staff,

The California Climate and Energy Collaborative (CCEC) welcomes the opportunity to provide comments in response to the demand scenarios and assumptions used in the Senate Bill (SB) 100 analysis presented on August 7th for the 2025 SB 100 Joint Agency Report. CCEC is a program of CivicWell that supports California local governments and their partners in their efforts to save energy, reduce greenhouse gas emissions, and accelerate climate action by building knowledge and networks amongst practitioners. Our network of local governments and their partners across the state are working to rapidly implement community energy efficiency, clean energy, electric vehicle and other climate actions, in alignment with State goals.

In recent years, no California energy and climate practitioner can ignore growing statewide concerns related to energy reliability and affordability, made worse by the fire and other extreme climate events we are working to avoid, and made better when we manage demand and load more effectively. Local governments are doing their best to prepare and protect their constituents in real time, but with limited individual ability to improve reliability and add load capacity through clean energy resources to cover growing electricity needs due to various hurdles, including load constraints and interconnection barriers. Current decarbonization, affordability, reliability, and equity challenges facing the State are unprecedented and critically entwined, and collaboration among State and local agencies is essential.

CCEC is increasingly developing ways to foster better two-way communication between State and local agencies to more effectively reach mutual energy and climate goals, and we welcome greater collaboration with the State on this matter. In the past year we have operated the State and Local Energy and Climate Coordination (SLECC) meetings with participation across roughly two hundred local governments and 5 State agencies. We greatly appreciate that CEC representatives engage with our network regularly, including recently to provide an update on SB 100 related processes and discuss relevant opportunities for productive local government input.

We recognize that the 2025 SB 100 Joint Agency Report is a critical analysis to inform how the State will meet its 100% clean energy laws while meeting California’s service capacity needs, and that this analysis must be based on accurate assumptions about demand as well as the role that buildings, community assets, and land use all play in meeting power system long term planning. Local governments have a unique perspective on this issue, as they regularly confront challenges and barriers when tying assets to the grid. In many venues, including our SLECC meetings and in a working group of the Local Government Sustainable Energy Coalition (another program of CivicWell), California local government energy officials and practitioners are sharing growing frustration about



Discussion: Progress on Barriers to Local Climate Action

Report Out

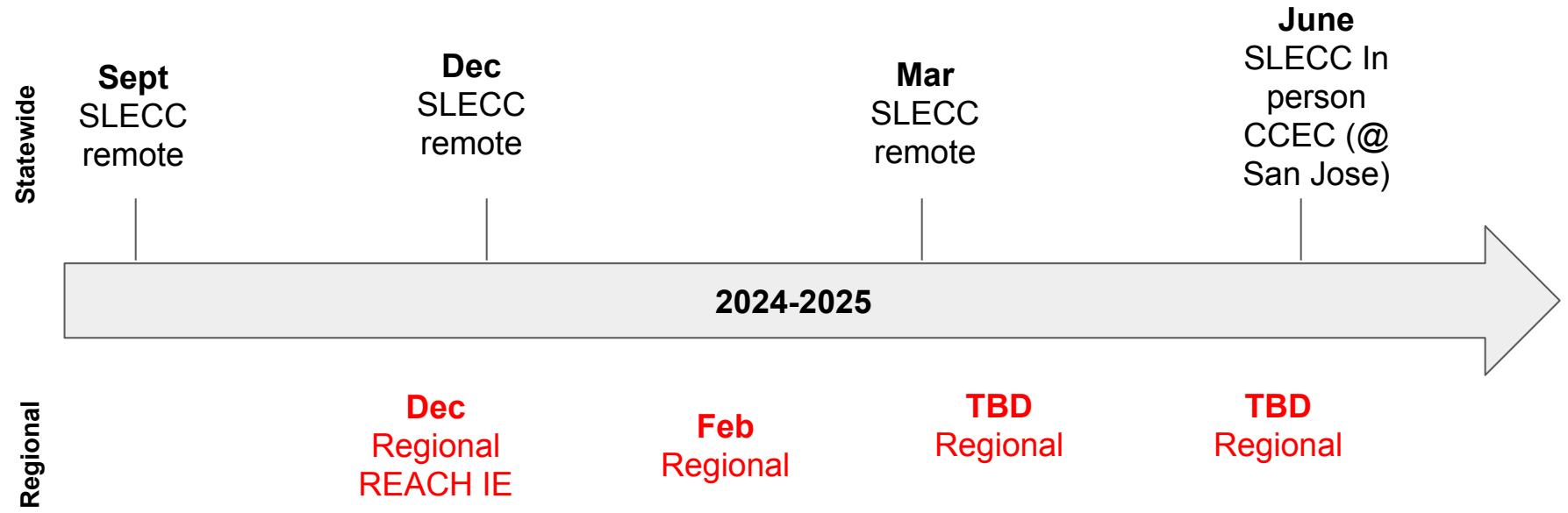
Facilitators briefly report:

- Key points
- What attendees felt needs to happen next



What's Next for SLECC

State and Local Coordination & Engagement Needs (2024-2025)



Contact
ahacker@civicwell.org

What's Next?

- Stay tuned for more details as convenings are planned
- Next meeting date: **March 13, 2024**

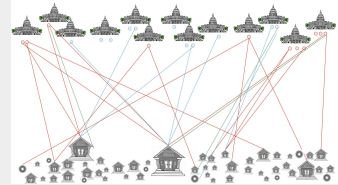
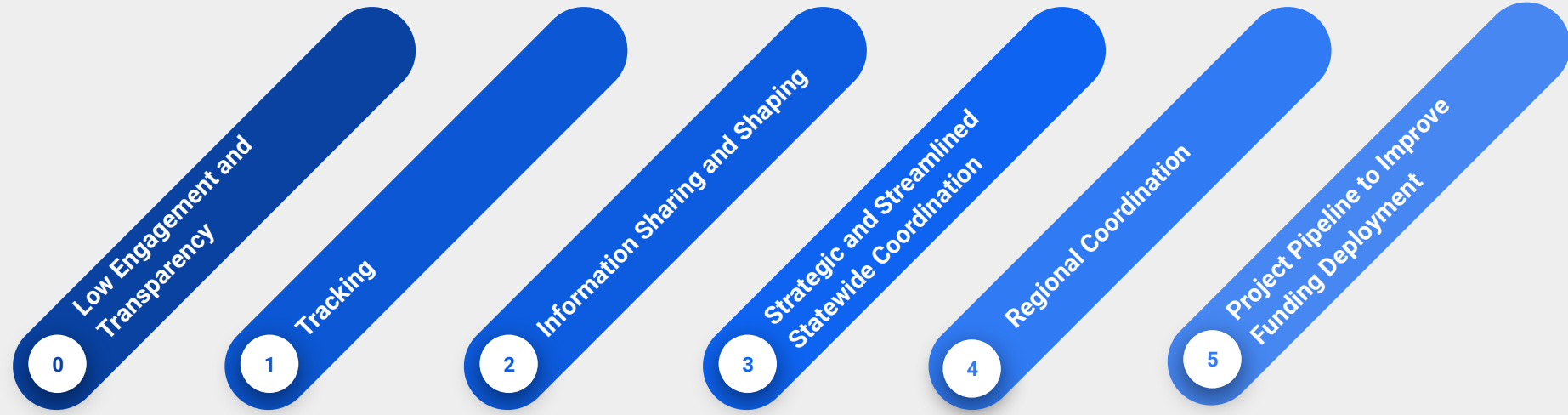
*Thank you for sharing
your insights!*





Discussion: Planning for the Next Phase of SLECC

CCEC's Phased Approach to Better State & Local Coordination



SLECC

