

# Preparing for the Growth of Energy Storage – What Cities Need to Know

WIFI: ZNEC Campus Guest Password: hoprighton

November 14, 2019



### Programs

- Single Family Home+
- Bay Area Multifamily Building Enhancement (BAMBE)
- Commercial Pay for Performance
- Water Bill Savings
- 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





### **Energy Code Trainings**

- Free, in-person, on demand, short & long versions, ICC CEUs
- Topics include:
  - 2019 Energy Code Changes Res & Nonres
  - Heat Pump Water Heaters
  - Residential ZNE for New Construction
  - HERS Registry
  - Residential Forms & Permit Submittals for Additions
  - And more, including non-residential topics

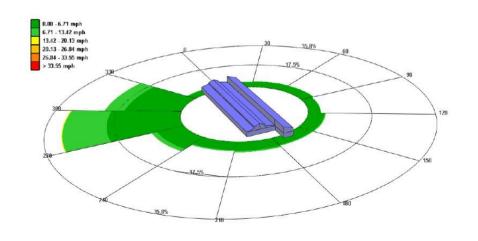
https://www.bayrencodes.org/services/trainings/





#### **Municipal ZNE Assistance**

Technical Assistance: No-cost
 engineering analysis to help local
 governments explore what it would take
 for municipal buildings to become ZNE, or
 to demonstrate ZNE policy feasibility for
 municipal building portfolios.



 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.



#### ePermit Tool

A free, user-friendly online tool that provides information and building permit forms for three of the most common types of home projects:

- Replacing a hot water heater
- Replacing all or part of a roof
- Replacing or adding new windows

#### Available at:

https://www.bayrenepermittool.com/generic#!/





# Bay Area Air Quality Management District

#### Regional air pollution control agency

Regulate stationary sources of pollution

• 24-member Board of Directors, locally

elected officials

#### Large, complex region

- 9 counties / 101 cities
- 7 million people
- 5 million vehicles

#### Anticipated growth by 2040

- 9 million people
- 20% increase in driving



# **Spare the Air - Cool the Climate**



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A *multi-pollutant* regional clean air plan featuring a comprehensive strategy of 85 measures across 9 sectors

#### Goals:

- GHG emissions reductions of **80% by 2050** (below 1990 levels)
- Eliminate disparities in health risk from air pollution



# Diesel Free by '33





By signing the Statement of Purpose, mayors, city and county governments, industry and business leaders, will join the Bay Area Air Quality Management District and the state of California to showcase our collective leadership to...

identify and adopt innovative solutions to eliminate diesel emissions and black carbon from our communities."













**RULES** 

**INCENTIVES** 

LOCAL GOVERNMENT SUPPORT

COORDINATION/ COLLABORATION



# **Presentations & Materials**

All presentations & materials will be emailed to you and available on the

https://www.bayrencodes.org/events



## 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).



# Introductio n

Setting the context



# Meeting Agenda

8:30am - 9:00am	Continental Breakfast & Networking
9:00am – 9:20am	Welcome & Introductions  Jennifer West, BayREN Representative, StopWaste  Axum Teferra, Bay Area Air Quality Management District
9:20am – 10:10am	Energy Storage Bootcamp: From the Basics to the Complex Jin Noh, California Energy Storage Alliance
10:10 am – 10:30am	2019 Energy Code Standards – Battery Storage Systems Peter Strait, California Energy Commission
10:30am – 10:40am	Request for Input on Local Government Electrification Toolkit Amy Rider, Building Decarbonization Coalition
10:40am – 10:55am	Break
10:55am – 11:35am	Energy Experiences and Installation in Fremont Rachel DiFranco & Jay Swardenski, City of Fremont
11:35am – 11:55am	Solar and Storage for Resilience in Response to an Unreliable Grid JP Ross, East Bay Community Energy
11:55am – 12:00pm	Closing Comments Jennifer West, BayREN Representative, StopWaste



## Presenters

Jin Noh California Energy Storage Alliance



Peter Strait
California Energy Commission





Rachel DiFranco
City of Fremont



Jay Swardenski City of Fremont



JP Ross East Bay Community Energy



# Introductio n

- Energy Efficiency first
- Heat Pump Water Heaters

•Who is in the room?



# Building Decarbonization Coalition Local Government Electrification Toolkit

# Request for Feedback on Design and Content

- Participant feedback form: https://www.surveymonkey.com/r/6VL322W
- Review the sample content posters here:
   <a href="https://drive.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y">https://drive.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y</a>
   <a href="https://www.ws.upen.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y">ws.upen.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y</a>
   <a href="https://www.ws.upen.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y">ws.upen.google.com/open?id=1\_MnkMejmaAoTJTzXtK0Y</a>



# Energy Storage Systems (ESS) Resources

A list of local government resources on policy and code compliance relevant to the deployment of energy storage systems (EES).

Available at:

bayrencodes.org/resources/ess/



