



Frequently Asked Questions About Half Moon Bay's Proposed Building Electrification Ordinance

Updated April 22, 2021

1. What is Building Electrification?

Building Electrification describes the move from Fuel Gas-powered appliances — like furnaces, hot water heaters, and stoves that use natural gas or propane — to clean, highly efficient electric appliances such as electric heat pumps, electric hot water heaters, and induction stoves. Fuel gas is natural or manufactured liquefied petroleum, or a mixture of these. This includes natural gas and propane.

This is an example of a Reach Code - a local building energy regulation that “reaches” beyond the State minimum requirements for energy use in buildings. Reach Codes can help improve energy efficiency, lower energy use, improve indoor air quality, and reduce GHG emissions.

2. Why adopt a Building Electrification Ordinance?

Switching our buildings’ energy sources away from Fuel Gas and toward electric appliances has the potential to drastically reduce the City’s GHG emissions and assist the City in achieving State-wide goals.

The State of California has adopted ambitious climate goals mandating the reduction of greenhouse gas (GHG) emissions by 40% (over 1990 levels) by 2030¹ and to reach carbon neutrality by 2045.²

According to the most recent data, 48% of Half Moon Bay’s GHG emissions come from energy use in buildings, with 80% of those emissions coming from Fuel Gas-powered energy.

97% of Half Moon Bay energy customers are receiving carbon-free electricity from Peninsula Clean Energy (PCE).

3. What will the proposed Building Electrification Ordinance do?

¹ [Senate Bill 32](#) (2016)

² [Executive Order B-55-18](#) (2018)



At its February 2, 2021 study session on Building Decarbonization, the City Council directed staff to draft a Building Electrification Ordinance specifically to:

- a) Require all-electric construction for all new buildings (residential and commercial)
- b) Develop a plan to phase out and ultimately eliminate all Fuel Gas applications and distribution in existing buildings throughout the City, over time

4. What is the status of the proposed ordinance?

City staff published a draft of the Building Electrification Ordinance based on City Council's direction from the February 2, 2021 study session on Thursday April 22, 2021.

The City Council directed staff to launch a community outreach effort to encourage and gather more input on this issue from the City's businesses and residents, to help ensure the public understands the proposal and to better determine the impacts of the proposed policy. Input on this ordinance from businesses and residents will be of great value as the City proceeds through this process.

5. What are the next steps, and how can I comment on the proposed ordinance?

A robust public outreach effort to follow from June through September 2021. A first reading of the Ordinance will be presented to City Council after public input has been received, and no earlier than September 2021.

Public outreach meetings will be announced in the City's weekly eNews, monthly Sustainability Source newsletter, and on the City's dedicated webpage on this issue - <http://www.hmbcity.com/buildingelectrification>).

Ordinances must go through a minimum of two readings at a public meeting before becoming adopted. The public can participate and provide comments at one or both of the readings of the Ordinance.

6. Where can I find more information?

All information regarding the Building Electrification Ordinance process will be posted to www.hmbcity.com/reachcodes.

7. Who should I contact with questions and comments?



Questions and comments about the Half Moon Bay Building Electrification Ordinance should be directed to:

Veronika Vostinak, Sustainability Analyst
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Additional FAQs: Electricity vs Fuel Gas

8. Isn't electricity more expensive than Fuel Gas?

While electricity is more expensive per BTU than Fuel Gas, electric appliances like heat pumps are generally more efficient and use less energy overall to run. The costs to run will vary depending on the product chosen and consumer behavior.

9. Is electricity from the grid "clean?"

PCE's base service is 100% carbon-free as of January 2021.

To learn more about PCE's power mix, please [visit the PCE website](#).

10. How reliable is the electric grid as compared to natural gas?

The natural gas grid and electric grid both go down on occasion. In fact, during California's primary natural disaster events, wildfires and earthquakes, utilities are supposed to turn the gas off. Additionally, many new fuel gas appliances require electricity to operate.

If 100% reliability is a goal for your home or project, electrification with battery and solar backup is the best option.

11. Does all-electric heating use a lot of energy and can it work in our cool climate?

All-electric heat pumps are highly efficient and effective in weather far colder than our typical local temperatures. Department of Energy studies show heat pump space heaters are highly efficient at as little as 5 degrees Fahrenheit. California Energy Commissions cost effectiveness studies also show high efficiency.

12. Don't people prefer gas stoves?

Many people may prefer gas stoves. However, most people are unfamiliar with induction stoves which offer superior speed and control, maintain cool and safe surfaces while cooking, and offer better indoor air quality. Induction stoves are increasing in popularity and are a great alternative to gas stoves.

13. What are the safety and health benefits of Building Electrification?

Based on studies around risks related to fire and respiratory issues, electrification offers safety and health benefits.

Research indicates that natural gas is a major fire risk in the event of earthquake. The link between earthquakes and natural gas-triggered fires is documented in the [State's 2002 study](#).

Natural gas use in the home is linked with asthma and other health risks:

- [EPA identifies indoor air quality as a significant health risk and gas appliances are listed as a point of concern.](#)
- [2019 meta research links gas stoves and asthma.](#)
- [2008 Johns Hopkins study linking gas stoves and asthma](#)
- Lawrence Berkeley Labs, California Energy Commission, and others have also produced similar studies
- Carbon monoxide from fuel use has been long deemed a risk, to the extent that [CO sensors are required in homes that burn fossil fuels.](#)