

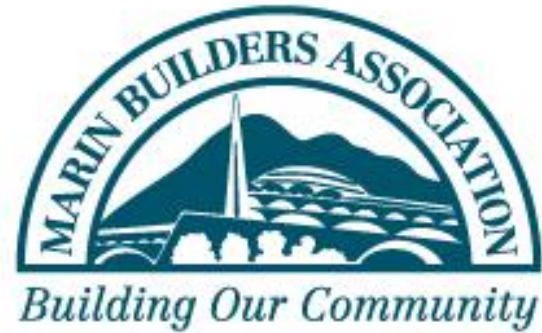


Marin's Transition to an All-electric Future

Workshop Series Meeting 2 of 3

County of Marin
Community Development Agency
September 27, 2023

—
Welcome



Brian Reyes, Molly Kron, Sabrina Cardoza,
Kellen Dammann, Julie Chew



Agenda





House Rules





Activity 1

Roundtable Discussion (15 Minutes)

Discuss and Share



What did you **LEARN OR UNLEARN?**



What **ONE** electrification solution do we need to implement immediately?



What **ONE** electrification solution needs more time or needs certain things in place before implementing?

We Agree

The cost of failing to act is great.

The County, Towns, Cities, and constituents have shared interests in climate change



What's so "NATURAL" about "Natural Gas"?!?!

We need to scale up our transition away from gas ASAP

We must do this transition equitably

Workshop Participants, Your Deliverable

"By October 2023, provide feedback, insight, and suggestions that will shape the countywide building electrification plan/roadmap"



What's in a Typical Electrification Plan?



Stakeholder Engagement



Building Inventory and Equity Analysis



Actions and Strategies

Comprehensive Policies
(Stick) and Programs (Carrots)
Prioritized
Time-Bound



Recommended Next Steps to Implementation

2023/2024 Plan Development Timeline



Community Updates

9/30 (in-person) EV and eBike Roadshow
Hosted by Drive Clean

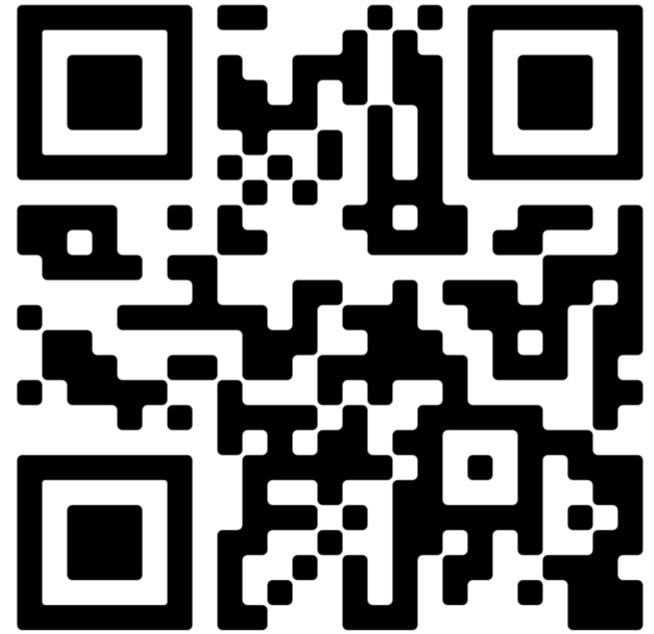
10/26 (virtual) Green Home Tours

11/2 - 11/16 (virtual) Public Learning
Workshop Series Hosted by County of Marin and
Partners

- 11/2 Heat Pump Water Heaters
- 11/7 Solar+Battery Storage
- 11/9 Heat Pump Space Heaters
- 11/14 Electrification Planning
- 11/16 EV 101

11/1 Electrify Marin Rebates re-structured

- Standard Rebate ↓
- Income Qualified (remains)



Register

Energy⁺ and Electrification Equity

Disadvantaged communities have been historically marginalized and overburdened by pollution, underinvestment in clean energy infrastructure, and lack of access to energy efficient housing and transportation.



MARIN

MARIN RANKS THE 3RD MOST RACIALLY DISPARATE COUNTY IN CALIFORNIA.

RACE COUNTS:

**Advancing Opportunities
For All Californians**



History of Racial Segregation

- Government action created segregated communities
- Federal Housing Administration would not insure homes in integrated communities
- Federal government built segregated public housing
- Local policies and zoning promoted segregation
- Protection of “Neighborhood Character”



FEDERAL HOUSING ADMINISTRATION UNDERWRITING MANUAL: 1936

UNDERWRITING MANUAL

UNDERWRITING AND VALUATION PROCEDURE
UNDER TITLE II
OF THE
NATIONAL HOUSING ACT

62 FEDERAL
HOUSING ADMINISTRATION



Part II
233-235

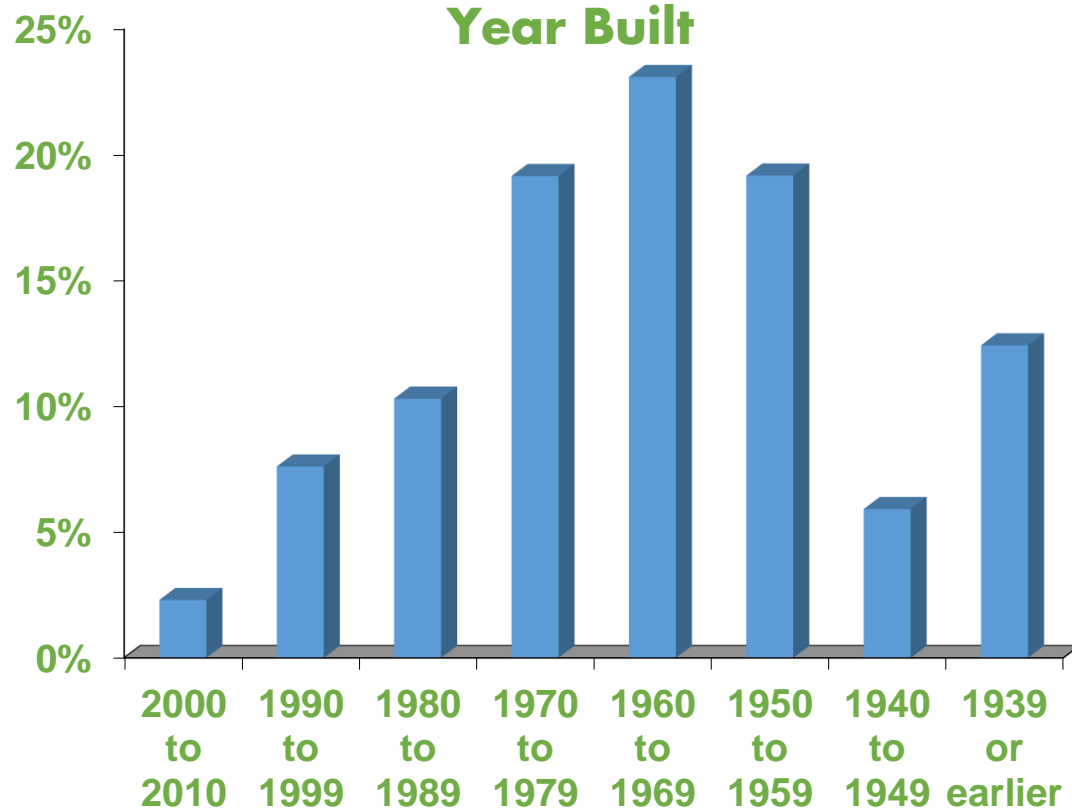
UNDERWRITING MANUAL

social groups are present, to the end that an intelligent prediction may be made regarding the possibility or probability of the location being invaded by such groups. **If a neighborhood is to retain stability it is necessary that properties shall continue to be occupied by the same social and racial classes. A change in social or racial occupancy generally leads to instability and a reduction in values.** The protection offered against adverse changes should be found adequate before a high rating is given to this feature. Once the character of a neighborhood has been established it is usually impossible to induce a higher social class than those already in the neighborhood to purchase and occupy properties in its various locations.

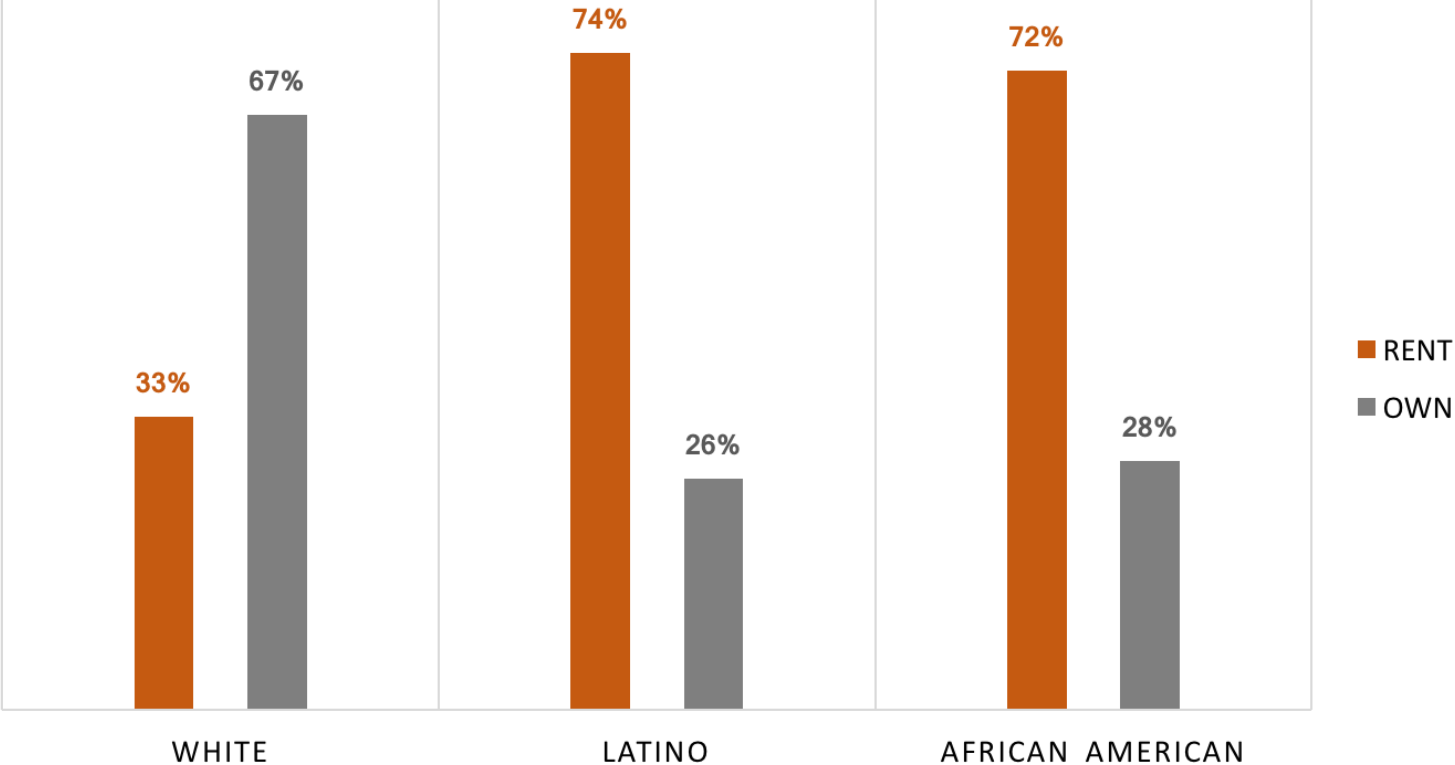
Local Housing Needs

Limited Rental Housing Options:	17% multi-unit
Growing Aging Population:	22% residents 65+
Limited Vacancy (rent/sale):	57% of vacant units are for seasonal uses
Insufficient Affordable Housing:	Cost-burdened: 20% of households Severely cost-burdened: 17% of households
Overcrowded:	13.4% renter-households 0.9% owner-households
Occupancy of Marin's 100,000 Homes:	65,000 owner occupied 35,000 rented

Marin Housing Development Patterns



INEQUALITY IN HOUSING THAT PERSISTS TODAY



Source: Housing Tenure by Race/Ethnicity in Marin County (ACS 2012-2016)

State and Federal Requirements to Address Systemic Racism

- State
 - California passed AB 686 (2018) requiring all state and local public agencies to address, combat, and relieve disparities and foster more inclusive communities.
- Federal
 - All jurisdictions in Marin signed a Cooperation Agreement that they SHALL take all actions necessary to assure compliance with:
 - Title I of the Housing and Community Development Act of 1974;
 - Title VI of the Civil Rights Act of 1964;
 - Fair Housing Act of 1968; and
 - Affirmatively Furthering Fair Housing.

Energy and Electrification Equity for Marin

- **Broaden engagement** with community-based organizations, minority-serving institutions, and historically underserved communities through targeted requests for information, roundtables, and workshops.
- **Developing equity-focused policies** to prevent displacement, expand access, and improve energy and economic outcomes for communities historically marginalized.
- **Expand energy and electrification funding opportunities** to underserved households.



Break (5 Minutes)





DOG-ROSE.

Activity 2

Deep Dive Roses, Buds, Thorns
(57 Minutes)

A and B

Read (10 min.)

Discuss and note (10 min)

Swap

B and A

Read (10 min.)

Discuss and note (10 min)

All

Record (5 min)

Report Out (10 min)



(Roses) What key strategies or elements do we want in Marin's plan?



(Thorns) What key strategies or elements do we NOT want or need in Marin's Plan?



(Buds) What strategies or elements are missing or need to be improved upon so we can consider these for Marin's plan?



Group Share
(1 min. per group)





Results and Findings

(Post Meeting Addendum)



1 Increasing Access to Rebates and Incentives



Question 1

1. As we transition to an all-electric future, what are two solutions (policy, program, or incentive) that we should implement to increase access to rebates and incentives?

Educate Homeowner + contractor

One-stop shop solution

Incentives clearinghouse

a single place to look for rebates + contractors one stop shop

On-bill financing as part of a standardized all-in-one product/service

more contractor training on electric tech

Agency requiring the change should be responsible

Contractor certification program - that homeowners can trust

Use of alternative Reverse Mortgage programs for up grants

quit carbon - Carbons like Quit Carbon are key to a coordinated process

concierge service / support

- helps w/ incentives - Publicizing incentives

Education and incentives for small businesses, such as restaurants

Consolidate Info Programs all state/city/county - communication / digital plan - Buildas / Contractors Education also

2. When is the best time for these solutions to be in place?

Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

Contractor education and incentives Immediate

Immediate! - catch bump prior to NOX reqs

Immediate

Near term

Probable and reasonable in mid-term

All 3

3. WHERE and WHO should we focus rebates and incentives to?

Both! homeowner + contractor put single program

target owners / landlords

Contractors and homeowners. Also, MUD property developers and owners

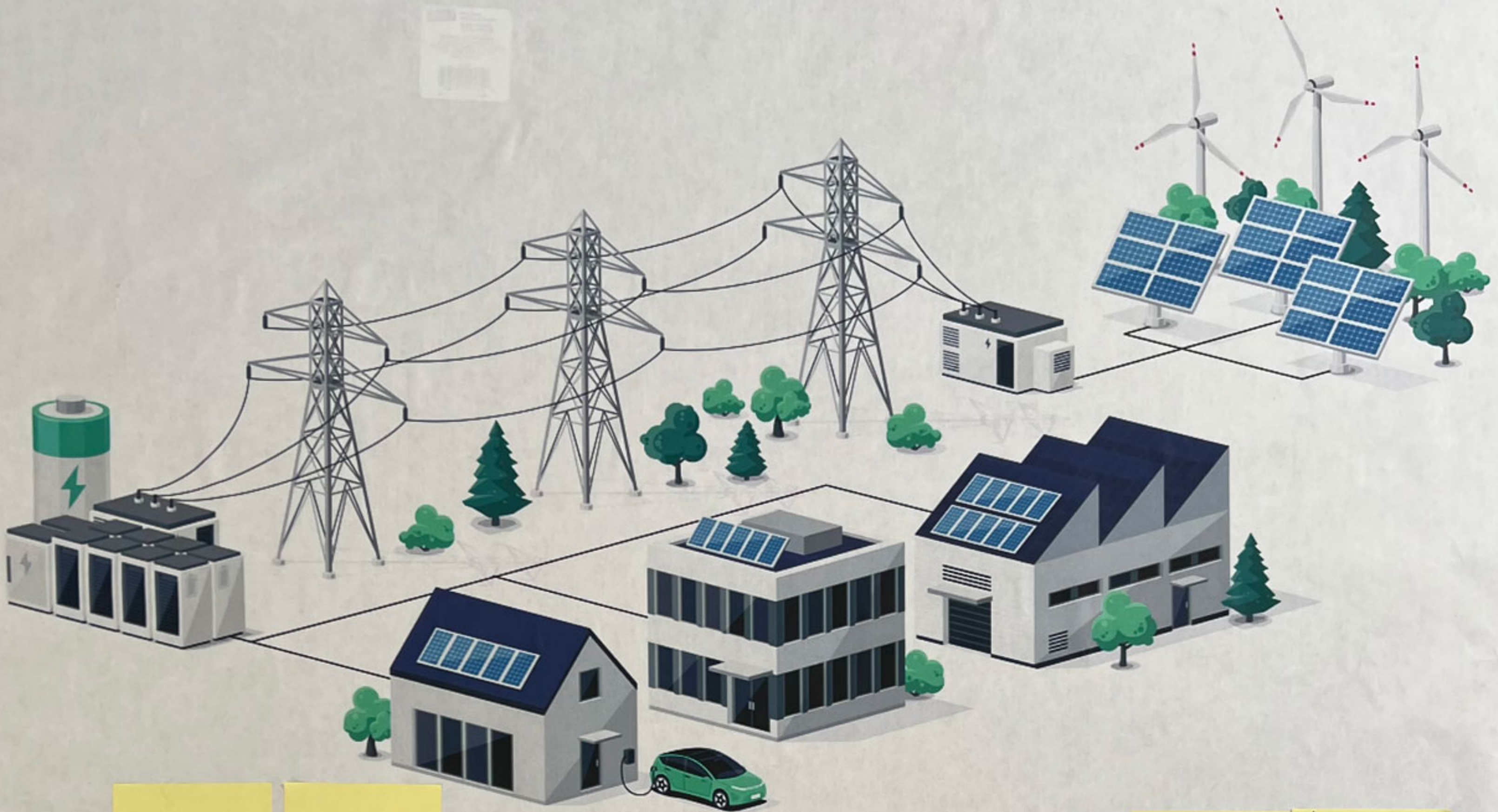
Both to Contractors + Homeowners

- to homeowner! they'll want certified contractor

- higher incentives for income-qualified - contractor & homeowner

Older Adults

2 Solving Grid Reliability and Resiliency in Marin



Question Prompts

1. As we transition to an all-electric future, what are two solutions (policy, program, or incentive) that we should implement to ensure a reliable and resilient grid?

- Energy Management + Efficiency Programs for large base of Schools
- Affordable all-electric appliances + features
- Storage of Community facilities - Encourage community building
- provide an incentive pool for off-grid projects + technologies that can keep a building off-grid
- Commercial/Industrial Usage reduction - lights off at night - AC/Heat up at night
- create volume and mandatory program for whole house shut-offs - homes over 1000 sq ft must
- Coordination with utilities and their capacities/infrastructure needs
- Align Time of Use incentives with load curves and carbon intensity profile of supply

2. When is the best time for these solutions to be in place?
Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

- INTERCONNECT TIMELINES w/UTILITY
- workforce training opportunities for batteries and heat pumps
- REVIEW OF EXISTING POLICY AS IT APPLIES ON MUNICIPAL/COUNTY/STATE LEVEL, UPDATE IF NECESSARY
- battery storage requirements w/ solar + electrification
- bi-directional charging
- linkage between city gov & PG&E. "one stop shop" on what to do next after application submitted
- Capacity planning - PG&E Streamlining
- Many more local decentralized microgrids + VPP
- resilience hub network

- Streamline permitting and approvals for large scale battery arrays
Immediate
- Immediate
- Near-term 26-27
- Focus on getting done - ready to go first. Don't need anything at once.

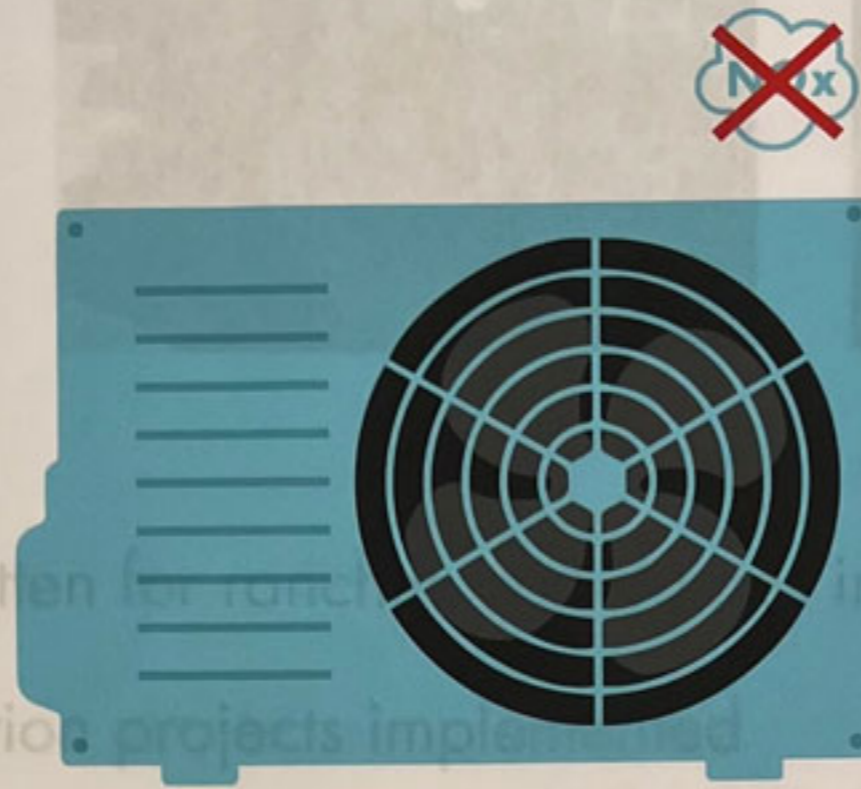
3. If implemented in your community, what would success look like to you? If possible, provide a metric and/or data source to measure.

3 Preparing Our Community for 2027: Regional Air District's Time of Replacement Electrification Requirements



HPWH

2027



Space HP

2029



Commercial HPWH

2031

Question Prompts

1. What are two solutions (policy, program, or incentive) that we should implement to ensure our community is best prepared for 2027, 2029, and 2031?

permit disclaimer w/in to e reads, upcoming requirements when apply for water heater, etc

Electric readiness programs
Focus on replacement on burn-out between 2023 and 2027

Fund local orgs like Ride & Drive Clean to expand into building electrification education & outreach

City ordinance that aligns with the Regional Regulations
Contractor training for heat pumps

Mass education + incentives

Training programs provide free labor for low income
- owners pay for units w/ rebates + incentives

create a separate pool of incentives that is only for low income/POC that cannot be used for moderate + high income

Continually be Campaigning the Cost Savings of electrification

Early Outreach + Education
- Incentive programs (set up)
- Easy permitting like solar

2. When is the best time for these solutions to be in place?
Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

It's coming so focus on Awareness & Communication
PREPARE FOR IT

Immediate - Educational Programs
Funding for community-based organizations
Toolkit for businesses

Near-term: City ordinances

Immediate

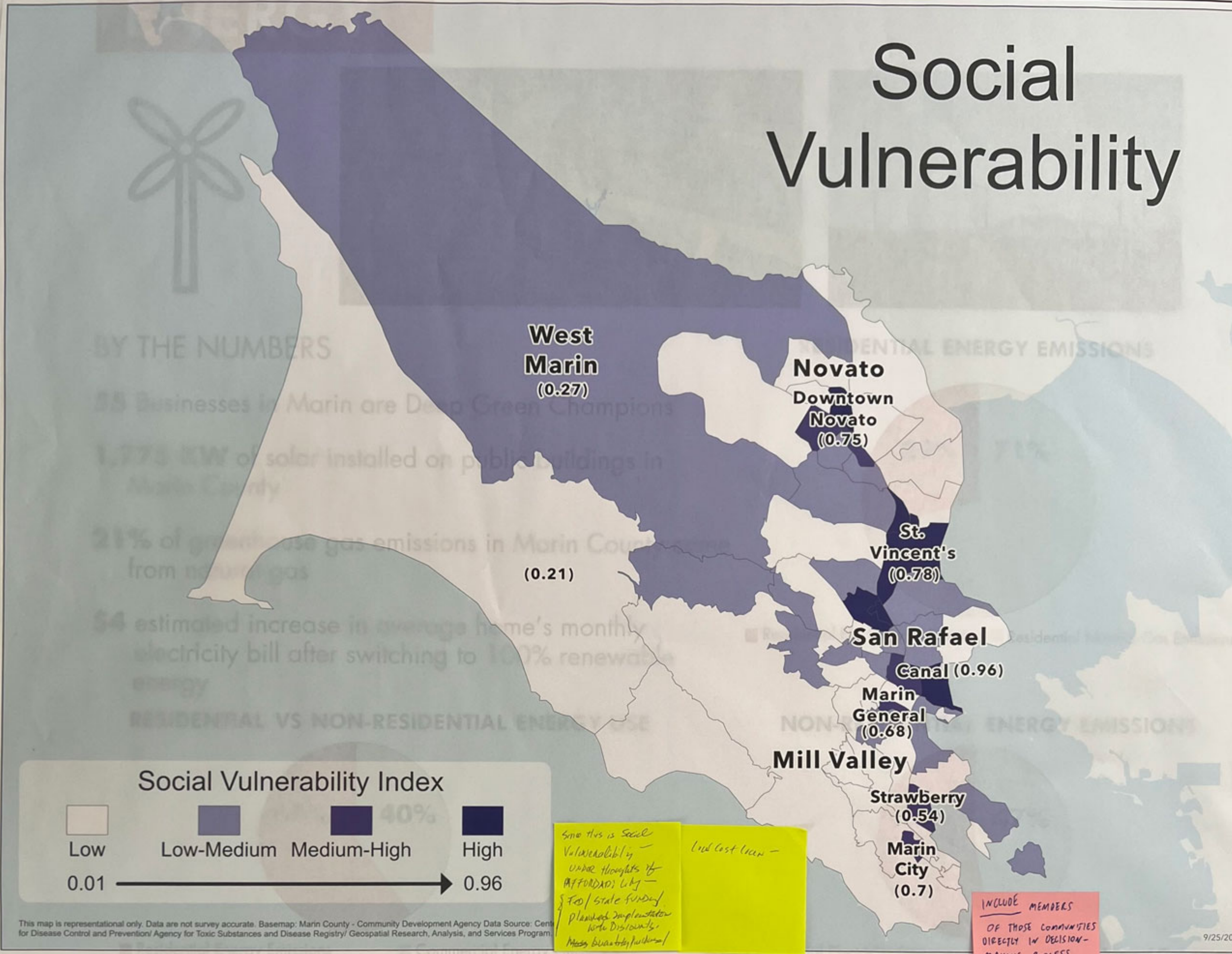
Immediate

3. If implemented in your community, what would success look like to you? If possible, provide a metric and/or data source to measure.

STUDY #/DATA for realistic
Engle market per # Remodels/
Permit cost/
Age of Equipment
Capacity - Equip part
Residential cost

of units replaced in low income/POC homes owned

Social Vulnerability



Question Prompts

1. As we transition to an all-electric future, what are two solutions (policy, program, or incentive) that we should implement to ensure we don't displace people?

Handwritten Solutions:

- Solve the split incentive: Landlord vs tenants
- Education: Why are we doing this? - Benefits - Voters Property Owners
- Right of return at same rate following substantial removal
- Installed cost neutrality for income-qualified homeowners
- Start with education. Find ways to replace that are simple
- No rent increases for elect. upgrades
- Rental protections: Make incentives for landlords available with a mechanism to require no rent increases
- Bulk purchasing programs to reduce cost
- Affordable Appliance

2. When is the best time for these solutions to be in place?

Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

Handwritten Timing:

- near-term 26-27
- AS SOON AS POSSIBLE
- Anti-displacement measures are needed near-term
- immediate - catch the burnouts prior to now
- Near-term
- immediate
- Now

3. If implemented in your community, what would success look like to you? If possible, provide a metric and/or data source to measure.

Handwritten Metrics:

- # of people attending workshops
- Data regard income and length of stay in current community
- % points gas v. electric
- % of low income/POC impacted
- Electrification upgrades don't increase assessed value - May also reduce permits avoidance

5 Solving the Workforce and Contractor Challenge



Question Prompts

1. As we transition to an all-electric future, what are two solutions (policy, program, or incentive) that we should implement to ensure an effective contractor and workforce is in place?

• Paid Internship/ apprenticeship
Technical Career Training
College to Career Training

YOUTH TRAINING IN GREEN CAREERS EXPANDING FELLOWSHIP OPPORTUNITIES

Funding for training & getting certified

Modifying licensing and certification requirements to promote 1-stop shop solutions (e.g., plumber can wire HPWH)

- Training
- Incentives

Certification program so that certified installers can market their expertise. Facilitate 1-stop shop. Immediate

Contractor training

Stipended training + wrap around services

Direct entry agreement from MCB pre-apprenticeship programs to apprenticeships

Grants or incentives to help contractors pay living wages

2. What are specific next steps you recommend to advance these solutions? Where possible, specify target timeline, potential partners, and other relevant details.

expand existing programs

PARTNERS WITH STATE AND FEDERAL CLIMATE CORPS

Go To Contractors For Education Safety Meeting When? Location?

Workforce development program for subsets of population (disadvantaged communities, those not educated who served prison sentences)

- MBA
- College of main

paid training yes!

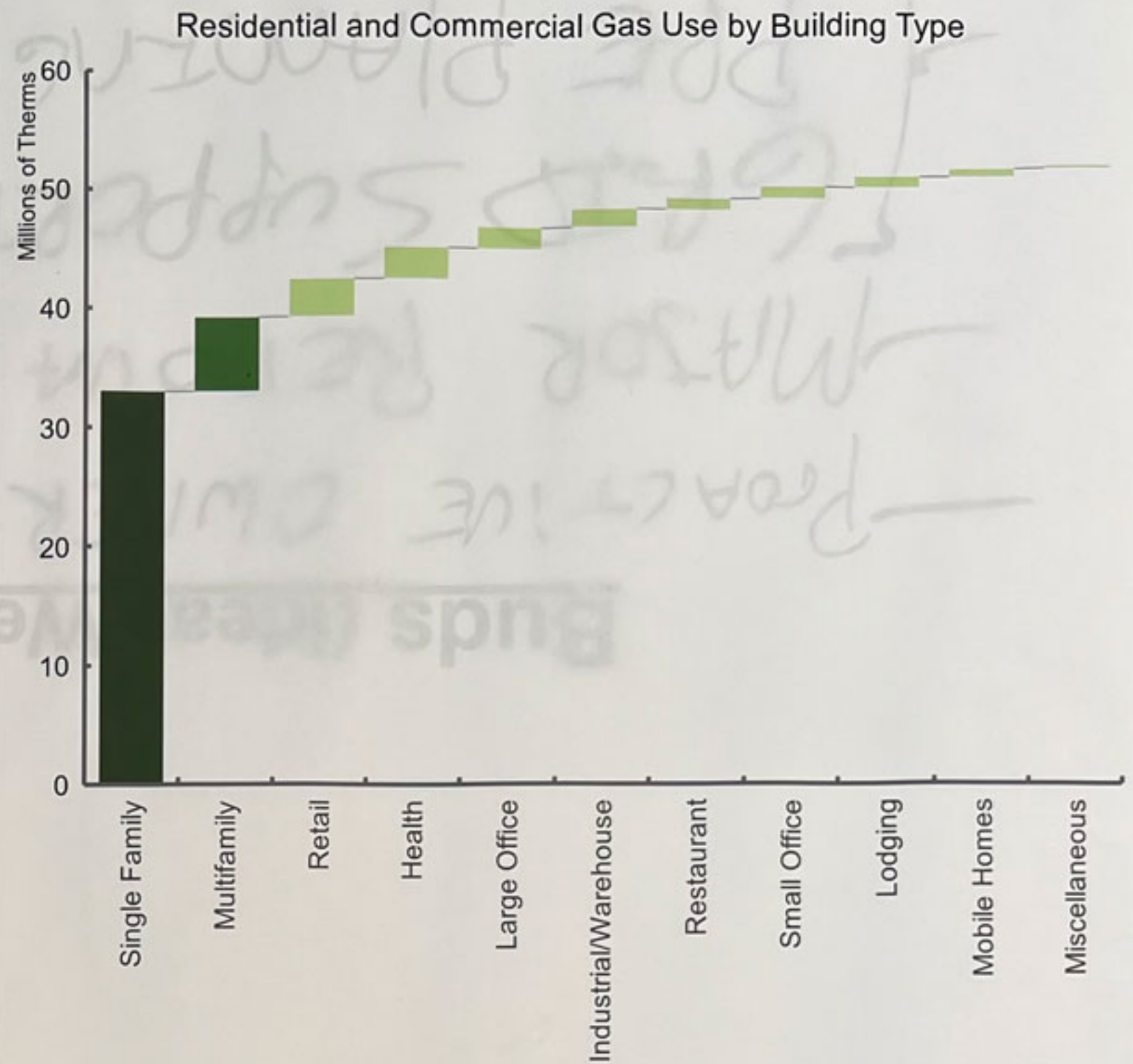
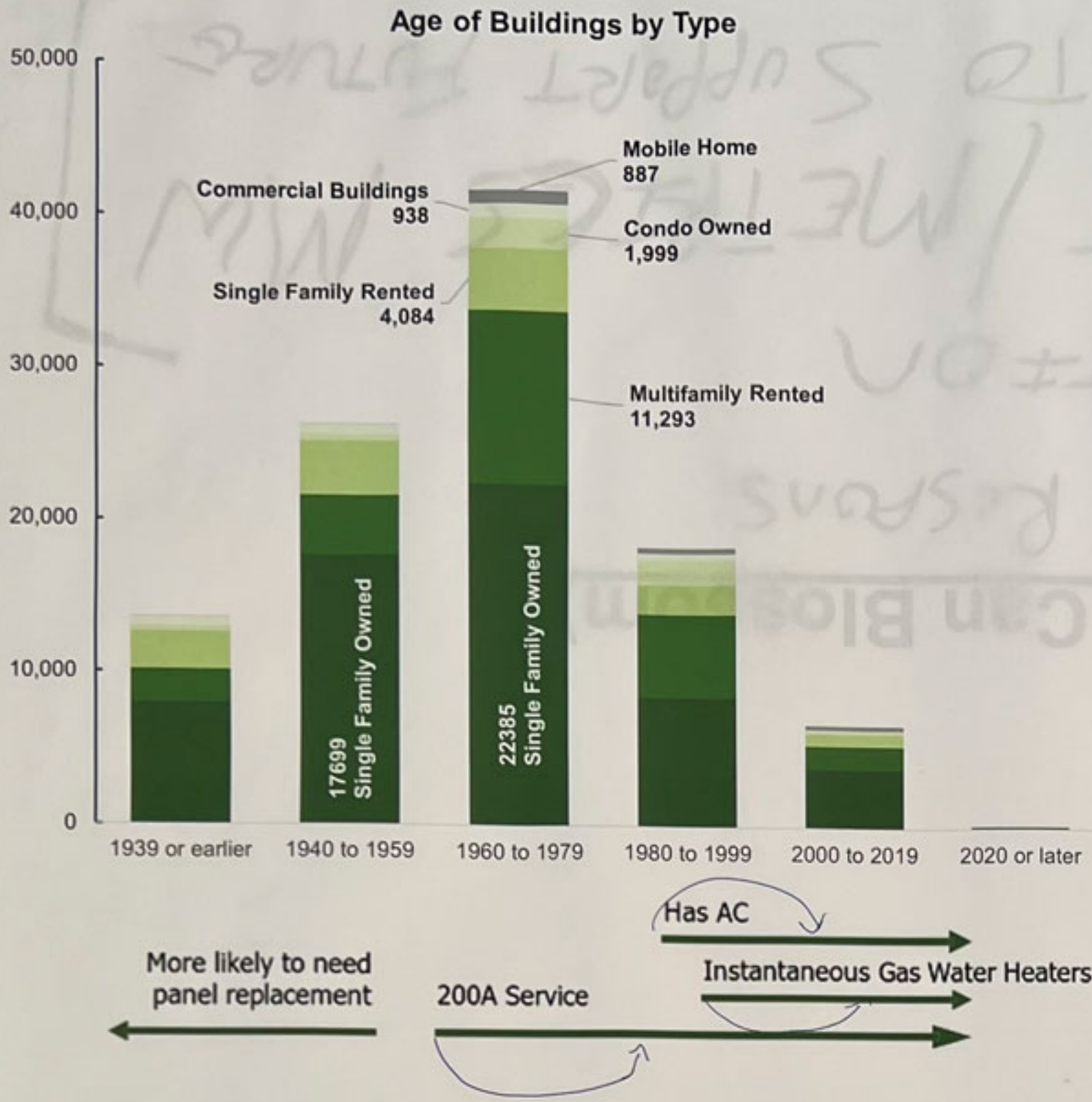
IBEW

Education & Incentives for schools 2024

3. If implemented in your community, what would success look like to you? If possible, provide a metric and/or data source to measure.

% of permits gas v. electric

6 Building Inventory Update: Commercial vs. Residential



Question Prompts

1. As we transition to an all-electric future, what are two solutions (policy, program, or incentive) that we should implement to ensure electric appliances are installed?

How can smart panels be supported?

Countywide direct install program? (Palo Alto)

Increase so much supply that low cost energy becomes sole incentive.

Funding/grants for improvements
Education + Outreach to the community

Educate sales people (Home Depot, etc) ↑ supply in stores.

• Easy permitting
• Rebates
• Require for all new construction major remodels

• Incentives/rebates
• Information by homeowners (normalize all-electric)
• Training for contractors
• All-electric as burn out policy

time of sale
time of burnout
time of renov.

2. When is the best time for these solutions to be in place?

Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

Education/Planned program provide appliances - check NEMD

Electric upgrades don't increase assessed value.

Incentives developers/property owners through property taxes or otherwise

• Near-term
• Near-term

• Immediate - biggest opportunity is before NOx regs kick in
• Target homeowners who are ready to go

3. If implemented in your community, should we be focusing these solutions in residential or commercial building stock? Both? More one than the other?

Both but residential is currently underserved

7 Electric Readiness: Preparing Older Building Stock to be Ready



Info on panel upgrades
How to manage costs
Info on rebates/incentives
Emerging grid use limits code

Question Prompts

1. What are two solutions (policy, program, or incentive) that we should implement to get buildings electric ready?

Electric readiness on large remodel (Panel size) cost matters

Work w/ P&E Neighborhood zoning

ID where distribution lines are/are not ready
Focus on electrical contractors + get the word out to homeowners

panel capacity increase

program to level boards + low cost split incentives

(Thoughtful/Paid) PROGRAMS + Incentive

Marketing approach building leads for electric + admin

Standardizing SET build requirements + mix ones

Trouble finding electricians work force dev

Inventory of buildings - estimate of age of appliances + panel sizes

Requirement to run to spec wire Reach code pre-wire

Program to Replace existing electric panels with higher capacity units. (like SMART) meters

2. When is the best time for these solutions to be in place?

Immediate (1/1/2024 - 12/31/2025), Near-term (1/1/2026 - 12/31/2027), or Long-term (1/1/2028 - 12/31/2031)

Immediate
Hear from + catch thousands of home-owners before BAAQMD's resp kick in

3. If implemented in your community, are there certain households and/or residences we should focus on?

750 ft < remodel

Commercial - (Due to scale)
Older homes - If owners are Afford (During remodel)

8 Time of Sale Policy: A Starter or Non-Starter?



Question Prompts

1. What type(s) of Time of Sale policies exist in your community or that you know of?

DISCLOSURE OF PREVIOUS 12 MONTH'S UTILITY BILLS

REQUIREMENT TO GET A HOME ENERGY ASSESS. W/IN 5 YRS OF SALE

Seller needs to have current home energy assessment done. Buyers need to ask for it - if asked for.

energy score disclosure

MARIN DISCLOSURES (Green) FIVE PROBLEMS (red) (lead pipe) (lead paint)

REQUIRE DISCLOSURE OF PERMIT HISTORY

PERMIT INSPECTION

Time of Sale is a proven failure. Too many homeowners just wait until this rare moment to do work that needs to be done today. Nothing says something is unimportant as planning to wait until a sale.

2. **IF** this were to be considered policy, what would need to be in place to effectively implement?

TOS \$ Burden ON SELLER

STRONG SUPPORTED ENFORCEMENT SYSTEM STAFF

Great Idea. However, could be costly to seller/buyer. Check with Marin Board of Realtors

trained evaluators

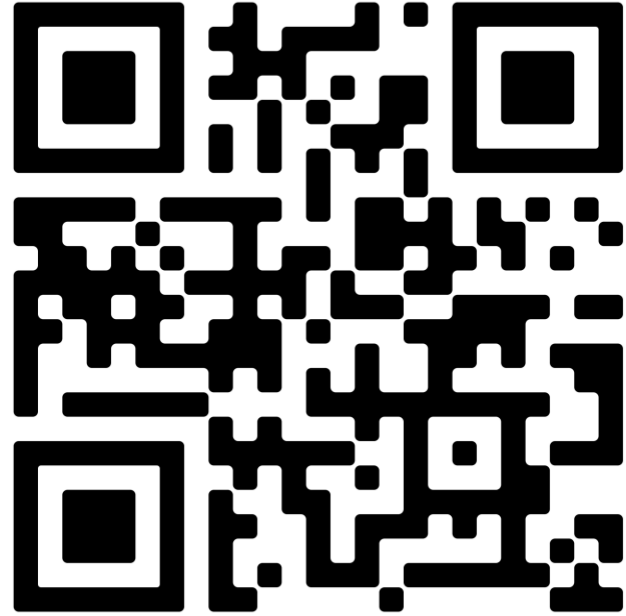
Point of sale requirement would help new homeowners to afford homes w/out needing upgrades

Whole house shut off - Motion sensors - include lower cost solutions as well

3. Vote (sticker):

Starter	Non-Starter

Reflection
and Needs



TAKE SURVEY

Next Steps

- **10/25/2023** Workshop #3
- **Between Nov and End of Dec 2023:** Feedback Loops and Draft Plan
- **January '23/February'24:** Final Plan