



# RICAPS

**Regionally Integrated Climate Action Planning Support**

**Multi-city Working Group**

**March 28, 2023**

RICAPS technical assistance is available through the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and with matching funds provided by C/CAG and additional funding provided by Peninsula Clean Energy.

# Agenda

- **Welcome & Agenda-** Avana Andrade
- **Peer-to-Peer Share Out-** All Jurisdictions
- **RICAPS Programs for Building Electrification-** Avana Andrade, OOS,
  - Vote on top programs for RICAPS to pursue; feedback
- **PCE Home Electrification Campaign Messaging-** Gerald Gottheil, Peninsula Clean Energy & Renee Yama, Cyclops Marketing Director
  - Feedback, Q&A
- **BAAQMD Ruling: Gas-Powered Water Heaters & Furnaces Phaseout-** Amy Dao, Program Lead, Climate Protection Division (BAAQMD)
  - Presentation, Q&A



**Peer-to-Peer Share Out**



**What is something you've been working on lately that you'd like the group's feedback on/ would like to share out?**

*It could be things that have happened lately or challenges and successes you've had in your work.*



**Survey: Climate Action**

**Planning Technical**

**Assistance Needs for 2023**



# **RICAPS Building Electrification Programs**

**Avana Andrade, OOS**

# Recap: How RICAPS electrification programs were selected

**Jan-Feb: Understanding hurdles to building electrification**  
(Jurisdiction listening sessions)

**Feb: Program tailoring to jurisdiction needs**  
(PCE & RICAPS program formulation)



**March: Launch of top building electrification programs selected by jurisdictions (vote!)**

**2023 --> RICAPS webinar programming tailored to electrification priorities, iterative programming supporting electrification**

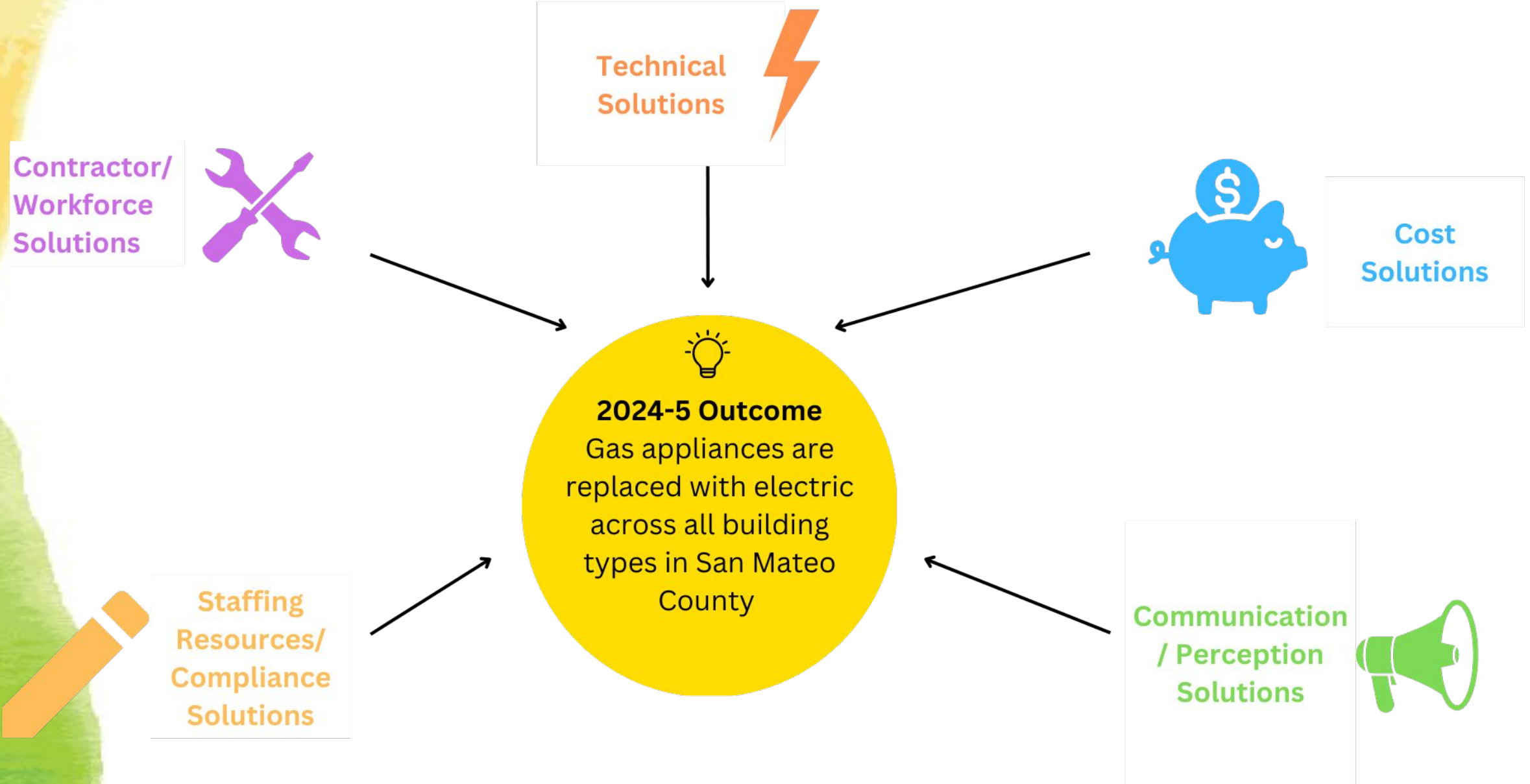
**January 2023**

**March 2023**

***Rest of 2023***



# Theory of Change: Solutions Lead to Existing Building Electrification







## Potential programming (2023)

Develop supply chain

Load shaping

Bulk buy

PV and storage

Brick and mortar presence

Turnkey Install Option

Pilot tech

List of trusted contractors

Whole home planning

Contractor Training - local workforce development

Emergency Loaner

PCE Financing

Third-party financing

Energy Calculator (website)

Info & education (website)

Contractor Network (website)

Hotline: technical guidance, project planning, program navigation

Building Electrification hub/Genie

Appliance Marketplace (website)



### Technical solutions



### Contractor/ Workforce Solutions



### Cost Solutions



### Communication/ Perception Solutions



### Staffing/ Resources/ Compliance Solutions



## Potential new RICAPS programs

RICAPS programs compliment PCE programming

Grid upgrade cost sharing mechanism

incentives for battery storage

Zonal electrification pilots

Coordination with PG&E

Collaboration with real estate professionals

Workforce Development

Training on electrification plan development

Encourage contractor networking/ collaboration

Incentives for rental properties

Subsidy coordination: stacking PCE, BayREN, IRA, CEC

Point of sale rebates/discounts

Innovative financing (green bonds etc)

Support for outreach/engagement

Outreach targeting outreach to encourage scale

Targeted outreach

Support for commercial electrification

Floating Staffing Support (JPA?)

Regional Compliance Program (at sale)

Category	POTENTIAL RICAPS PROGRAM CONCEPT	POTENTIAL RICAPS ROLE
Contractor/ Workforce	Electrification outreach campaign to small contracting businesses and distributors, with a focus on businesses that are multilingual, and not covered under BayREN contractor outreach.	Convener, creation of campaign resources (as needed), distributor of best practices, collector of small business contacts, creator of outreach plan strategy;
	Support electrification curriculum development pilot programs/apprenticeship incubator	Potentials: in partnership with community partners, leverage grant funding to pay contractors to take a training, put out an RFP or MOU to collaboratively launch a pilot with a CBO; consider existing partnerships through BayREN, NovaWorks.
	Strategic fundraising for workforce training programs	Research prerequisites needed for cities, CBOS, local gov to apply for funding for electrification workforce pipeline programs. Identify right-fit NGOS to support. Provide guidance for funding application, and if neccessary, collaborate on grant applications for workforce development.
Communication/Perceptions	Create education materials for electeds, enabling conditions for passage of existing building electrification policies	Convener of local governments, assessor of existing resources (SwitchIsOn, PCE, BAAQMD), potential outreach to local media.
	PG&E collaboration and outreach campaign for the general public & local governments, focusing on grid upgrades, reliability, zonal electrification, etc.	Convener, aggregator of resources, liaison between PG&E and local governments
	Outreach and storytelling: outreach package to compliment PCE building electrification hub	Convener of key stakeholders; potentially, content creator
Technical	Regional compliance work: lobbying higher-level regulators for electrification-ready policies with a focus on compliance (ex. BAAQMD) and permit streamlining; letter writing campaign (ex. regional time of sale check compliance mechanism)	Convener, local government ally and liaison
	Whole home electrification plan training pilot	Program development, convener of key stakeholders, platform to launch training
	Research on building vintage: what kinds of building stocks are more likely to have electrification challenges	Research, distribution of best practices for research among network

# Home Electrification Message Feedback

RICAP Feedback and Survey  
Introduction





# Campaign Background

## Campaign objectives:

- Educate customers on the many benefits of whole-home electrification (e.g., health, safety, environmental, economic, comfort)
- Encourage customers to switch from methane to clean electric



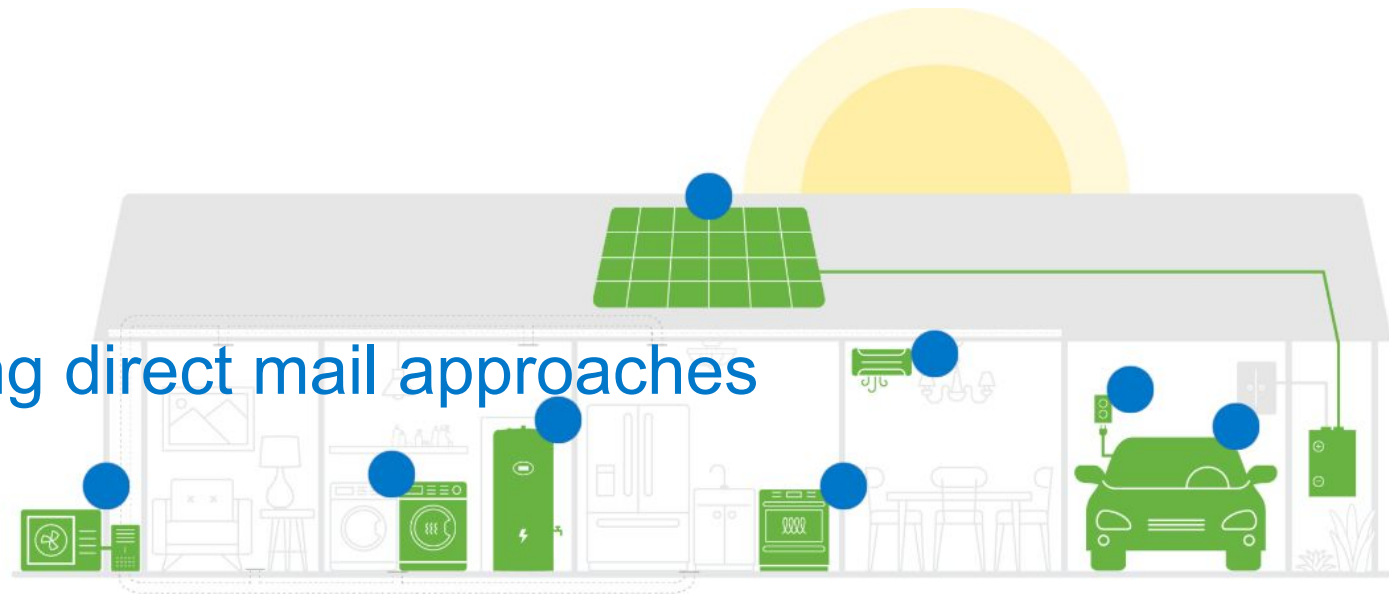
# Campaign Background

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## Progress to-date:

- ✓ Completed primary research in 2022
- ✓ Soft-launched benefits messaging on website

- ✓ Prepping to A/B testing direct mail approaches





# Ad Message Feedback

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## Objective:

- To ensure campaign messaging is approachable to all audiences and doesn't alienate segment(s) of Peninsula Clean Energy customers



# Survey Instructions

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- Putting yourself in the position of a customer, share your initial reactions (e.g., emotional and/or cerebral) to ad message options.
- Spend no more than 15 minutes completing the 5-question survey.
- Complete by April 7.



<https://forms.gle/8ruQz6gkfGqyPkjs7>



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

# Update on Amendments to Building Appliance Rules for RICAPS

March 28, 2023

Amy Dao  
Sr. Environmental Planner  
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# Rule Amendments



- On March 15, 2023, amendments to address NOx emissions associated with buildings were adopted for:
  - Regulation 9, Rule 4 (Rule 9-4): Nitrogen Oxides from Fan Type Residential Central Furnaces
  - Regulation 9, Rule 6 (Rule 9-6): Nitrogen Oxides from Natural Gas-Fired Boilers and Water Heaters
- Emissions Standard & Point-of-Sale Compliance Dates:

Ultra low Nox (14 ng/J)	1/1/2024	Central natural gas-fired furnace
Zero NOx	1/1/2027	Water heaters less than 75,000 BTU/hr
Zero NOx	1/1/2029	All applicable natural gas-fired furnaces
Zero NOx	1/1/2031	Water heaters 75,000 to 2 million BTU/hr

# Public Comments Received



- Written: 565 commenters
  - 404 expressed support for the rule amendments
  - 29 comments from organizations
    - Utilities – PG&E and community choice aggregators
    - State government - CARB
    - Local government – Marin County and Berkeley
    - Labor
    - Manufacturers
    - Building management
    - Advocacy organizations
- Oral: ~300 commenters

# Public Comments - Cost



- **Concerns-** about high cost of compliance in individual circumstances
  - Panel upgrades, utility costs, access to funding, upfront capital costs
- **Responses-** Implementation working group to track cost to consumers, facilitate access to funding as appropriate (focusing on low-income households)
  - Appliance costs expected to go down as market grows
  - Minimize need for panel upgrades and other expenses
  - Funding mechanisms that minimize upfront costs
  - Workforce availability and training

# Public Comments – Grid Capacity & Reliability



## Concerns:

- Insufficient capacity of grid distribution infrastructure to meet the needs of proposed rules
- Alignment with state-wide planning processes and generation resource build-out
- Reliability and access to heat and hot water during power outages
- Emergency replacements

## Responses:

- E3 report discusses impact to grid and alignment with CEC/CPUC planning processes
- Modern natural gas appliances require electricity to operate in many cases
- Emergency replacement plans including loaner programs, workforce training, alignment with building code processes

# Common Questions



**Q: Is this a natural gas ban?**

A: No - The proposed rule amendments only address natural gas furnaces and water heaters. The zero-NOx emissions standard could be met by natural gas appliances, but there are none currently available.

**Q: Will this effect gas stoves?**

A: No – The existing regulations and proposed amendments do not include any requirements for gas stoves.

**Q: Will property owners be required to replace their gas appliances immediately when the zero-NOx standard takes effect?**

A: No, but if an appliance fails and needs to be replaced after the effective date, the replacement must be zero-NOx.

# Common Questions



**Q: Do the health benefits come from improving indoor air quality?**

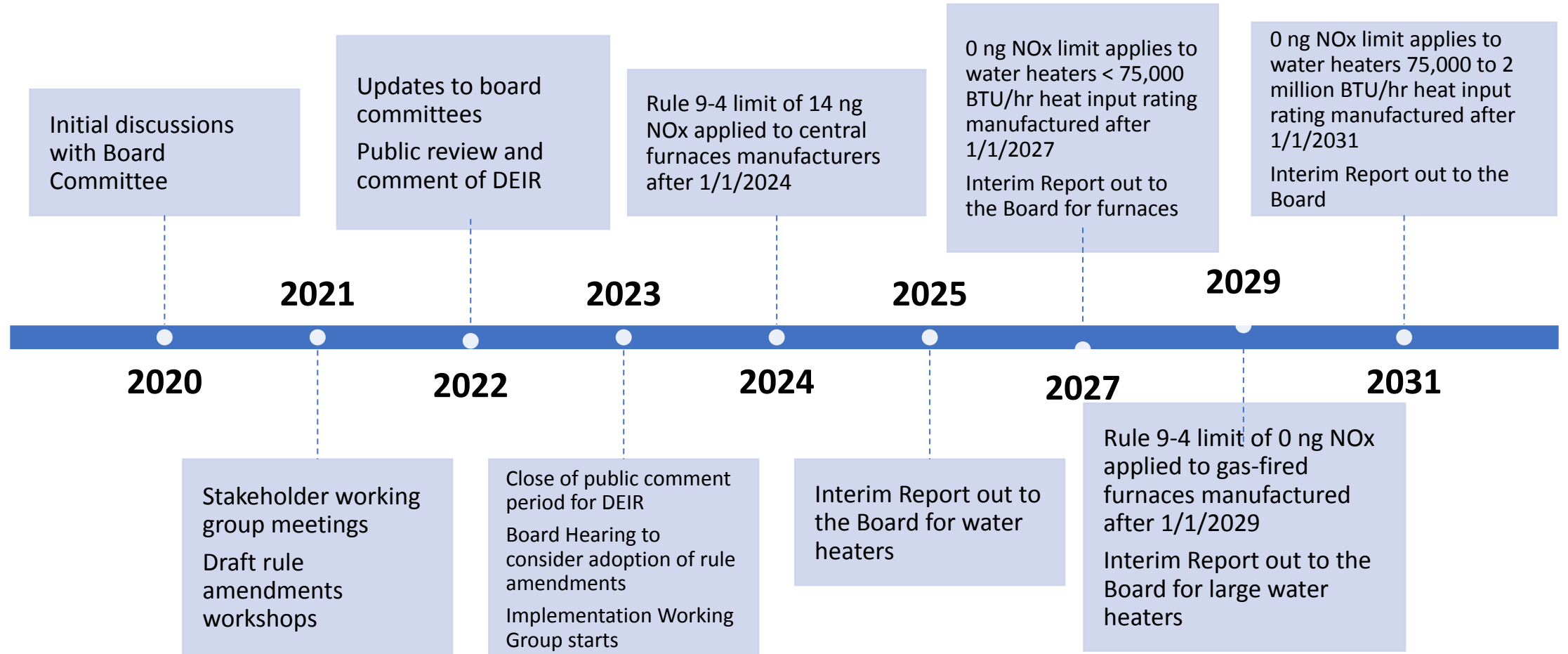
A: No. The proposed amendments only effect water heaters and furnaces whose emissions are vented to the outside.

- NOx and PM2.5 pollution from these 1.8 million appliances harm outdoor air quality and cause health impacts.

**Q: Does this effect propane-fired equipment?**

A: No. These rules have always only applied to natural gas-fired equipment, which are the cause of most of the air pollution from water heaters and furnaces in the Bay Area.

# Timeline





# Questions, Comments?





**Please go to the link in the  
chat to take your *quick*  
survey!**