

Melissa Thurman

From: Diane Bailey <diane@menlospark.org>
Sent: Wednesday, October 12, 2022 10:14 AM
To: Town Center; Craig Hughes; Sarah Wernikoff; Maryann Moise Derwin; John Richards; Jeff Aalfs
Cc: Brandi de Garmeaux
Subject: Support for a Comprehensive Reach Code to phase out gas from both New and Existing Buildings (Agenda Item 6a)
Attachments: FFBSV Support Letter to the Town of Portola Valley for a Strong Existing Building Reach Code.pdf

Dear Mayor Hughes and Council Members,

On behalf of the Campaign for Fossil Free Buildings in Silicon Valley (FFBSV), and the undersigned, please find our comments attached urging you to fully consider a *comprehensive* Reach Code for new and *existing* buildings. It is essential that Portola Valley, a longtime leader on green building, consider all reasonable measures to prevent new uses of gas and facilitate the necessary transition from fossil gas at the speed and scale called for by the Intergovernmental Panel on Climate Change, as well as to address the air quality, health, and safety impacts of current fossil gas use in our homes and other buildings.

We appreciate the efforts of city staff and Sustainability Committee members to discuss reach codes over several years. We support the excellent proposal for all-electric new construction, as well as the consideration for existing buildings. However, the current proposal for existing buildings, which is limited to only a minor requirement for new Air Conditioners to dual mode electric heat pumps could be strengthened to include important provisions for remodels that avoid perpetuating gas use. Specifically, we request a discussion of these items for consideration in the current reach code:

1. Heat pump water heaters in Single family homes and duplexes would be required during addition and alteration projects that include water heater replacement
2. Heat pump HVAC Systems in Single family homes and duplexes would be required during addition and alteration projects that include a gas furnace
3. Pools and outdoor equipment in Residential buildings would need to use electric or solar pool heating and any new gas infrastructure would be prohibited for backyard uses such as fire pits, grills, and pools.

Thank you very much for considering our request and please find our full comments attached.

Sincerely,
Diane Bailey

Diane Bailey (she/her), Climate Change Professional ([CC-P](#)) | Executive Director

MENLO SPARK

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The Campaign for Fossil Free Buildings in Silicon Valley

350 Silicon Valley, Acterra, Bay Area for Clean Environment, Carbon Free Silicon Valley, Carbon Free Palo Alto, Carbon Free Mountain View, Cinnamon Energy Systems, Citizens' Climate Lobby San Mateo County, Citizens Environmental Council of Burlingame, Clean Coalition, Climate Reality Project: Santa Clara County, Coltura, Cool Block, Drawdown Bay Area, Earthy B, Electrify Now, emeraldECO, Fossil Free Mid-Peninsula, GreenTown Los Altos, Indivisible Ross Valley, Kitchens of Life, Menlo Spark, Menlo Together, Mothers Out Front Silicon Valley, npc Solar, Pacifica Climate Committee, Peninsula Interfaith Climate Action, Project Green Home, Redwood Energy, SIDCO Homes, San Carlos Green, San Francisco Bay Physicians for Social Responsibility, San Mateo Climate Action Team, Sierra Club Loma Prieta Chapter, Sustainable San Mateo County, Sustainable Silicon Valley, Sunnyvale Cool, Silicon Valley Youth Climate Action, and Silicon Valley Youth Climate Strike

October 12, 2022

Town of Portola Valley
765 Portola Road,
Portola Valley, CA 94028
Via email: TownCenter@PortolaValley.net

RE: Support for a Comprehensive Reach Code to phase out gas from both New and Existing Buildings (Agenda Item 6a)

Dear Mayor Hughes and Council Members,

We, the undersigned, on behalf of the Campaign for Fossil Free Buildings in Silicon Valley (FFBSV), urge you to fully consider a *comprehensive* Reach Code for new and *existing* buildings based on the model code provided by the [Bay Area Reach Codes team](#). It is essential that Portola Valley, a longtime leader on green building, consider all reasonable measures to prevent new uses of gas and facilitate the necessary transition from fossil gas at the speed and scale called for by the Intergovernmental Panel on Climate Change, as well as to address the air quality, health, and safety impacts of current fossil gas use in our homes and other buildings.

We appreciate the efforts of city staff and Sustainability Committee members to discuss reach codes over several years. We support the excellent proposal for all-electric new construction, as well as the consideration for existing buildings. However, the current proposal for existing buildings, which is limited to only a minor requirement for new Air Conditioners to dual mode electric heat pumps could be strengthened to include important provisions for remodels that avoid perpetuating gas use. Specifically, we request a discussion of these items for consideration in the current reach code:

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[FFBSV](#) includes the 39 organizations listed above, working together to support an accelerated phase out of fossil fuels in homes and buildings. A rapid transition away from fossil fuel use is critical to avoid the very worst and irreversible impacts of climate change. Preventing the continued use of fossil fuels, including “natural gas” (which is comprised of methane), creates more affordable, cleaner, healthier, and more resilient housing and buildings for communities throughout San Mateo and Santa Clara Counties.

Building Electrification is an Urgent Climate Action

Although the devastating increase in catastrophic wildfires throughout California has raised public awareness of climate change, the depth of the climate crisis is even worse than is commonly understood and demands urgent action. A recent report from California’s nonpartisan Legislative Analyst’s Office detailed how we are already experiencing the impacts of Climate Change.¹ In 2021, California experienced its hottest average summer temperatures, its second largest wildfire, and its third driest year (based on precipitation) on record, and we can expect extreme weather to intensify as the climate continues to change. The LAO report estimates that \$8 to \$10 billion of existing property in California is likely to be underwater by 2050; extreme heat is projected to cause more deaths per year than from car accidents; and at least 13,000 existing housing units in the Bay Area alone, “will no longer be usable” because of sea rise over the next 40 to 100 years.²

Levels of CO₂ in the atmosphere reached 420 parts per million (ppm) last month, which is well above the 280-350 ppm scientists say is ideal for human life.³ This measurement has been certified as the highest level ever recorded, and it’s estimated to be the highest in the last 4.5 million years. A sobering series of reports from the Intergovernmental Panel on Climate Change (IPCC) released from August 2021 through April 2022 have found that humans have had an “unequivocal” influence on climate change and warn that this decade is humanity’s last chance to limit warming.⁴ While the IPCC report revealed that sadly, a 1.5°C rise in planetary temperature is now unavoidable, the potential to limit warming to below 2°C—and avoid even more catastrophic climate impacts—is still possible if the world can achieve net-zero carbon emissions by 2050.⁵ That means we need to begin phasing out fossil fuels right away, including methane gas used to heat and cook with.

The Bay Area Reach Codes Team has provided carefully vetted policies, reviewed by top legal and energy experts to help cities throughout our region meet their climate plan goals and demonstrate much needed progress in phasing out fossil fuel use. They provide additional resources and staffing support to ensure that cities have successful outcomes when adopting these policies. Additional electrification resources that support bold action at this time include:

- The new federal climate bill (Inflation Reduction Act) contains significant funding (up to \$14,000 in direct rebates for each qualifying household) for fixed, low, and middle income residents, and tax credits for everyone.
- Peninsula Clean Energy is launching a zero interest on-bill financing program, along with extensive rebates and home upgrade funding.

Phasing out gas use provides many benefits to community health, safety, and a stable climate future. Extending these benefits to existing homes and buildings is now urgently needed.

- **All-Electric homes and buildings are more efficient.** According to the California Energy Commission, a modern high-efficiency heat pump electric water heater (available at all major retailers) costs roughly one-third less on utility bills to operate than the most efficient gas water heater.⁶ In addition, electric heat pump heating also provides air-conditioning, resulting in less equipment, reduced maintenance costs, and greater climate resilience.

- **Public Safety:** Methane gas is highly flammable. In the past 10 years, 9,000 gas explosions in the U.S have killed more than 500 people, and gas leaks have displaced and sickened thousands of people.⁷ Methane gas also caused half the fires after two major California earthquakes.⁸
- **Health:** Gas stoves release smog-forming compounds such as nitrogen dioxide, unburnt hydrocarbons and carbon monoxide pollution that doubles risks for heart and lung disease and triples the use of asthma medications.⁹ ***In fact, studies have shown that children living in homes using gas for cooking have a more than 40% higher risk of having asthma.***¹⁰ Further, improperly vented gas appliances lead to carbon monoxide poisoning that results in thousands of emergency room visits and several hundred deaths every year.¹¹
- **Climate:** All-electric buildings are a highly visible and practical step forward to address the climate crisis, by breaking the cycle of fossil fuel dependency in buildings. This is the single biggest step that cities can take to address climate this year.
- **Resilience:** Switching from gas to electric at the time of remodel or replacement helps avoid a complex, costly and likely inevitable switch to all-electric heating and appliances in the future, since gas prices are expected to rise sharply, and California is planning to eventually end gas distribution. The California Public Utilities Commission estimates that natural gas rates will increase at twice the rate of electricity through the next 10 years.¹² **Converting to all-electric now will help future-proof Portola Valley.**

In keeping with the latest science, we must actively begin a swift transition from polluting and unhealthy fossil fuels like methane gas. That means preventing new fossil fuel devices from committing to decades more use. We must rise to that challenge and apply our valuable resources of money and time to avoid the worst impacts of the climate crisis. Current and future generations deserve and depend on our best and boldest collaborative efforts.

Thank you for considering our comments. We would be pleased to provide additional information or respond to any questions that might arise.

Sincerely,

Hoai-An Truong, Mothers Out Front Silicon Valley

Leane Eberhart, Architect

Robert M. Gould, MD; President, San Francisco Bay Physicians for Social Responsibility

Linh Dan Do, 350 Silicon Valley Menlo Park Climate Team

Stephanie Morris, Mothers Out Front Silicon Valley

Diane Bailey, Executive Director, Menlo Spark

John McKenna, 350 Silicon Valley Menlo Park Climate Team

Moria Merriweather, Mothers Out Front Silicon Valley

Michelle Hudson, Co-Leader of the San Mateo Climate Action Team

Gary Latshaw, Chair of the Guadalupe Regional Group of the Sierra Club, and staff-scientists of securethefuture2100.org

Susan Butler-Graham, Mothers Out Front Silicon Valley

Kathy Battat, Sierra Club, Loma Prieta Chapter, Environmental Legislative Action committee

Debbie Mytels, Chair, Peninsula Interfaith Climate Action

Cc: Brandi de Garneau

¹ <https://lao.ca.gov/Publications/Series/1>

² <https://calmatters.org/environment/2022/04/california-climate-change-report-legislature/>

³ <https://keelingcurve.ucsd.edu>

<https://www.axios.com/2022/05/04/april-sets-record-highest-co2-levels>

⁴ <https://www.ipcc.ch/report/ar6/wg3/>

<https://www.bloomberg.com/news/features/2021-08-09/ipcc-report-human-caused-climate-change-unequivocal>

⁵ https://www.nytimes.com/2021/08/09/climate/climate-change-report-ipcc-un.html?te=1&nl=climate-fwd:&emc=edit_clim_20210812

⁶ Rider, Ken, Email correspondence, ken.rider@energy.ca.gov. March 2020.

⁷ Joseph, George. "30 Years of Oil and Gas Pipeline Accidents, Mapped." Citylab. November 30, 2016

Sellers, F., Weintraub, K. and Wootson, C. (2018). "Thousands of residents still out of their homes after gas explosions trigger deadly chaos in Massachusetts." Washington Post. https://www.washingtonpost.com/national/thousands-of-residents-still-out-of-their-homes-after-gas-explosions-trigger-deadly-chaos-in-massachusetts/2018/09/14/802ff690-b830-11e8-94eb-3bd52dfe917b_story.html

⁸ Los Angeles in 1994 and San Francisco in 1989, according to the California Seismic Safety Commission. (2002). "Improving Natural Gas Safety in Earthquakes." SSC-02-03

Taylor, Ann. "The Northridge Earthquake: 20 Years Ago Today." The Atlantic. January 17, 2014.

⁹ Jarvis et al. (1996) "Evaluation of asthma prescription measures and health system performance based on emergency department utilization." <https://www.ncbi.nlm.nih.gov/pubmed/8618483>

¹⁰ Lin, W., Brunekreef, B. & Gehring, U. Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children. Int. J. Epidemiol. 42, 1724–1737 (2013).

¹¹ USDN, Methane Math, https://sfenvironment.org/sites/default/files/fliers/files/methane-math_natural-gas-report_final.pdf

¹² "California's Gas System in Transition | Equitable, Affordable, Decarbonized and Smaller." Gridworks, September 29, 2019. https://gridworks.org/wp-content/uploads/2019/09/GW_Calif-Gas-System-report-1.pdf.

CPUC Rate Analysis: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/en-banc/feb-2021-utility-costs-and-affordability-of-the-grid-of-the-future.pdf>