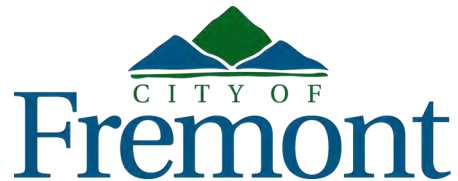




# Climate Action Plan Update 2021

*Climate Talks - Day 1  
Buildings and Energy*



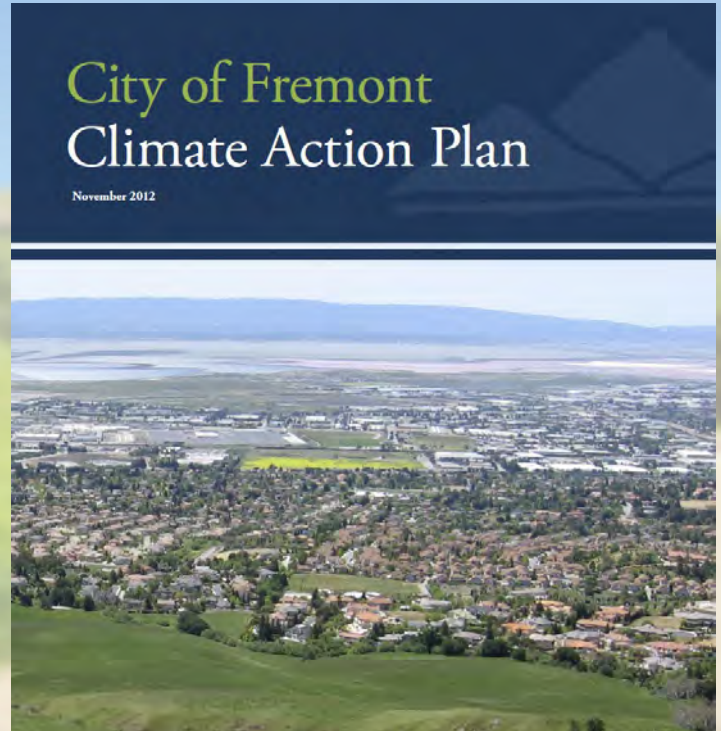
# Agenda

Introductions and CAP Process Update	20 minutes
Brief Remarks from Panelists	10 minutes
Questions from the Chat	5 minutes
Community Discussion	20 minutes
Consider.it Platform Overview and Closing Remarks	5 minutes

- Please be respectful during the discussion.
- Chat box: Voice your questions, concerns, and ideas in the chat box. We ask that you stay on topic and try to be concise.
- **If you would like to speak during the discussion, click “Raise Hand” on bottom of Zoom interface or \*9 for phone callers.**

# Introduction to the Climate Action Plan

- Roadmap for specific activities a city will undertake to reduce greenhouse gas emissions.
- Fremont's 1st CAP adopted in 2012
- CAP 1.0 goal of 25% GHG emissions reduction by 2020
- Now that it's 2021, time to update!



# 2019 Carbon Neutrality Resolution Sets the Stage for CAP Update



## By or before 2045

➤ Carbon Neutral City

## 2030 interim target

➤ 55% emissions reduction

## 2045 forward

➤ “Post-Carbon Community Framework”

✓ 4 Overarching Values

✓ 7 Key Strategies

# Post-Carbon Framework Values



**Equity &  
Access**



**Efficiency &  
Innovation**



**Health &  
Wellness**



**Resiliency &  
Capacity-Building**

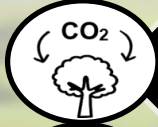
# Post-Carbon Framework Strategies



**Clean & Renewable Power**



**Electrification & Fossil Fuel Phase-Out**



**Carbon Sequestration**



**Mobility & Connectivity**



**Resource Conservation & Elimination of Waste**

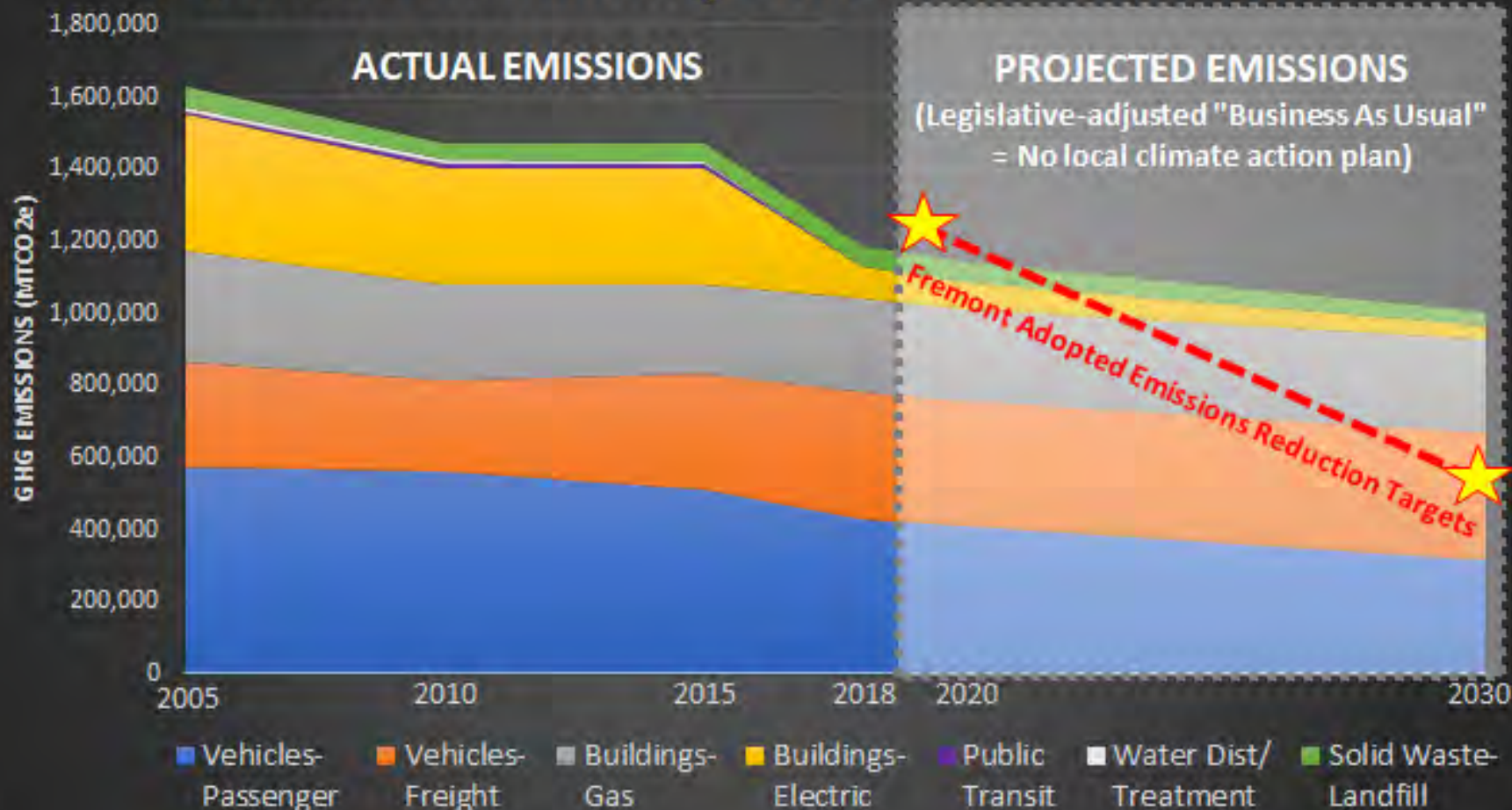


**Restorative Ecology & Green Infrastructure**



**Climate Adaptation & Resilience**

# Fremont Community-Wide GHG Emissions



# Closing the Gap through Local Action

- local ordinances
- city building and zoning codes
- incentive and recognition programs
- infrastructure and upgrades
- regional collaboration
- state and federal policy advocacy
- funding mechanisms





# Collaboration is Key

*Local Government*



*Partner Public Agencies*

*Community Members*

# Community Outreach

- **Virtual Community Workshops**

- Workshop #1: Visioning a Sustainable Future (Sept 22)
- Workshop #2: CAP Climate Talks Week (Feb 1-5)
- Workshop #3: Resilience, Equity, & Community Connections

- **Outreach to key community sectors**

- Youth, Seniors, Environmental Organizations, Faith-Based & Cultural Organizations, Neighborhood Associations, Small Business, Industry, Energy Utilities, etc.

- **Online polling/surveying: [www.Fremont.gov/CAPConsiderIt](http://www.Fremont.gov/CAPConsiderIt)**

# Consider.it Community Forum

[Fremont.gov/CAPConsiderIt](https://www.fremont.gov/CAPConsiderIt)


- Open through mid-Feb
- Participants can comment, add CAP measure ideas, and respond to others
- Can adjust view to see opinion of various stakeholder groups


## Buildings & Energy


sort by [trending](#)


### Opinions


show opinion of: [everyone](#)


 **Promote on-site renewables and energy storage**  
Expand local on-site renewable energy and energy storage capacity through utility partnerships, cleantech industry collaborations, and customer incentive programs.  
Added: 12/10/2020 | 7 considerations | [add a consideration](#)





 **Maximize building energy efficiency**  
Partner with developers, property owners, landlords, and tenants to provide incentives for low-carbon and green building design strategies, including integration of efficient, smart, and electric grid-adaptive technologies.  
Added: 12/10/2020 | 9 considerations | [add a consideration](#)



 **Shift equitably to 100% renewable energy**  
Offer low-cost options and opportunities for 100% renewable grid energy through the local electricity provider, prioritizing participation from climate-vulnerable community members.  
Added: 12/10/2020 | 8 considerations | [add a consideration](#)



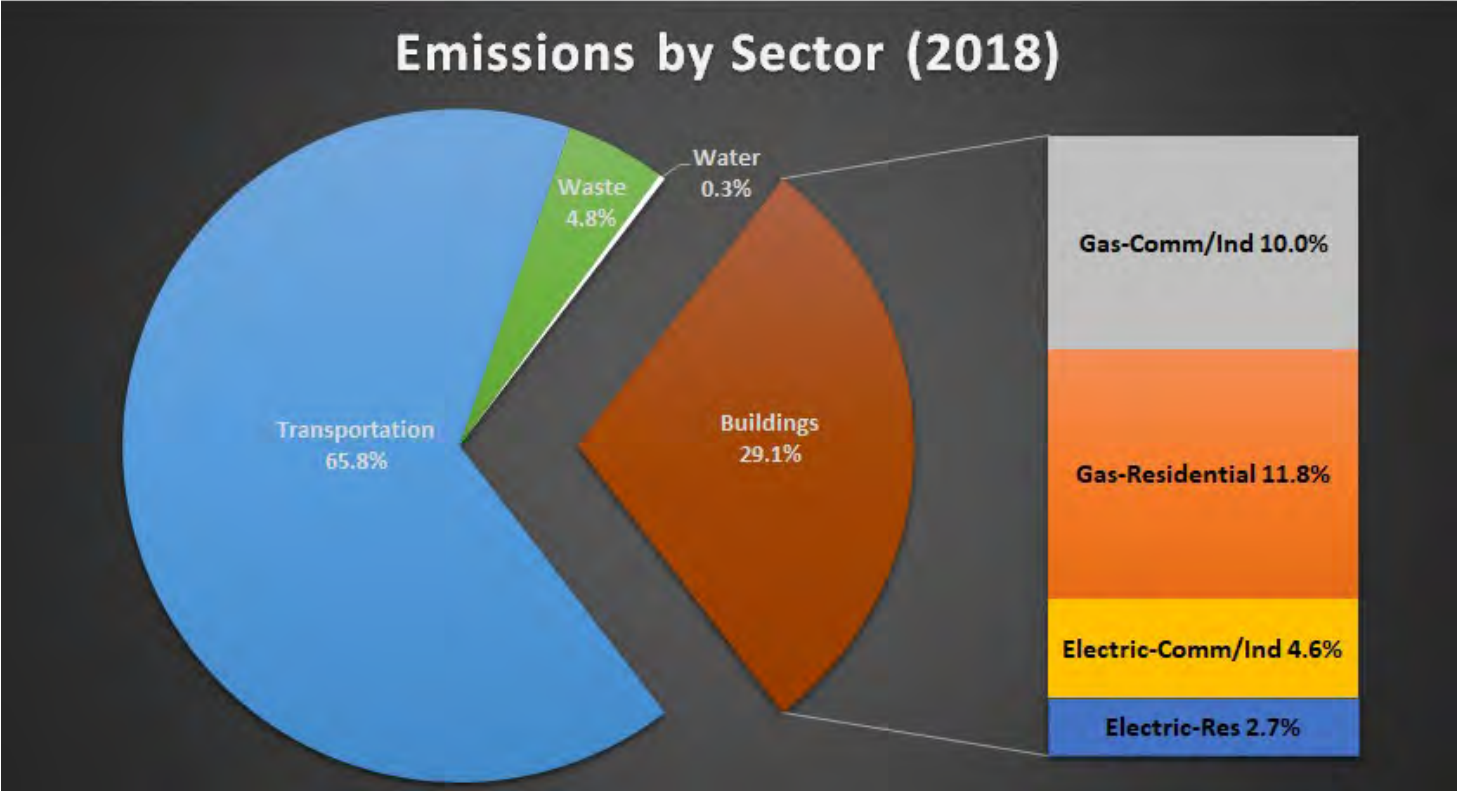
 **Develop community-scale microgrids (solar+ battery storage systems)**  
Partner with utilities and industry groups to enable neighborhood/community-scale deployment of distributed energy resource projects and initiatives including solar, energy storage, and demand response that can both connect to and operate independently



# Climate Talks Day 1: **BUILDINGS & ENERGY**



# Buildings Represent 29% of Fremont's GHG Emissions



# Getting to Zero Emissions in Buildings

## Energy Efficiency

- High efficiency devices & load management strategies

## Low Carbon Electricity

- GHG-free grid & on-site renewables

## Electrification

- Electric appliances/processes in place of “natural” (methane) gas
- All-electric/zero net energy construction

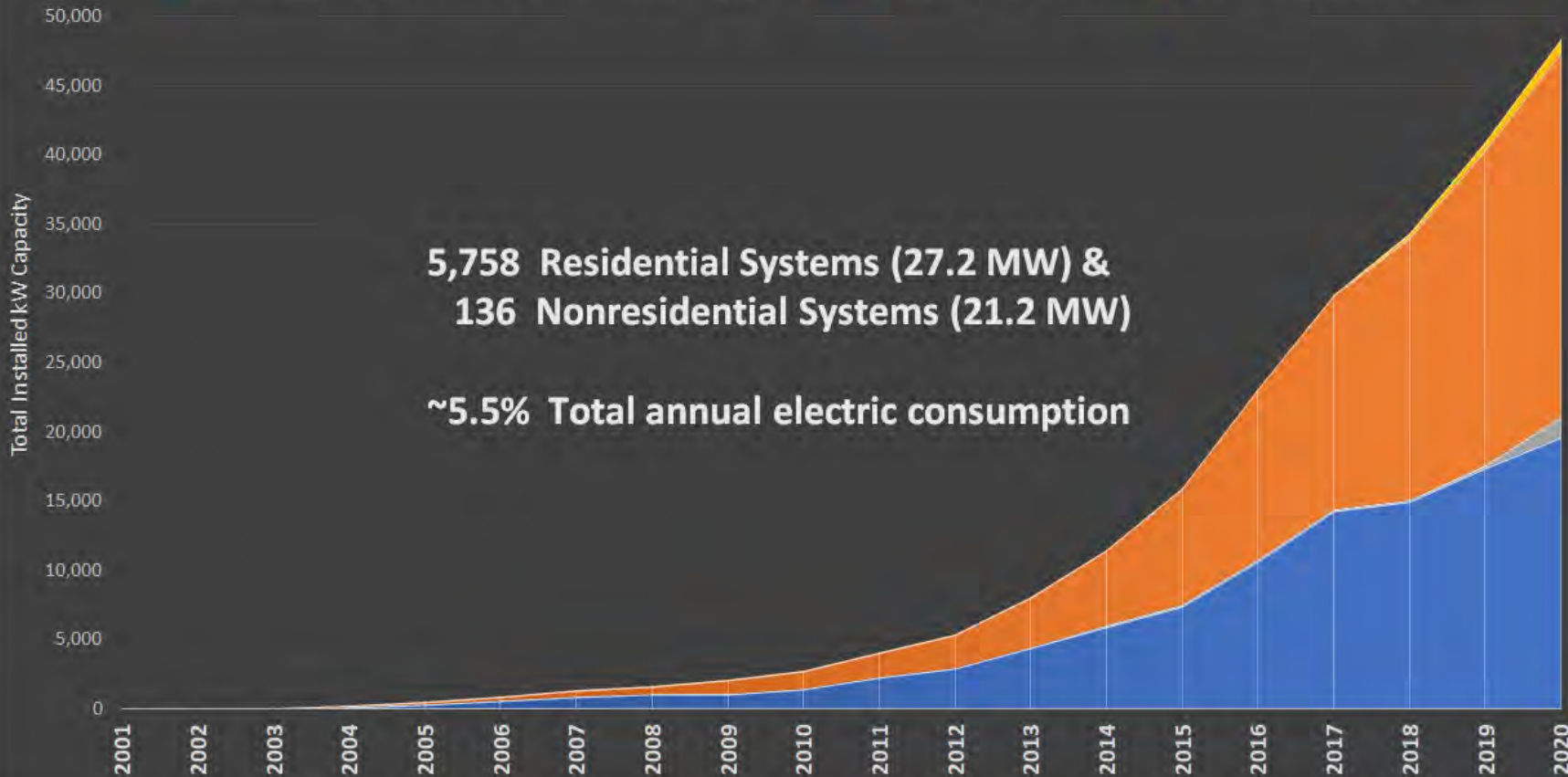
## Low-Carbon Fuels

- Biofuel/hydrogen/synthetic gas substitution for combustion processes



# Local Solar & Storage Capacity Installed in Fremont

■ Nonresidential Solar   ■ Nonresidential Storage   ■ Residential Solar   ■ Residential Storage





**STOP WASTE**  
at home • at work • at school

## Fremont Climate Week: Buildings & Energy

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February 1, 2021



# Who is StopWaste?

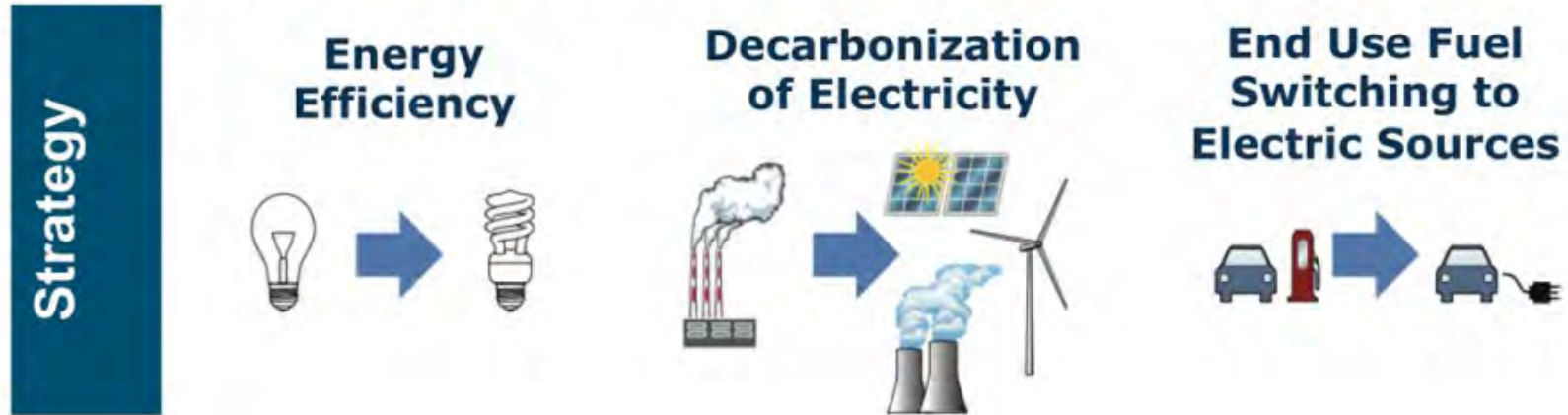


- Countywide public agency with 17 member agencies representing Alameda County, its 14 cities, and 2 sanitary districts
- Outreach & education for residents and businesses
- Key Programs:
  - Enforce Mandatory Commercial Recycling & Composting Law
  - Food Waste Reduction and Home Gardening
  - Household Hazardous Waste
  - K-12 Environmental Education
  - Green Buildings & Energy Council
  - Support Member Agency Staff
  - ...and more!



# Energy Sector: Deep Decarbonization

Figure 23. Three Pillars of Deep Decarbonization



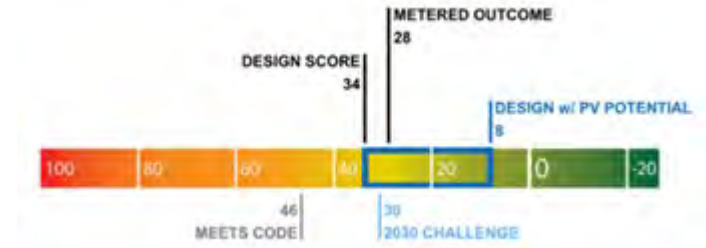
# The Bay Area Regional Energy Network (BayREN)

BayREN is a highly effective and trusted group of local governments that deliver targeted, integrated, and regional-scale climate solutions focused on energy, water, and resilience.



# Local Government Support

- Support local building department and planning staff
- Encourage consideration and adoption of local energy codes and policies
- Build relationships across levels of government
- Promote best practices in local energy policy implementation across the region



# Residential Support

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- **Single Family**

- Focus on middle income homeowners and renters
- Home energy assessments
- Education and rebates for energy efficiency and electrification improvements

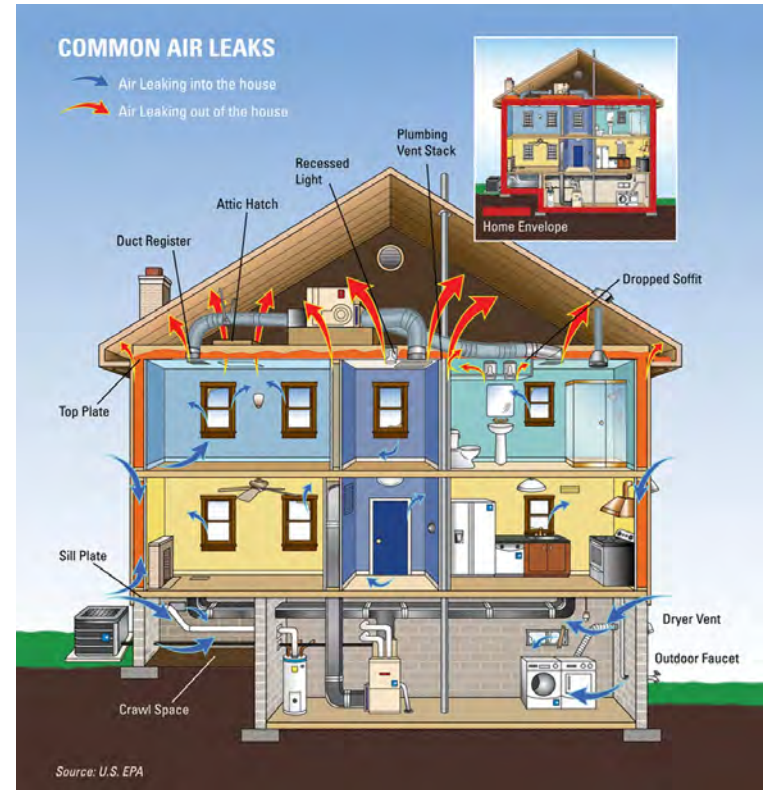
- **Multifamily**

- Priority on deed-restricted or naturally-occurring affordable housing
- Technical assistance for whole-building retrofits
- Clean Heating Pathway for electrification projects
- Multifamily program design recognized nationally

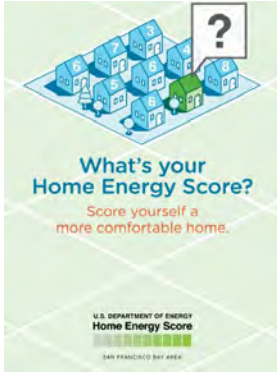


# Benefits of Energy Efficiency & Electrification

- Lower operating cost
- Health, comfort, and resilience co-benefits
  - Indoor air quality improves (wildfire smoke intrusion, pollen, or other outside irritants)
  - Less leaks = more comfort and stable temperatures in case of extreme heat/cold or outages
  - Removes burning methane from inside our homes and need for gas pipelines
- Grid health
  - Higher load: Slower/more costly to reach 100% renewable



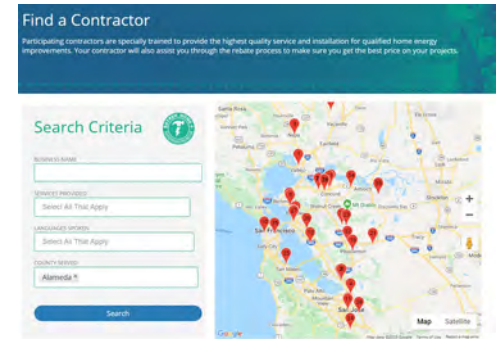
# Getting Started



Get a Home Energy Score  
[www.bayren.org/hes](http://www.bayren.org/hes)



Contact a Home Energy  
Advisor  
866-878-6008  
[advisor@bayren.org](mailto:advisor@bayren.org)



Find a Contractor  
[www.bayrenresidential.org/find-a-contractor](http://www.bayrenresidential.org/find-a-contractor)

Questions? Reach me at [ealvarez@stopwaste.org](mailto:ealvarez@stopwaste.org) or (510) 891-6585

# WHAT IS EBCE?



East Bay Community Energy (EBCE) is our local power supplier committed to providing Alameda County with clean, green electricity at low rates. EBCE reinvests earnings back into the community to create local green energy jobs, local energy programs, and clean power projects.



# HOW IT WORKS



## Source **EBCE**

buy and build cleaner  
energy



## Delivery **PG&E**

deliver energy, repair lines,  
handle billing



## Customer **YOU**

benefiting from cleaner energy,  
local control

## New communities joining in 2021

Newark  
Pleasanton  
Tracy

### EBCE Members

Albany	Livermore
Berkeley	Oakland
Dublin	Piedmont
Emeryville	San Leandro
Fremont	Union City
Hayward	County of Alameda



# WHAT ARE MY OPTIONS?



**More renewables**

than PG&E

**lower rates**

than PG&E



**100%**

renewable

**\$0.01/kWh**

more than PG&E

# WHAT ARE THE BENEFITS?



LOWER  
RATES



LOCAL  
INVESTMENT



SUSTAINABILITY



CUSTOMER  
CHOICE

# EBCE's Power Content

ENERGY RESOURCES	BRIGHT CHOICE	BRILLIANT 100	RENEWABLE 100	PG&E	PG&E SOLAR CHOICE
<b>Renewable</b>	60%	75%	100%	29%	100%
Biomass & Biowaste	4%	0%	0%	3%	0%
Geothermal	12%	0%	0%	2%	0%
Eligible Hydroelectric	5%	0%	0%	2%	0%
Solar Electric	3%	38%	50%	12%	100%
Wind	36%	37%	50%	9%	0%
<b>Coal</b>	0%	0%	0%	0%	0%
<b>Large Hydroelectric</b>	25%	25%	0%	27%	0%
<b>Natural Gas</b>	0%	0%	0%	0%	0%
<b>Nuclear</b>	1%	0%	0%	44%	0%
<b>Other</b>	0%	0%	0%	0%	0%
<b>Unspecified Sources of Power**</b>	13%***	0%	0%	0%	0%

\* PG&E data as reported in PG&E's rate comparison with EBCE.

# Resilient Home

EBCE making the process of installing solar + battery backup simple & affordable

## Who's eligible?

- EBCE customers who are homeowners
- Single family, condos, townhomes
- New solar + battery backup systems
  - Existing solar retrofits coming soon!

## Sign up:

- No cost (no obligation) home evaluation
- Phone & video consultation
- Proposal review
- Schedule installation
- Sunrun will help with incentive paperwork



<https://ebce.org/resilient-home/>

# Residential EE / Electrification

## Induction Lending Program

- Working with cities to offer “try before you buy” induction cooktop lending (Q1 2021)
- Stay up to date! [Ebce.org/induction](http://Ebce.org/induction)

## Heat Pump Water Heater Rebates

- Rebate offered to installers
- Access the rebate through the BayREN Home+ program for an additional \$1,000 to the homeowner



# THANK YOU!



EBCE.org



/PoweredbyEBCE



@PoweredbyEBCE



/PoweredbyEBCE



customer-support@ebce.org



833.699.EBCE (3223)





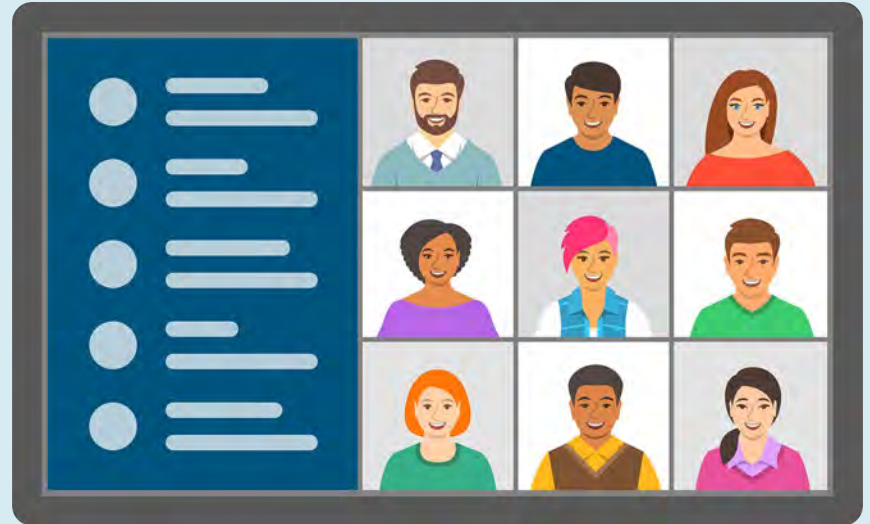
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# Community Discussion

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# Continue the Discussion


[www.Fremont.gov/CAPConsiderIt](http://www.Fremont.gov/CAPConsiderIt)

## Buildings & Energy

sort by [trending](#)

### Opinions


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#### Promote on-site renewables and energy storage

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Added: 12/10/2020 | 7 considerations | [add a consideration](#)




58 opinions



#### Maximize building energy efficiency

Partner with developers, property owners, landlords, and tenants to provide incentives for low-carbon and green building design strategies, including integration of efficient, smart, and electric grid-adaptive technologies.

Added: 12/10/2020 | 9 considerations | [add a consideration](#)



60 opinions

***Please sign up on Consider.it to continue the discussion!***

Open through early Feb 2021

# CAP Update Project Timeline - Next Steps



# Stay Connected

City Website:

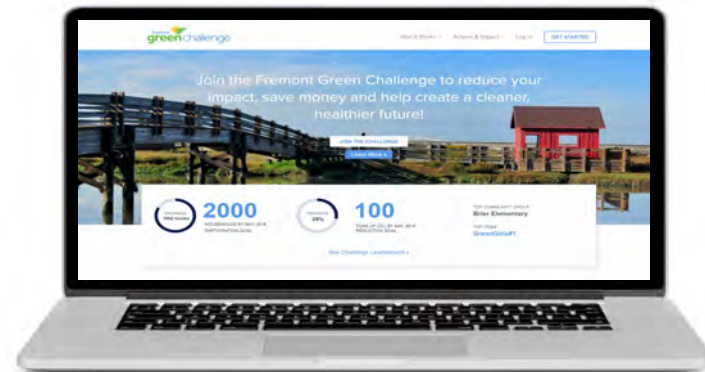
[www.Fremont.gov/ClimateAction](http://www.Fremont.gov/ClimateAction)

Sustainability Newsletter:

[www.Fremont.gov/FGCNewsletter](http://www.Fremont.gov/FGCNewsletter)

Climate Action Platform:

[www.FremontGreenChallenge.org](http://www.FremontGreenChallenge.org)



*Thank  
you!*



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