



Local Governments Empowering Our Communities

# Resource Management and Climate Protection Committee

October 21, 2020



# Bay Area Regional Energy Network (BayREN)

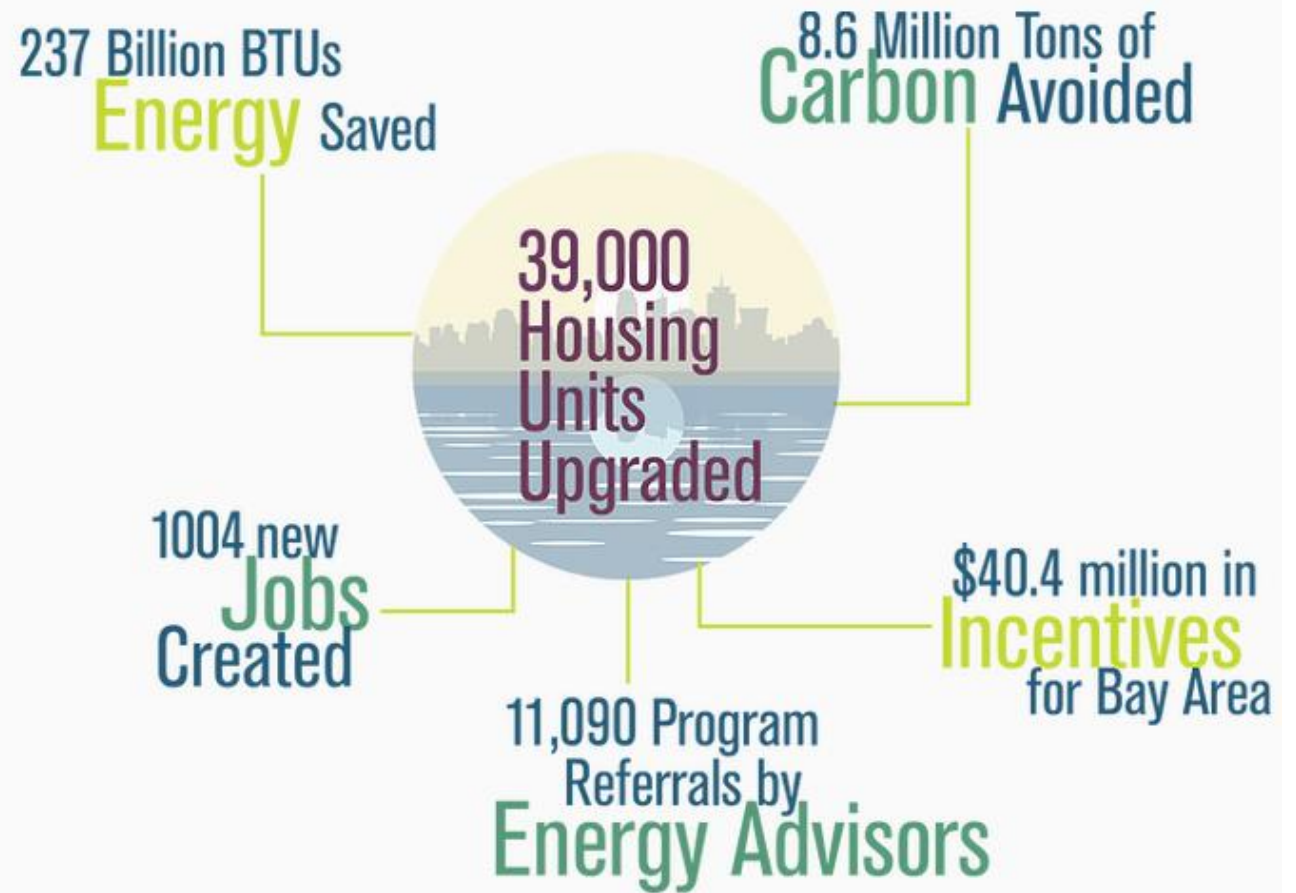
- Collaboration of the 9 Bay Area Counties
- Funded by ratepayer dollars, overseen by the California Public Utilities Commission
- Programs: Single Family, Green Labeling, Multifamily, Codes & Standards, Commercial, and Water Upgrades \$ave

# BAYREN

Three areas of expertise:

1. Promoting Healthy and Energy Efficient Buildings
2. Building Government Capacity
3. Reducing Carbon Emissions

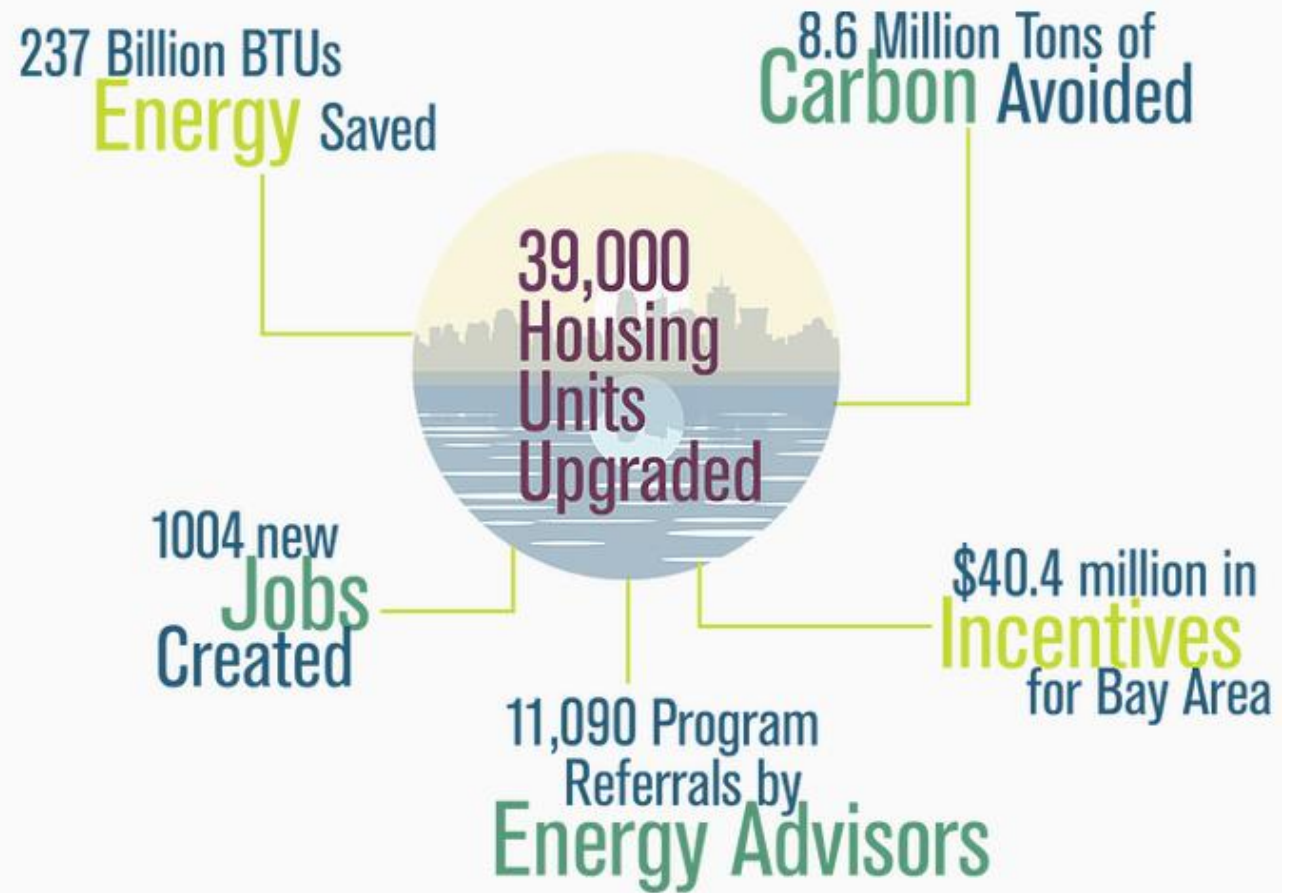
## Results!



# BAYREN

- Local government-run
- Programs designed to make it easy for homes, multifamily buildings, and businesses to save money and energy by upgrading equipment, like lighting, HVAC, refrigeration, etc.

## Results!

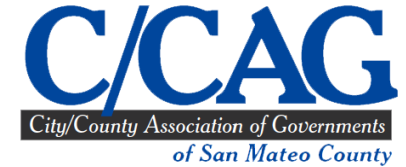


# Regional and local collaboration

Potential grant opportunities:



Local jurisdictions



Contractors



Non-profit organizations

...and more!



# BayREN collaborates across the region to leverage resources and identify opportunities



- Supporting Partner for the Switch is On statewide electrification campaign led by the Building Decarbonization Coalition
- Informed the development of the new Bay Area Energy Atlas tool to support local climate action work across all Bay Area jurisdictions
- Partnered with BAAQMD and CCAs to offer incentives for Heat Pump Water Heaters
- Regular collaboration with ABAG/MTC on key Bay Area planning processes like Plan Bay Area

# Examples of Roles filled by County Representatives

- **The Door Opener**
- **The Opportunist**
- **The Brand Steward**
- **The Connector**
- **The Engager**



# Single Family Program Services



Online Home Evaluation & Free Energy Efficiency Kit

Energy Advising & Rebates

**BayREN Home+**

Green House Calls

Qualified Participating Contractors

Target audience: homeowners and renters

**BAYREN**



# Home Electrification Rebates Available

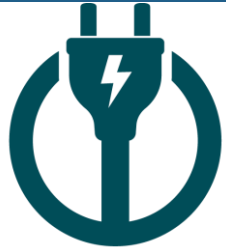
- Heat Pump Space Heating **\$1000**
- Heat Pump Water Heater **\$1000\***
- Induction Electric Range or Cooktop **\$300**
- Heat Pump Clothes Dryer **\$300**

*[BayRENresidential.org](https://www.BayRENresidential.org)*

\*Additional stackable PCE incentive by the end of 2020



# Increase of Electrification Efforts



THE SWITCH IS ON



Local Governments Empowering Our Communities

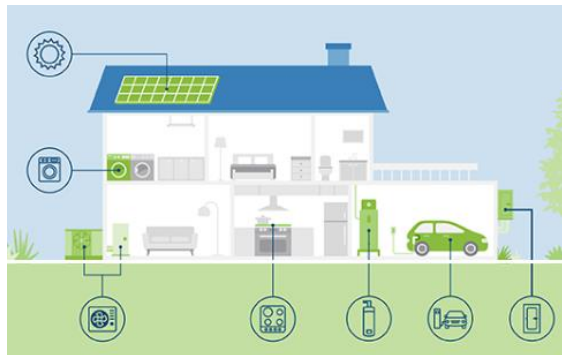
YellowTin



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT



BUILDING  
DECARBONIZATION  
COALITION



City of Palo Alto  
Home Electrification  
Readiness Assessment



ecoblock



A Zero Emissions All-Electric Single-Family Construction Guide



REDWOOD ENERGY

April 2020

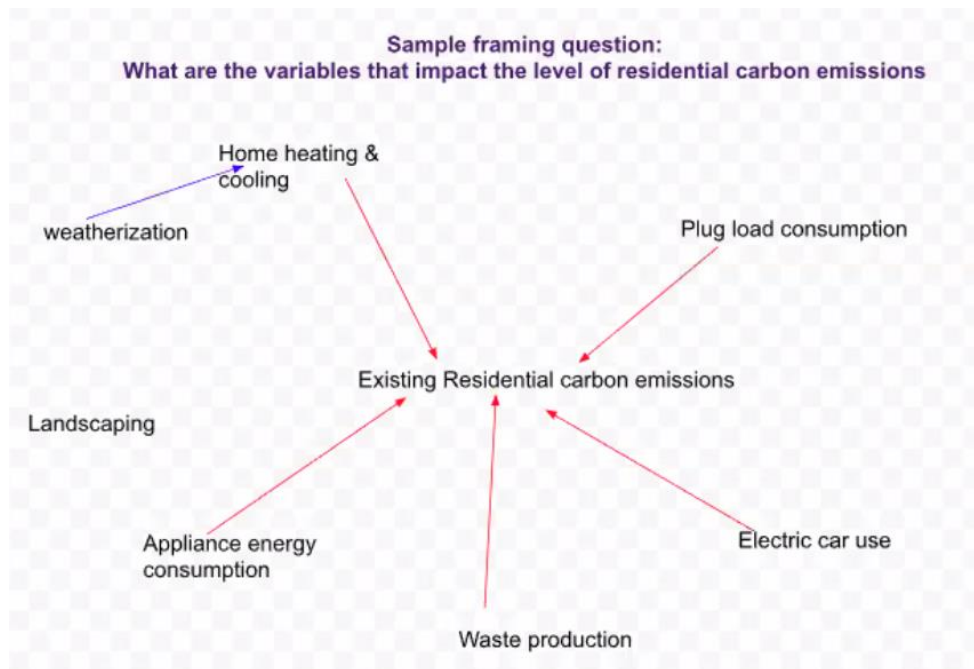
# Funding to “Map” the System

## 2 Stakeholder workshops

- October 28
- Early December

## 2 Focus groups

- Contractors – Nov. 17
- Homeowners – Nov. 18





# Funding for 10 Case Studies

- At least 5 home types/profiles
  - Include real-world costs to electrify
  - Highlight co-benefits/stories
  - Systems mapping effort will inform the scope
- \*Criteria for case studies are in development



# Metrics for 2020 – Single Family Program

- **Over 300** home projects submitted
- **260** Green House Calls
- **7** workshops for San Mateo County residents & contractors
- **6** mailers; **5,500** reached



# Green Labeling Program



Home Energy Score

Rebates

Green Labeling Program

Realtor trainings

Energy upgrade recommendations

Target audience: homeowners, realtors, and assessors

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# Metrics for 2020 – Green Labeling Program

- **46** rebates issued
- **One two-day** National Association of Realtors Green Designation training complete
- **More** outreach end of 2020





# Multifamily Program Services



No-Cost Consulting

Energy & Water Savings

**Multifamily Building Enhancements Program**

\$750 rebate/unit (energy efficiency)

Electrification Rebates

Target audience: multifamily property owners

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# Electrification Rebates Available

BAMBE Rebate	Rebate
Reduce >0.25 tonnes CO2	\$750 per apt in building
Electrification Adders	Rebate
In-unit Measures	
In-unit Heat Pump Water Heater	\$1,000
In-unit Heat Pump HVAC	\$1,000
In-unit Laundry Dryer	\$250
In-unit Electric Cooking	\$350

Central System Measures	
Central Heat Pump Water Heater (2-18 apts served)	\$800 per apt served
Central Heat Pump Water Heater (19 or more apts served)	\$15,000
Central Heat Pump HVAC	\$800 per apt served
Common Area Measures - these require an additional measure from the BAMBE "core" list	
Common Area Heat Pump HVAC	\$1000
Laundry/Common Area HP Water Heater	\$1,000
Pool Heat Pump Water Heater	\$1,500

# Metrics for 2020 – Multifamily Program

- **199** units complete, **670** in construction
- **Workshop and mailer** complete; planning additional outreach

*[BayREN.org/multifamily](https://BayREN.org/multifamily)*



# Codes & Standards Services



Trainings

Forums

**Codes & Standards Program**

Reach Code Support

Code Compliance Tools

Target audience: building department staff

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# Online Trainings for Building Departments

## Energy Code Trainings

- **Free live online** trainings on Energy Code Compliance
  - 60-90 minutes in length
  - can be scheduled for staff meetings
  - ICC CEUs for building department staff
  - Topics include: Heat Pump Water Heaters, 2019 Energy Code Changes, Reach Codes, and more
- **On-demand** Heat Pump Water Heater training now available
- <https://www.bayrencodes.org/services/trainings/>





# Municipal Assistance for Zero Net Energy/Zero Net Carbon Buildings

- Building specific assistance or portfolio review
- Retrofits or new construction
- Coordination with SMC Energy Watch, PCE



*Energy  
Efficiency*



*Renewable  
Energy*



*Building  
Electrification*

# Quarterly Forums



## No Missed Opportunities: Decarbonization of Public Buildings

Wednesday, September 16, 2020

9:00 am - 12:00 pm

via Zoom

[bayrencodes.org/events/](https://bayrencodes.org/events/)





# Open Reach Code & Policy Working Group

## Calls every two months

- Open to all local government staff
- To learn what others are doing
- To ask for help or advice
- To receive updates on statewide initiatives
- To explore potential policies

# Metrics for 2020 – Codes & Standards Program

- **About 10** trainings hosted
- **One** regional forum hosted;  
**130** attendees
- Ongoing **coordination** on resources for municipalities, contractors, and building staff



# Commercial



Technical  
assistance

Performance-  
based incentives

**BayREN  
Business**

Microloans

Coordination with  
SMC Energy Watch

Target audience: Small businesses

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# Target Customers

Small & medium businesses <50,000 sq. ft in Bay Area

- Retail
- Offices
- Personal and business services
- Restaurants
- Automotive services stations and dealerships





# Eligible Measures

**INTERIOR LIGHTING**



**EXTERIOR LIGHTING**



**REFRIGERATION**



**HVAC**



# How it Works



A free, no-obligation energy assessment



Recommendations to improve energy efficiency



Turnkey installation



No-cost maintenance

# Microloan



- 0% interest microloans (<\$2,500)
- Increase accessibility of funds and energy savings programs for hard-to-reach and small and micro businesses in the Bay Area
- Partnership with Mission Asset Fund (nonprofit)





# Partnership Marketing

- Coordinating with other OOS and PCE programs serving small businesses
- SOON: Reaching out to cities, local chambers to align efforts
- SOON: Distributing flyers via Environmental Health info visits



## ON THIS PAGE

[BAYREN BUSINESS](#)

[GREEN BUSINESS PROGRAM](#)

[PENINSULA CLEAN ENERGY EV](#)

[SMC ENERGY WATCH](#)

[SMC WASTE DISPOSABLE FOOD WARE ORDINANCE](#)

[FUNDING & FINANCE](#)

## SMALL BUSINESS RESOURCE CENTER

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**CALL ALEXANDRIA GALLIZIOLI TO LEARN MORE AT (XXX) XXX-XXXX**

### BAYREN BUSINESS

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### GREEN BUSINESS PROGRAM

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### PENINSULA CLEAN ENERGY EV

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# Financing for Water Savings



On-bill financing  
for residential  
projects

Empower water  
savings without  
rebates

**Water  
Upgrades  
\$ave**

Administered via  
water utility billing

Now available  
regionally

Target audience: Residents

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# “Pay-As-You-Save” Loan Model

- No up-front payments, credit checks, debt obligations, or liens
- On-bill charge is lower than estimated savings
- Guarantee: failed measures are repaired or payment obligation terminated



# Next Steps

- Program design refined based on 3 pilots
- Final contracting with program implementer - EEtility
- Enrolling water agencies now
  - Sebastopol – contracting
  - EBMUD – interested
  - Santa Rosa – interested
- Program launch – early 2021







# Bay Area Energy Atlas

This project is funded by the Bay Area Regional Energy Network (BayREN), a collaboration of the nine counties that make up the San Francisco Bay Area, in partnership with the California Center for Sustainable Communities at UCLA.



A first of its kind interactive website build with the largest set of publicly available disaggregated energy data in the nation.



Residential  
Income

Building  
Vintage

Building  
Type

Building  
Size

# Bay Area

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# Energy Atlas

This project is funded by the Bay Area Regional Energy Network (BayREN), a collaboration of the nine counties that make up the San Francisco Bay Area, in partnership with the California Center for Sustainable Communities at UCLA.

Annual energy consumption totals, per capita, median per SQFT by use types:

- Single family residential
- Multi-family residential
- Commercial
- Industrial
- Institutional
- Other

Units:

- Electricity
- Natural Gas
- Combined BTU

Years: 2013-2017

Aggregated following CPUC rules for customer privacy (15/15)

Questions?



# Thank you!

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