



Igor Tregub
Councilmember District 4

REVISED AGENDA MATERIAL for Supplemental Packet 2

Meeting Date: November 10, 2025

Item Number: 08

Item Description: Resolution of the City of Berkeley Supporting the Bay Area Air District's Zero Emission Building Appliance Rules

Submitted by: Councilmember Igor Tregub

Councilmember Terry Taplin and Councilmember Mark Humbert added as co-sponsors.



IGOR TREGUB, COUNCILMEMBER DISTRICT 4

CONSENT CALENDAR
November 10, 2025

To: Honorable Mayor and Members of the City Council

From: Councilmember Igor Tregub (Author), Councilmember Cecilia Lunaparra (Co-Sponsor), Councilmember Terry Taplin (Co-Sponsor), Councilmember Mark Humbert (Co-Sponsor)–

Subject: Resolution of the City of Berkeley Supporting the Bay Area Air District's Zero Emission Building Appliance Rules

RECOMMENDATION

Adopt a resolution in support of the Bay Area Air District's Zero-Emission Building Appliance Rules phasing out the sale of polluting gas-fired water heating and space heating equipment ~~when existing fossil fuel equipment needs replacement~~, starting in 2027 for water heaters and 2029 for furnaces. The resolution also supports common-sense amendments to the rules to ensure flexibility for residents who have particular difficulty with compliance.

CURRENT SITUATION AND ITS EFFECTS

The Bay Area Air District's mandate is to protect public health through rules and regulations reducing air pollution. The combustion of gas in building equipment such as furnaces and water heaters, is one of the largest sources of air pollution in the region, generating a range of air pollutants linked to poor health outcomes, including nitrogen oxides (NOx),¹ fine particle pollution (PM2.5),² formaldehyde,³ carbon monoxide,⁴ and benzene, all of which contribute to breathing problems, cardiovascular issues, and

¹ American Lung Association, [Nitrogen Dioxide](#)

² American Lung Association, [Particle Pollution](#)

³ American Lung Association, [Formaldehyde](#)

⁴ American Lung Association, [Carbon Monoxide](#)

dementia. Furthermore, these pollutants cause up to 85 premature deaths⁵ and 15,000 asthma attacks per year,⁶ costing the region \$890 million annually in health-related costs⁷ from air pollution exposure. The Bay Area Air District adopted groundbreaking standards in 2023 that will phase out the sale of residential gas water heaters in 2027 (Rule 9-6), and the sale of gas-furnaces in 2029 (Rule 9-4). Both rules include an implementation working group process which has thus far examined challenges and recommended solutions for the successful, equitable rollout of zero-emission residential water heating. Each implementation working group process will be followed by an amendment process to act on recommendations to provide flexibility for residents who might be unduly harmed by the rule.

The Air District's Zero Emission Building Appliance Rules ~~support~~ align with Berkeley's Strategic Plan Goal to "[b]e a global leader in addressing climate change, advancing environmental justice, and protecting the environment."⁸ Adoption of these rules aligns with California's commitment⁹ to achieving zero-emission space and water heating standards¹⁰ statewide by 2030, and with the City of Berkeley's goal of reaching net zero emissions by 2045 or sooner.

Clean air and health: The Bay Area is ranked among the worst regions in the nation in with respect to air quality, ~~with nearly 30 consecutive years~~ failing to achieve national ambient air quality standards for ozone for nearly 30 consecutive years¹¹ and for fine particulate matter for 15 straight years ~~of nonattainment with fine particulate matter standards~~. Gas-fired heating equipment is one of the chief contributors to health harming emissions. The region's gas-burning appliances in buildings emit more NOx pollution than all passenger vehicles¹²—and more than six times as much NOx as all the power plants in the region combined.¹³ Implementing the Bay Area Air District Zero-Emission Building Appliance Rules would prevent 15,000 asthma attacks annually and save up to \$890 million annually in healthcare costs due to air pollution exposure across the Bay Area,¹⁴ amounting to roughly \$2,000 of health damage per new gas-fired water

⁵ Bay Area Air District, [Air District strengthens building appliance rules to reduce harmful NOx emissions, protect air quality and public health](#)

⁶ Bay Area Air District, [Final Staff Report](#)

⁷ Bay Area Air District, [Air District strengthens building appliance rules to reduce harmful NOx emissions, protect air quality and public health](#)

⁸ City of Berkeley, Strategic Plan, <https://berkeleyca.gov/your-government/our-work/strategic-plan>

⁹ California Air Resources Board, [Appendix F, Building Decarbonization, 2022 Scoping Plan](#)

¹⁰ California Air Resources Board, [Zero-Emission Space and Water Heater Standards](#)

¹¹ U.S. Environmental Protection Agency, [California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants](#)

¹² Bay Area Air District, [Final Staff Report: Proposed Amendments to Building Appliance Rules – Regulation 9, Rule 4: Nitrogen Oxides from Fan Type Residential Central Furnaces and Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters](#)

¹³ U.S. Environmental Protection Agency, [2020 National Emissions Inventory](#)

¹⁴ Bay Area Air District, [Final Staff Report](#)

heater installed and \$4,000 per new furnace installed. This pollution contributes to higher asthma rates and poor health outcomes in communities of color and low-income communities.¹⁵

Meeting climate commitments: Burning fossil fuels in homes for heating is responsible for roughly 11% of California's statewide climate emissions.¹⁶ Berkeley's Climate Action Plan has a goal that new and existing Berkeley buildings achieve zero net energy consumption by 2045 or sooner.¹⁷ Heat pumps reduce lifetime space heating emissions by up to 93% compared to gas equipment in California.¹⁸ The Bay Area rules represent the best opportunity for Bay Area jurisdictions to reduce fossil fuel emissions from buildings and meet their net-zero targets for the buildings sector.

BACKGROUND

The Bay Area Air District adopted groundbreaking standards in 2023 that will help accelerate adoption of efficient electric heat pumps, cutting deadly air pollution and making energy bills more affordable. The standards will only apply when existing fossil fuel equipment needs replacement and will phase in gradually starting in 2027 for water heaters and 2029 for furnaces. The Air District is also currently working to amend these rules to include common-sense flexibility measures.

RATIONALE FOR RECOMMENDATION

There is concern that the fossil fuel industry and its allies will use the amendment process at the Bay Area Air District to [pressure the District to](#) roll back these clean air standards entirely. Environmental, health, community, climate and environmental justice groups are mobilizing to protect these standards while working with staff to incorporate flexibility measures to help ensure smooth, affordable, and equitable implementation.

Resolutions of support from Bay Area jurisdictions will bolster the Bay Area Air District in its efforts to conduct reasoned and fact-based rulemaking and avoid politicization of a critical regulatory effort with consequences for the health and wellbeing of Bay Area residents.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

¹⁵ Tessum, et al. [PM2.5 pollutants disproportionately and systemically affect people of color in the United States](#)

¹⁶ California Air Resources Board, [California Greenhouse Gas Emissions from 2000 to 2021: Trends of Emissions and Other Indicators](#)

¹⁷ City of Berkeley, [Climate Action Plan](#)

¹⁸ Jack Teener and Lacey Tan, *RMI*, [Now Is the Time to Go All In on Heat Pumps](#)

The resolution expresses support [for](#) the Air District's Zero Emission Building Appliance Rules, which will have the following impacts if implemented fully:

As noted above, implementing the Bay Area Air District Zero-Emission Building Appliance Rules would prevent 15,000 asthma attacks annually and save up to \$890 million annually in healthcare costs due to air pollution exposure across the Bay Area, with disproportionate impacts for communities of color and low-income communities.¹⁹

Also noted above, burning fossil fuels in homes for heating is responsible for roughly 11% of California's statewide climate emissions. Heat pumps reduce lifetime space heating emissions by up to 93% compared to gas equipment in California. In denser urban settings like Berkeley, burning gas in buildings makes up a larger proportion of greenhouse gas emissions. Berkeley's Climate Action Plan 2023 update estimated that burning gas in residential and commercial buildings makes up 35 percent of Berkeley's greenhouse gas emissions.²⁰ The Air District's rules would ensure that as gas-fired heating appliances break or reach the end of their useful lives, that they are replaced with zero-emission alternatives like high-efficiency heat pumps. This would likely put Berkeley on the path to eliminating the bulk of its greenhouse gas emissions from burning gas in buildings simply by complying with the Air District rules.

FINANCIAL IMPLICATIONS

Limited staff time associated with communicating the city's position to the Bay Area Air District

CONTACT PERSON

Councilmember Igor Tregub, Council District 4
510-981-7140
ltregub@berkeleyca.gov

Amy Johnson, Legislative Aide, Council District 4
amjohnson@berkeleyca.gov

Attachments:

1. Resolution
2. [Air District Factsheet](#)
3. BACA Two-pager on Air District Rules

¹⁹ Bay Area Air District, [Final Staff Report](#)

²⁰ City of Berkeley, [Climate Action Plan and Resilience Update, Item 23](#)

RESOLUTION NO. ##, ###-N.S.

RESOLUTION OF THE CITY OF BERKELEY SUPPORTING THE BAY AREA AIR DISTRICT'S ZERO-EMISSION BUILDING APPLIANCE RULES

WHEREAS, the combustion of gas in building equipment like furnaces and water heaters generates a range of air pollutants linked to poor health outcomes, including nitrogen oxides (NOx), fine particle pollution (PM2.5), formaldehyde, carbon monoxide, and benzene, which contribute to breathing problems, asthma attacks, cardiovascular issues, dementia, and premature death; and

WHEREAS, gas-powered furnaces and water heaters are major contributors to smog-forming NOx pollution and PM2.5 in the Bay Area, ~~causing which together cause~~ up to 85 premature deaths and 15,000 asthma attacks per year, and ~~costing~~ the region \$890 million annually in health-related costs from air pollution exposure; and

WHEREAS, communities of color are disproportionately exposed to health-harming pollution from gas combustion in homes and businesses, both nationally and in the Bay Area; and

WHEREAS, the Bay Area faces an ongoing air quality crisis – ~~it has failed for with~~ nearly 30 consecutive years ~~failing~~ to achieve national ambient air quality standards for ozone ~~and 15 straight years of nonattainment with failed to achieve~~ fine particulate matter standards – and further reductions of particulate matter and ozone pollution through the implementation of all feasible measures are needed for attainment and maintenance of these health-protective standards; and

WHEREAS, gas-burning building equipment in the region's homes and businesses emits more NOx pollution than all the Bay Area's passenger cars combined, making it one of the top sources of pollution in the region; and

WHEREAS, the Bay Area Air District's Board of Directors adopted Rules 9-4 and 9-6 in March of 2023 ~~without any "no" votes~~ unanimously, establishing future zero-NOx standards for water heaters and furnaces, and these rules will accelerate the transition to zero-polluting heating equipment in the region as businesses' and residents' old equipment reaches end of life; and

WHEREAS, the Air District's Implementation Working Group has worked with the Air District to achieve a successful and equitable implementation of the zero-emission rules to residential water heating in 2027; and

WHEREAS, the Air District is now conducting an additional rulemaking to introduce common-sense flexibility measures into the zero-NOx equipment rules to provide options for businesses and residents who may face challenges complying with them; and

WHEREAS, switching from gas-powered space and water heating to efficient zero-emission appliances like electric heat pumps reduces smog-forming pollution, enhances climate resilience, and improves household resilience by introducing reliable cooling and improved air filtration to homes without air conditioning; and

WHEREAS, the Air District's zero-NOx furnace and water heater rules help the City of Berkeley make substantial progress toward achieving its/our climate goals of reducing and eventually eliminating the burning of fossil fuels, a step required to curb global warming and mitigate sea level rise, extreme heat, and climate related natural disasters; and

WHEREAS, adoption of these rules aligns with California's commitment to achieving zero-emission space and water heating standards statewide by 2030, and with the City of Berkeley's goal of reaching net zero emissions by 2045 or sooner; and

WHEREAS, the City of Berkeley has been integrally involved in planning for the implementation of these rules and has participated in the Air District's Implementation Working Group, which has thus far examined challenges and recommended solutions for the successful, equitable rollout of zero-emission residential water heating.

NOW THEREFORE, BE IT RESOLVED, that the City of Berkeley supports the timely implementation of the Bay Area Air District's Rules 9-4 and 9-6 to accelerate the transition to zero-emission water heaters and furnaces, with common-sense amendments to ensure flexibility for residents who have particular difficulty with compliance.



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