



Local Governments Empowering Our Communities

BayREN Regional Forum

Residential Electrification in the Real World:
Navigating Panels and Permits

December 7, 2023

Meeting Agenda

9:00 am Introduction to BayREN Forum

9:15 am Panel Optimization and Electric Service Upsizing

- Overview of Panel Optimization for Electrification
- Lessons Learned in San Mateo
- Electrical Infrastructure Challenges in Multifamily Electrification Retrofits
- Addressing Panels Through Policy

10:15 am Q&A

10:30 am 15 min. Break

10:45 am Equipment Siting and Permitting

- Projects That Make it vs Projects That Don't: Two Apartment Case Studies
- Removing a Known Barrier: Zoning Changes to Help Electrify Existing Homes
- Heat Pump Water Heater Permitting Pilot

11:35 am Q&A

11:50 am Closing Remarks



BayREN County Reps



Emily Alvarez
StopWaste
Alameda County
ealvarez@stopwaste.org



Adam Scarbrough
Contra Costa County
adam.scarbrough@dcd.
cccouny.us



Kellen Dammann
Marin County
kdammann@marin
county.org



Ryan Melendez
Napa County
ryan.melendez@countyof
napa.org



Barry Hooper
City and County of
San Francisco
barry.e.hooper@sfgov.org



Alero Moju
County of San Mateo
Office of Sustainability
amoju@smcgov.org



Breann Boyle
Santa Clara County
breann.boyle@ceo.scc
gov.org



Nandi Loggins-Glover
Solano County EDC
Solano County
nandi@solanoedc.org



Dori Estrella
Sonoma County
dori.estrella@sonoma-
county.org



Karen Kristiansson
ABAG/MTC
BayREN
kkristiansson@bayarea
metro.gov

Programs

- Single Family Home+
- Green Labeling
- Bay Area Multifamily Building Enhancements (BAMBE)
- BayREN Business
- Water Upgrades \$ave
- Codes and Standards

www.bayren.org

Codes and Standards

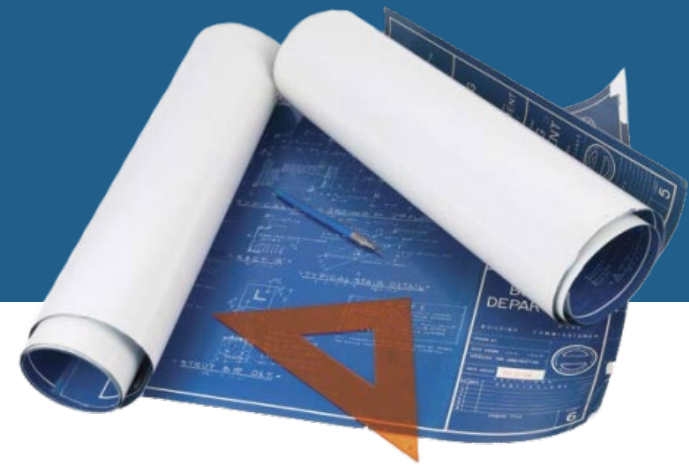
Joint effort of Bay Area local governments to support the development and implementation of tools, best practices, trainings, and policies for accelerating compliance with, and exceeding, California Title 24, Part 6.

Two Broad Areas of Effort

- **Compliance Improvement:** Investigate areas for improvement in code enforcement processes & offer solutions
- **Policy:** Share best practices & develop regional resources for going above code



Codes and Standards



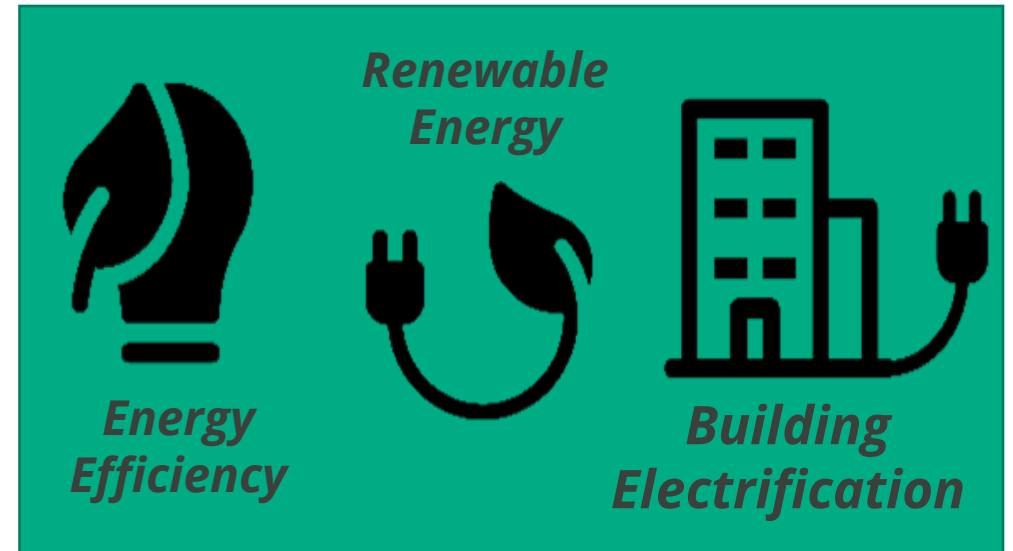
Energy Code Trainings

- **Free in-person or live online** trainings on Energy Code Compliance
 - 60-90 minutes in length; can be scheduled for staff meetings
 - ICC CEUs for building department staff
- **On-demand** Heat Pump Water Heater training now available
- Scheduled sessions can be viewed at <https://www.bayren.org/events-training>

Codes and Standards

Municipal ZNE/ZNC Technical Assistance

- **Technical Assistance:** BayREN provides free engineering technical assistance and resources to help local governments save energy and money while reducing their carbon footprints by moving towards Zero Net Energy (ZNE) or Zero Net Carbon (ZNC) with their buildings.
- **Municipal ZNE RFP and OPR Template Language:** Request for proposal (RFP) and owner project requirements (OPR) template language for local governments to encourage developers to construct new municipal buildings to ZNE.

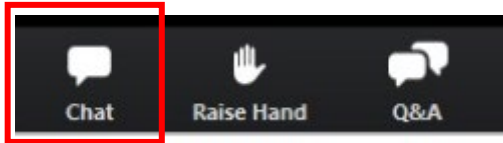


Zoom Meeting How To's

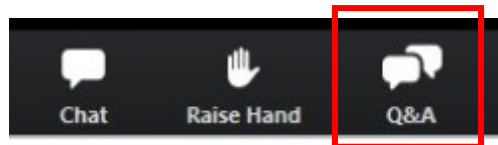
- Video camera not needed.
- Please use the chat feature to interact with panelists and other participants.
- Please use Q&A function or raise hand function if you have a question or comment.
- We will break for questions at the end of each session.

Zoom Meeting How To's

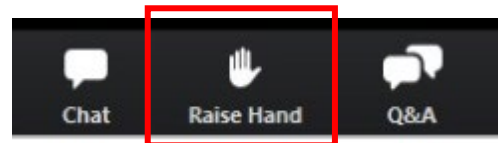
- Chat in lower left-hand corner



- Q&A button at right side of tool bar



- Raise hand button in middle of tool bar



Disclaimer

The views expressed in these presentations are those of the author(s) and do not necessarily reflect the position of the Association of Bay Area Governments, the Bay Area Regional Energy Network or the jurisdictions that BayREN represents. Any questions pertaining to the views and information in the presentations should be directed to the author(s).

Presentations & Materials

All presentations & materials will be emailed to you after the Forum and available at <https://www.bayren.org/events-training>

Exploring Electrification Challenges

- Q1: Decarbonization Implications for the Gas System and What Local Governments Are Doing
- Q2: The Grid: What is it and Should it Shape Policy for All-Electric Buildings?
- Q3: Building Resilience- Keeping the Lights on in an All-Electric Future
- **Q4: Residential Electrification in the Real World- Navigating Panels and Permits**

Panel Optimization and Electric Service Upsizing

Overview of Panel Optimization for Electrification



Abhijeet Pande

Vice President, Research and Consulting

TRC

Panel Optimization and Electric Service Upsizing

Lessons Learned in San Mateo



Tom Kabat

Energy and Electrification Consultant

Good Gridizen

Panel Optimization and Electric Service Upsizing

Electrical Infrastructure Challenges in Multifamily Electrification Retrofits



Jack Aitchison

Energy Engineering Manager
Association for Energy Affordability

Panel Optimization and Electric Service Upsizing

Addressing Panels Through Policy



Laura Feinstein

Sustainability and Resilience Policy Director
SPUR

Q&A

Break
15 min

Equipment Siting and Permitting

Projects That Make it vs Projects That Don't: Two Apartment Case Studies



Eric Morrill

Founder

All Electric California

Equipment Siting and Permitting

Removing a Known Barrier: Zoning Changes to Help Electrify Existing Homes



Ori Paz

Sustainability Division Management Analyst
City of Menlo Park

Equipment Siting and Permitting

Heat Pump Water Heater Permitting Pilot



Nancy Barba

Director
Frontier Energy



Karen Kristiansson

Program Manager, BayREN Codes & Standards
ABAG/MTC

Q&A

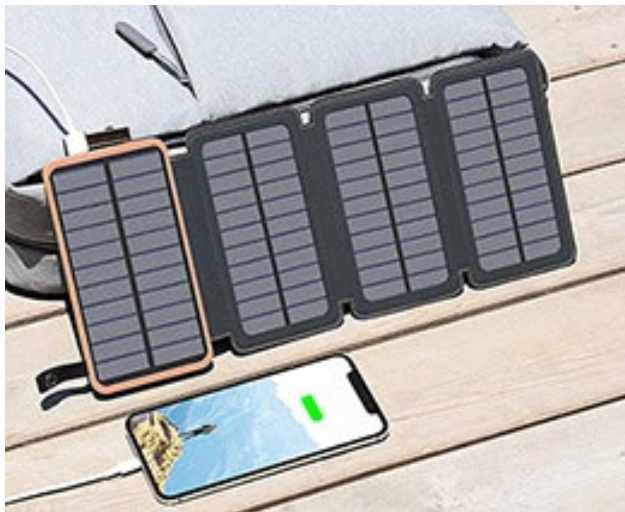
Resources

- Slides will be posted at www.bayren.org/events/residential-electrification-real-world-navigating-panels-and-permits-2023-12-07

Enjoy the Event (or Not)?

Please Complete Our Feedback Survey

- Please check your email and follow the link to our survey:
<https://forms.gle/fkhHxqw7ACP6AbTJA>
- Respondents will be entered into a giveaway for a solar phone charger!



Thank you!

