

From: Mary Williams <[REDACTED]>

Sent: Wednesday, July 6, 2022 10:04 PM

To: Sustainability & Infrastructure Commission <SandICommission@cityofsanmateo.org>; City Council (San Mateo) <CityCouncil@cityofsanmateo.org>

Subject: proposed gas ban

Dear Members of the San Mateo Sustainability and Infrastructure Commission,
Dear Members of the San Mateo City Council,

I am very concerned that both the Sustainability and Infrastructure Commission and the San Mateo City Council are discussing mandating not only a ban on natural gas usage in new construction but also the conversion of all existing homes to all electric.

First, you have bought into the socialist climate agenda and, without any evidence, want to totally redo the energy industry and how people live. Such a proposal will profoundly damage both this area and this country. The intended purpose has nothing to do with climate (our climate is not changing and banning natural gas will do nothing about any greenhouse gases). The purpose is power--the power to dictate to people what they must do, to take control of the energy industry, and thereby to take control of this country in order to create a new socialist form of government.

Second, gas is inexpensive, clean, abundant in the United States. There is no reason to require such a ban. You are creating an imaginary problem and then rushing in to "solve" what does not exist.

Third, you are insisting on all electric. Where will that electric power come from? Renewables will not be able to provide sufficient power for our grid or our state. Yes, California glosses over this now by buying power from out of state. But if gas is banned, the need for power will be so great that windmills and solar will not be able to satisfy it and other purchases will not either. This will put people in danger because there will be power outages, food will spoil, and stores will close.

Four, the demand that all energy be electric will be tremendously costly. Our rates have been going up every month. People cannot afford the green agenda now, and they really won't be able to do so in the future. The requirement of all electric in homes will astronomically increase costs for all of us. And it is not necessary.

Five, the cost for a single-home conversion to all electric power will be huge. A new electrical box will run \$6000 or more. A water heater plus installation will be \$5000-6000. And then there is the range and heater. Sure, you all will probably get kickbacks from the plumbers and electricians and PG&E. But we citizens of San Mateo will have to pay for this nonsense. And continue to pay, and pay, and pay.

Six, who the hell are you to tell me what I can and cannot do with my home? It is my home and my property, not yours.

Sincerely,

Mary Frances Williams, Ph.D.

From: Jeffrey Wang <[REDACTED]>

Sent: Friday, July 1, 2022 10:12 AM

To: Sustainability & Infrastructure Commission <SandlCommission@cityofsanmateo.org>

Subject: Ending Use of Gas Appliances

Commission members-

I read recently that your Commission is discussing banning gas appliances in existing homes. This concerns me. I'm a retired mechanical engineer who worked for Lockheed Martin(LM) for over 30 years and helped design spacecraft and silicon solar panels that were about 10% efficient. As a consumer worried about climate change I was very interested in adding solar panels to my home but didn't do so until last year when I could purchase 21% efficient panels at a reasonable cost that I expect will pay for themselves in 15-20 years. However, it was a huge upfront cost of over \$21,000 and not everyone can afford that.

Speaking of gas appliances, I recently discovered that heat pump water heaters are now available, but tried to find a cost estimate and could not. I know electric heat pump heating and cooling systems are available and now more efficient due to recent advances. However I have no idea how much it would cost to replace an existing gas home heating/cooling system. My expectation is that these systems would be very expensive as current gas system replacements have become very expensive. The only conclusion I can draw is that mandating an end to gas appliances in the near future without taking the cost and efficiency of these new systems into account is foolhardy and would cause a backlash that would make people wary of any future actions on your part."

Jeff Wang
[REDACTED]

From: Kenneth E Abreu [REDACTED]
Sent: Tuesday, June 7, 2022 1:59 PM
To: Andrea Chow; City Council (San Mateo); Sustainability & Infrastructure Commission
Subject: Reach Code 2022
Attachments: Reach code letter June 2022.docx

To: Andrea Chow, Sustainability Analyst, San Mateo City Council and San Mateo Sustainability and Infrastructure Commission

Subject: Reach Code 2022

My name is Ken Abreu and I'm a long-term San Mateo resident and small business owner. I'd like to provide some thoughts on Reach Code 2022 proposal.

I became aware of the possible changes in an article in the San Mateo Daily Journal on the April 13, 2022 meeting of the Sustainability and Infrastructure Commission on the Reach Code 2022. It raised some concerns for me. So, in this email I'd like to provide some ideas and information for your consideration.

The thing that raised my concern was that policies should be established to decarbonize existing buildings and to eliminate natural gas by 2030.

In addition to being a long-term home owner and small business owner, I also was a practicing mechanical engineer in the energy field until I retired. So, I've thought a lot about issues of climate change and actively support strong actions to address it.

Also, since I retired, I've been very active in advocating for affordable housing and for addressing the income and wealth inequality.

Let me begin by establishing some goals and values that I think are important and I expect are important to you.

- Climate change must be aggressively addressed to protect future generations.
- Income and wealth inequality must be significantly reduced to assure a better future. The lack of affordable housing is one of the key drivers of this inequality in our area. Also, the lack of affordable housing contributes to more Green House Gas (GHG) emissions because of longer commutes.

My key concern is that in establishing policies we must try to balance these goals and values. It's not easy. But to aggressively implement some policies that might reduce GHG emissions, we might further increase the income and wealth inequality in our society. Or by implementing some policies to close the inequality gap we might cause more GHG emissions. And in some cases, policies intended to reduce GHG can result in increased GHG emissions.

Below I'll give you some things to think about from the perspective of a small business owner, a home owner and an energy engineer.

The small businesses we operate are laundromats. Our customers are primarily lower and middle income residents. This is an essential service. Natural gas is used to run the dryers and to heat the hot water. The business is capital intensive and equipment (washers, dryers and boilers) typically need a long life (15-25 years) to amortize the capital costs and keep the costs down. Providing the heat for dryers and hot water is much less costly with natural gas than with electricity and will likely stay that way for many years. Conversion to electric heating will also require a major investment to upgrade the electric feed into the laundromat in addition to the major cost of replacing the dryers and boilers. All the costs need to be

recovered from the customers through our vending prices. Finally, technology is continuing to lower the energy requirements of the laundry equipment[1].

In thinking about requiring elimination of natural gas by 2030 or from existing laundromats, keep in mind that this would significantly raise the costs for lower and middle income residents to do the essential chore of laundry. These folks are already financially stretched to live in San Mateo and this would only make things worse. Also, if this were imposed in San Mateo, but not adjacent cities the laundromats in San Mateo would close down as uneconomic and residents would drive to adjacent cities (thus creating more GHG) to do their laundry.

Now, from a homeowner perspective, we are planning to make an investment in the next year or so to reduce our GHG emissions. We are fortunate to own our home almost 40 years and have some funds we can use to invest. Many younger families can barely afford a home. Let alone a costly energy investment to reduce GHG. Our investment options include install solar on the roof, install a battery, replace our hybrid car with an EV, replace our natural gas hot water heater, replace our natural gas furnace or replace our gas stove. All of these would be major investments of thousands of dollars. When looking at our gas consumption it is clear that the amount we use for water heating and cooking[2] is very small. The bulk of our natural gas use is winter space heating. We don't have air conditioning. Right now, we are thinking that the best investments might be for the EV and then at some point the solar panels and battery.

If we were required to replace our appliances (furnace, stove, water heater) with electric appliances we may not have the funds to get an EV or install solar panels. But for us, getting an EV and adding solar will probably do a lot more to reduce GHG than replacing our appliances.

So, in thinking about changes to existing homes it is quite possible that a conversion to all electric may be more expensive, particularly the initial cost, depending on the situation at each existing house. This would be particularly burdensome for younger families and low and middle income families, who already struggle with housing costs. Also, the right investment for people to make on their existing home is different from home to home.

In conclusion, I request that in deciding on the Reach Code for 2022 you look at balancing the goal of GHG reduction with the goal of making housing more affordable and reducing income and wealth inequality. Please consider the information I've provided you in the email. The underlying issue is how to best allocate money and resources to gain the most value for all our people. Money and resources are constrained. Also, requiring electric for new construction is generally much lower cost than for most existing buildings. It's also important to make sure there is consistency with adjacent cities so as not to encourage businesses and customers leaving San Mateo.

The information I provide in this email should not be taken as an excuse to lessen efforts to reduce GHG emissions. Climate change is one of the major issues of our time and strong actions must be taken. But be thoughtful and innovative in your actions and make sure to pursue other major goals like income inequality and affordable housing.

I do think the Staff report of April 13, 2022 is a reasonable start for balancing these goals, but more will need to be done over time. But it needs to be done thoughtfully.

I hope you find this information useful and will factor it into your considerations. Feel free to email me or call me if that would be helpful to you. Thank you all for your work on these important issues.

Respectfully,

Ken Abreu

[REDACTED]

[REDACTED] (cell)

[1] For example: When replacing old washers with new washers the amount of water (hot and cold) has been reduced significantly (as much as needing only 1/3 the amount). New boilers of over 90% efficiency can replace old boilers of 70% efficiency. New detergents have made washing with hot water unnecessary for most loads. Newer high spin washers take more water out in the final spin of the wash and thus less drying is needed. Also, the California Energy Commission (CEC) through appliance standards continues to require more efficient appliances.

[2] We use a microwave oven or small electric convection oven for a lot of our cooking.

From: Alan R. Mattlage [REDACTED]
Sent: Thursday, May 26, 2022 4:05 PM
To: Sustainability & Infrastructure Commission <SandICommission@cityofsanmateo.org>
Subject: Methane Gas Fee

Dear Commissioners,

Yesterday, I watched the video of your April 13 meeting in which you discussed the City Staff's proposed reach codes. There was much discussion about the "feasibility" of retrofitting buildings. It seemed feasibility depended mainly on a cost-benefit analysis which in turn depended solely on the costs borne by the building owner; however, this is only part of the costs related to the use of methane gas versus all-electric appliances. It does not consider the cost of the use of methane gas in buildings that is borne by the public at large, i.e., the "social cost of carbon" resulting from greenhouse gas emissions. Just today, the Supreme Court issued an emergency order allowing federal agencies to continue using \$51 per metric ton as the social cost of carbon. I did a bit of work to calculate a ballpark figure on what this might mean for methane gas emissions from San Mateo's buildings. (See my sources below.)

The average San Francisco household uses roughly 36 million BTUs per year (36.1 million in 2019). This would amount to roughly 1.9 metric tons of CO2 emissions. At \$51 per metric ton, the cost that the average San Francisco household is forcing the public to pay is \$96.90 per year from burning methane gas. Additionally, the 1.9 metric tons of CO2 emissions is a result only of methane that is burned. It does not include the planet warming effects of methane leaks which are not insignificant. So the \$96.90 annual social cost of carbon from methane use by the average SF household is a conservative estimate.

I was pleased to hear Commissioner Narita raise the prospect of essentially charging a fee to building owners who use methane gas appliances. Using the federally determined social cost of carbon, we might set that fee at something like \$96.90 per year. This would require methane gas users to pay the full cost of their appliances. Alternatively, a more nuanced fee might be calculated to more accurately assess the social cost of carbon for methane emissions for each individual San Mateo building. With PG&E's participation, this could be based on the actual number of BTUs used by buildings as determined on their gas bills. *The revenue could then be used to overcome some of the equity concerns that phasing out methane raises.* I write this only to suggest a ballpark figure for what a justifiable fee might be. Professional staff could surely refine my numbers.

I strongly encourage you to look into this financing strategy as you consider San Mateo's reach code. I hope to receive a response from you to this, lest I find myself advocating an unwise policy. For the sites I used in making these calculations, see <https://www.sandiego.edu/soles/hub-nonprofit/initiatives/dashboard/electricity.php> and https://www.eia.gov/environment/emissions/co2_vol_mass.php.

Thank you for your time and attention.
Alan

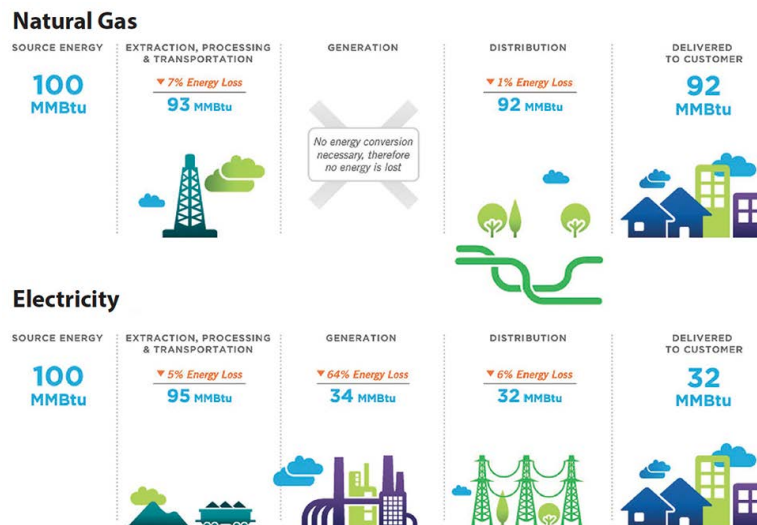
"It is a magnificent thing to be alive in a moment that matters so much."
-- Ayana Elizabeth Johnson

From: Richard Schram [REDACTED]
Sent: Sunday, May 1, 2022 10:36 AM
To: Sustainability & Infrastructure Commission <SandICommission@cityofsanmateo.org>
Subject: Elimination of gas from all of San Mateo

Removing Energy Choice A Bad Decision

There are multiple reasons to not force electricity only on the homes and businesses' of San Mateo.

- 1) This is a **REGRESSIVE** policy. A much higher economic burden will be placed on the renters, the poor and seniors of San Mateo.
- 2) This is an **INFLATIONARY** policy. Costs of heating water and area heating will go up. Gas is more cost-effective and can deliver more therms at a lower price.
- 3) Gas delivery is much more efficient than electricity. As much as 60% of the energy is lost in the production/generation/distribution of electricity. See below attachment.
- 4) Having multiple sources of energy gives the consumer choice and availability should one source fail. The idiom "Don't put all your eggs in one basket" certainly applies. By limiting choice we risk controlling costs and availability.
- 5) Technology is not infallible. The possibility of failure of any single source of energy is inevitable. War, terrorism, strikes, maintenance problems, equipment failure, fires, accidents, and storms can all disrupt electric service.
- 6) The costs of changing from natural gas are not just new appliances. New internal high voltage wiring, higher capacity electric junction boxes, and a higher amperage electric service from the energy supplier will be required. This can amount to tens of thousands of dollars for each household and possibly hundreds of thousands of dollars for multifamily residential buildings and commercial buildings.
- 7) Presently, California electric suppliers are not capable of supplying our present energy needs. With the move to electric vehicles this trend will only worsen. A move to all properties using only electricity will only exacerbate the problem.
- 8) Nearly 45% of the natural gas burned in California is used for electricity production!



From: Bhushan Gupta [REDACTED]
Sent: Sunday, April 17, 2022 12:28 PM
To: Sustainability & Infrastructure Commission <SandlCommission@cityofsanmateo.org>
Subject: Re Cancelling Natural Gas in San Mateo

Dear Mr. Loraine,

I am a senior citizen living in Belmont in a one family house.

I am extremely concerned of losing a choice to heat my home with American Natural Gas.

In view of crappy infrastructure provided by PGE for electricity and high cost of Electricity I will prefer that County should not take away this choice from us.

Being senior citizens we hate heat pump heat which provides cold hot air as compared to Natural Gas, Unless you envision people using high Wattage resistance heat.

Ultimately I will like to know where would PGE get electricity at night (when we need to heat house and use hot water in the morning)when there is no sun.

My answer will be fossil fuel unless you want to authorize nuclear power plants.

So my ability to have a choice of Natural Gas is extremely important to me.

I would like this letter to be part of your record and pass this to all members of board and acknowledge receipt and an explanation to my questions.

Thank you

Bhushan Gupta

[REDACTED] Belmont CA 94002