Proposed Green Building Reach Codes

How can we make home remodels more sustainable? Survey on green building reach codes.

Summary Of Responses

As of September 14, 2022, 8:43 AM, this forum had:		Topic Start	Topic End
Attendees:	161	August 30, 2022, 2:31 PM	September 13, 2022, 11:59 PM
Responses:	98		
Hours of Public Comment:	4.9		

QUESTION 1

How concerned are you about climate change?

	%	Count
Very concerned	68.4%	67
Somewhat concerned	14.3%	14
Neutral	12.2%	12
Not very concerned	3.1%	3
Not at all concerned	2.0%	2

QUESTION 2

Did you attend the August 30th Community Meeting on Proposed Green Building Reach Codes held on Zoom?

	%	Count
Yes	13.3%	13
No	86.7%	85

QUESTION 3

Proposed Green Building Reach Codes

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How much have you heard, seen, or read recently about the City of San Mateo's Green Building Reach Codes?

	%	Count
A great deal	40.8%	40
A little	46.9%	46
Nothing at all	12.2%	12

QUESTION 4

Do you support or oppose proposed Reach Code Option 1 that requires panel capacity for future electrification of gas appliances at time of electrical panel upgrade in residential buildings?

	%	Count
Strongly support	51.6%	49
Somewhat support	17.9%	17
Neutral	6.3%	6
Somewhat oppose	9.5%	9
Strongly oppose	14.7%	14

QUESTION 5

Do you have any other comments about Reach Code Option 1?

Answered	32
Skipped	66

SEE PAGE 9 FOR RESPONSES TO QUESTION 5

QUESTION 6

Do you support or oppose proposed Reach Code Option 2 that requires the installation of outlets at time of kitchen or laundry room renovations in single family homes if a gas stove or gas dryer is installed?

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		%	Count
Strongly support		48.4%	46
Somewhat support		12.6%	12
Neutral		5.3%	5
Somewhat oppose		11.6%	11
Strongly oppose		22.1%	21

QUESTION 7

Do you have any other comments about Reach Code Option 2?

Answered	31
Skipped	67

SEE PAGE 10 FOR RESPONSES TO QUESTION 7

QUESTION 8

Do you support or oppose proposed Reach Code Option 3 that requires heat pump air conditioning installation at time of AC installation and gas furnace replacement in single family homes and duplexes?

		%	Count
Strongly support		41.1%	39
Somewhat support		15.8%	15
Neutral		7.4%	7
Somewhat oppose		13.7%	13
Strongly oppose		22.1%	21

QUESTION 9

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Do you have any other comments about Reach Code Option 3?

Answered	36
Skipped	62

SEE PAGE 11 FOR RESPONSES TO QUESTION 9

QUESTION 10

Do you support or oppose proposed Reach Code Option 4A that requires new pools use electric or solar water heating at existing residential buildings?

	%	Count
Strongly support	61.1%	58
Somewhat support	15.8%	15
Neutral	9.5%	9
Somewhat oppose	7.4%	7
Strongly oppose	6.3%	6

QUESTION 11

Do you have any other comments about Reach Code Option 4A?

Answered	18
Skipped	80

SEE PAGE 12 FOR RESPONSES TO QUESTION 11

QUESTION 12

Do you support or oppose proposed Reach Code Option 4B that would prohibit the extension of fuel gas infrastructure in the backyard of existing residential buildings, thus, prohibiting fossil gas use for fire pits, grills, and water heating for pools?

	%	Count
Strongly support	41.9%	39

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		%	Count
Somewhat support		8.6%	8
Neutral		7.5%	7
Somewhat oppose		10.8%	10
Strongly oppose		31.2%	29

QUESTION 13

Do you have any other comments about Reach Code Option 4B?

Answered	30
Skipped	68

SEE PAGE 13 FOR RESPONSES TO QUESTION 13

QUESTION 14

Do you support or oppose proposed Reach Code Option 5 that requires the installation of a heat pump water heater as part of an addition or alteration projects that include a water heater replacement in single family homes?

		%	Count
Strongly support		30.9%	29
Somewhat support		19.1%	18
Neutral		8.5%	8
Somewhat oppose		10.6%	10
Strongly oppose		30.9%	29

QUESTION 15

Do you have any other comments about Reach Code Option 5?

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Answered	34
Skipped	64

SEE PAGE 14 FOR RESPONSES TO QUESTION 15

QUESTION 16

How concerned are you by the potential cost increase for homeowners as result of adopting these proposed green building reach codes?

	%	Count
Very concerned	60.4%	58
Somewhat concerned	28.1%	27
Not concerned	10.4%	10
Not sure	1.0%	1

QUESTION 17

Do you think these green building reach code options:

	%	Count
help reduce greenhouse gas emissions	32.0%	31
do not go far enough	23.7%	23
go too far	35.1%	34
not sure	9.3%	9

QUESTION 18

Is there anything else you would like to share about these green building reach code options?

Answered	52

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Skipped 46

SEE PAGE 15 FOR RESPONSES TO QUESTION 18

QUESTION 19

Which of the following describes your connection to the City of San Mateo?

		%	Count
Live in San Mateo		69.4%	68
Work in San Mateo		3.1%	3
Live and work in San Mateo		21.4%	21
Visit San Mateo to shop, dine or for recreation		6.1%	6

QUESTION 20

What is your age group?

		%	Count
18-24 years		1.0%	1
25-40 years		14.3%	14
41-64 years		55.1%	54
65+ years		29.6%	29

QUESTION 21

Which best describes your current housing situation?

		%	Count
Own my home		90.8%	89

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		%	Count
Pay rent for my home		8.2%	8
Other		1.0%	1

Question 5: Do you have any other comments about Reach Code Option 1?

- Be more specific. How many reserved breaker(s) space and amps? stove, oven, water heat, furnace, EV?
- This is a practical measure that helps residents plan and prepare for the transition.
- Really great way to ease the transmission at an opportune time.
- This will be very cost prohibitive for homeowners.
- This is a "no brainer" except for some potentially unique situations which a process is needed for dealing with.
- How will low-income residents be assisted with the cost? Can you bring the big wealthy local companies on board to donate? Especially those that will benefit from electrification?
- Making decisions without any idea of their negative consequences is dangerous...how is the electric generated on a necessary scale and can the grid even work unless new power generation are developed
- How much extra capacity?
- You don't know when the other appliances go out and need replacement, so change out only as needed for upgrading to electrical panel.
- We should be requiring all remodels to be permitted--- make it easier. AND also make home inspection reports PUBLIC and available to EVERYONE!!! There is NO reason why new homeowners should have to guess at the renovations done to their home or the actual condition it is in. Please keep these records public. Every house should have history like a car. Except houses are more expensive! We need a lemon law for homes.
- I am concerned about the cost to homeowners. Panel upgrades are expensive - what is the cost to homeowners?
- As a community, as we makes plan for transition to all electric, may be be mindful of our citizens who may not have the financial resources to make the necessary changes?
- Gas fireplaces should be exempt. Electrical fireplaces are improving but aren't there yet. Lack of flame fireplaces reduces home value and quality of life.
- hopefully low-income homeowners will receive some fin. assistance to meet this requirement
- I don't think all electric is the way to go anytime soon. Natural gas is less expensive and still clean. What will people do in power outages or heat waves? This just makes it more expensive for everyone!
- Complete horse shit. Over 1500 scientists have said there is nothing extraordinary about the climate. Just a way for politicians to tax and spend more of our money
- This is a weak measure as it will not have a significant or near-term impact on reducing GHGs. It should be implemented, but due to the urgency of the climate crisis, far stronger measures are needed.
- added expense that may not be affordable to all house owners
- Verify that PG&E will run additional capacity to older buildings up to the Meter no cost.
- Isn't it already expensive enough to do home remodeling, but now you will require me to get a new panel?
- A cost-share programs needs to be developed for low income residents. Replacing a panel can be very expensive.
- I strongly support this. However, it should be pointed out that a majority of homes can be fully electrified without increasing the panel size. As noted at https://redwoodenergy.net/watt-diet-calculator/, "Most people think electrical upgrades are needed if they add electric appliances, but this can be avoided with thoughtful selection of efficient products or by using load sharing devices."
- Upgrading the panel for electrification capacity make sense at the time of panel upgrade. Less costly.
- How will this be defined? How much future expansion capacity will be needed? In some cases there will be costs to use a larger panel, so upfront cost is not necessarily $0 as indicated in the table above.
- How it will work in existing houses may be difficult and very expensive for homeowner
- Facilitate easy access to grants; check with PG&E whether related upgrades can be expedited
- This is not Reach it is Over-Reach. We are presently in a electric energy crisis already.
- Could be okay if truly limited to panel replacement or upgrade. Not convinced it is no cost item.

- In an existing home if an upgrade is needed for safety reasons I don't think this additional work should be required
- Replacing gas with electric at residences will not offer any meaurable impact on greenhouse gas levels. Recommend the city focus on transportation inprovements.
- unless its new construction, existing residents should have option to keep their gas connections if they have it.
- This is the bare minimum that we should do!

Question 7: Do you have any other comments about Reach Code Option 2?

- Contractors will do only the minimum. Be more specific how many outlets and amps.
- While it is best to inform residents of superior options available today, if they do choose gas then it should not hamper future residents or themselves when the time comes to choose electric appliances.
- Again, this is adding arguably unnecessary costs to the project.
- I think that forcing someone to cook with electricity goes beyond what a city should regulate
- This makes a lot of sense, but there needs to be a process for exceptions (e.g., wiring challenges, etc.)
- same as above
- This seems like a stupid question on it's surface.
- Most of the houses in San Mateo have 60 amp fuse panels and knob and tube wiring with no grounds. The fuse panels are usually in a closet and many houses have no 220V service. Be real about the costs, Starting price will be more like 5000 and could be much more.
- Again, too premature advance preparation and cost for homeowner. Replace as needed.
- Why should a homeowner be forced to pay for something they may never use? When codes change to force new appliances to be electric is the time when these outlets should be installed.
- As a community, as we makes plan for transition to all electric, may be be mindful of our citizens who may not have the financial resources to make the necessary changes? Seniors on fixed incomes, etc.
- Housing costs are already through the roof in SM, this will hurt our poorest residents who are already struggling.
- Cost is much higher because this usually includes upgrades to electrical panel for 220 v.
- hopefully low-income homeowners will receive some fin. assistance to meet this requirement
- Just don’t get the push for this. It makes NO sense.
- Just more horse shit regulations by bought and paid for politicians to make our lives harder
- This is a weak measure as it will not have a significant or near-term impact on reducing GHGs. It should be implemented, but due to the urgency of the climate crisis, far stronger measures are needed.
- added expense that may not be affordable to all house owners
- Hard for low income population to handle
- Unnecessary and burdensome added cost when installing gas appliances which do a better job
- Need a cost-share program.
- Totally makes sense. Much cheaper to do electric readiness at time of renovation.
- Electrical service is unfortunately not entirely reliable, so gas should remain an option for those who choose to use it.
- forcing people to switch fuels and the extra costs to be incurred seems hard to ask, will be especially hard for elderly on fixed income
- This is highly under estimated. Many of the homes in San Mateo will need complete rewiring and higher capacity service.
- Current building codes are adequate for electrical outlet requirements
- The initial description about what is required and when is not the same as your question above. Renovations might not have anything to do with outlets. Government overkill..
- Replacing gas with electric at residences will not offer any meaurable impact on greenhouse gas levels. Recommend the city focus on transportation inprovements
- I believe that a kitchen remodel should require all electric appliances at time of remodel

- Residents should be able to keep their existing gas appliances if they want them.
- You should require that only electric stoves or dryers be installed during renovations now.

Question 9: Do you have any other comments about Reach Code Option 3?

- Only support if the $3k TECH rebates is available. Other incentives include eliminate the $500-$1000 permit fee. Expidite the permitting process at no charge. These cover the installation costs. To reduce operating costs the city provides an annual refund that would equalize operating costs between the heat pump vs the AC/gas furance. This would be in place fo 10 yrs from the date of installation.The money to fund would come from Sacramento.This year under Sentor Becker Menlo Park with a third of our population recieved $3.4M. For the city's population this would be$13.5M. All used to help ease higher operating costs
- Be more specific. Would a window air conditioner be allowed? Or any combination of a small room electric resistance heater and a window air conditioner?
- With the Inflation Reduction Act combined with local incentives from PCE, Bay-Ren and PG&E low and medium income families may be able to avoid any cost differential.
- Leading with AC is a smart move for introducing HVAC heat pumps.
- Cost prohibitive.
- I feel that it should be up to the homeowner to choose their fuel source.
- This makes a lot of sense, but there needs to be a process for potential exceptions/unique situations.
- same as above
- Cost/benefit should include the real cost at scale of electric generation for these proposed changes. Where are they?
- For new installations it is ok but for replacement it is a stupid idea, it will not save any money as gas is cheaper than electricity and California can't even supply enough electricity now
- My HVAC guy told me this already.
- Why not push solar?!? It’s much healthier!
- Are the additional costs accurately estimated? Heat pumps are tricky to install correctly and are generally very expensive. Some homeowners may not be able to afford this option.
- As a community, as we makes plan for transition to all electric, may be be mindful of our citizens who may not have the financial resources to make the necessary changes?
- Electric heat pump technology has been in use around the world for a long time and is efficient proven technology.
- The code should do more than address A/C. It should require all gas HVAC equipment to be replaced with electric appliance at the end of the gas appliance's useful life.
- As a family deeply concerned about climate change, we did a variety of upgrades in the past 5+ years, after having solar panels installed. In stages we put in an EV charger (which required a panel upgrade), replaced our gas dryer with an electric one, and most recently switched to a heat-pump based heating/AC system housewide as well as a heat-pump-based water heater (coupled with a recirculating pump that moves hot water throughout the house, reducing water waste). These changes were expensive. However, we were aware of rebates available through BayRen, etc. and that helped convince us that those investments were worthwhile. Now we only have one gas item in the house -- the stove. Having gone virtually all electric, we are looking to expand our solar panel array to further offset our energy costs. We strongly hope that the city and county, state, etc. can continue to come up with rebates and other incentives to encourage our fellow Californians to make the investment in cleaner choices.
- Fine for AC units because they should be discouraged as they contribute to warming and they are generally for comfort and there are other alternatives such as insulation, blinds/curtains, trees, etc. Look at what Europe requires before they allow an AC unit! Heat is a necessity so I do not agree
- hopefully low-income homeowners will receive some fin. assistance to meet this requirement
- The State can't keep the lights on now. So where is all that NEW electrical power coming from?

- Hikes up the price for the middle class just like the rest of these elitist horse shit proposals
- added expense that may not be affordable to all house owners
- Heat pumps are great - but noisy; and provide cooling now just heat - now our nice outdoor environment will hum with thousands of air conditioners
- If this means I can't install an efficient gas furnace, if I want to replace my current one (with or without a/c), I'm opposed. Gas forced air heating is better than electrical heating. Heat pumps are noisy- buzzing and clanking, enough to also bother neighbors (and now in late fall/winter/spring too?!). They're also outside exposed to the elements, requiring regular maintenance. Modern gas furnaces are protected inside, requiring little maintenance, are quiet, efficient, and economical to operate. Heat Pumps deliver relatively cooler air to heat with and also lose efficiency dramatically (and need to be supplemented with even more electrical) when outside air temps approach 40 deg F or less. And why would we use heat pumps for heating too, risking stressing PG&E's electrical grid to shutdown in winter too, when people really need it?
- I support the installation of electric air conditioning. However, mini-spits might be a better solution in some applications, especially when a whole home does not require air conditioning. It would be better if the code could allow for any electrified option.
- Makes sense, especially with current heat conditions. Like getting air conditioning for almost no cost.
- This requirement does not take into account individual site factors such as where a heat pump exhaust might be placed. A better option would be to provide rebates for heat pump purchases.
- having just researched this the upfront cost id way more Than $2000 and if use heat pump, when need top up electrical heat PG&E will be gouging with there probes
- Again, these estimates are highly under-estimated.
- Heat pump units have drawbacks, require more space, take more time than efficient gas units to recharge, location of units is more problematic, cost and space requirements are significant
- $1500 up front is not insignificant and the monthly bill impact is confusing because it seems to say it will both save money and cost more simultaneously. Doubt the $1500 figure will remain static or decrease.
- I don't think in the case of replacement something different should be required
- I believe this should include single family and multi family dwelling units adding new air conditioning. Exclusions might apply to repairs or replacement of damaged gas units
- Such an amazing technology, and especially a no-brainer in our mild climate.
- Think upfront cost significantly underestimated
- You should require heat pump installation whenever furnaces are replaced now.

Question 11: Do you have any other comments about Reach Code Option 4A?

- Only support if PCE rebates are in place. Again the city can eliminate permit fees. Expidite the permit without charge. CIty can provide annual rebate to compensate for higher operating costs using the money Senator Becker provided ie $13.5 ML
- Pools are a luxury item and I am not concerned about equity impacts for this measure.
- This takes too long and will negatively impact our power grid.
- Solar heat pumps for pool water heating is much less efficient than gas. I would support the measure if the technology was more efficient.
- Neutral = while this is a very good idea, the total GHG reduction for this is minimal (i.e., few new pools?)
- If you can afford a pool, you can afford to heat it.
- Solar can handle low temperature applications like a swimming pool. Electrical again the scale and source of electrical generation is still unknown from what I understand.
- Pools should be banned due to future droughts (scientists have confirmed) water shortage. We have to do with less amenities in the future
- No-brained. Easier doesn't mean cheaper or healthier.

- Given the environmental impact of pools and the lack of water in California I would propose a ban on new pool construction in San Mateo.
- Pool solar heating has been in use successfully for decades.
- Pools are luxury not necessities
- As little new pools allowed as possible - our water crisis is NOT going to improve
- Most inefficient way possible to heat a pool.
- Does not take into account existing infrastructure, might be much more difficult to install the required electrical lines. Also the bill impact is probably higher cost rather than savings as listed here due to the price of electricity.
- Should be banning personal pools California can no longer afford these as water crises deepens
- Add incentives for this, not mandates. If this option is a money saver, people will take the option.
- How many solar panels required to heat average pool and where will they be located? Not enough info. Skeptical of cost figures. Not enough detail.

Question 13: Do you have any other comments about Reach Code Option 4B?

- Only support PCE rebates available. Other incentives include eliminate the permit fee. Expidite the permitting process at no charge. These cover the installation costs.
- This is unfair. I new build that is more energy efficient than a renovated SFR should be able to have a grill and firepit. The fix in other cities people are using us actually less energy efficient. They are undergrounding propane storage tanks that are filled by trucks driving around. This is worse.
- Using a grill a few times a month (probably no more than 20 times a year) is not a material source of emissions. Plus people will bbq using LPG/propane. Which has more lifecycle emissions.
- People should be able to use outdoor appliances and amenities on their property. If we do not allow for natural gas, they will use propane tanks that have an even larger carbon footprint.
- People should be able to do whatever they want to their own backyards.
- I feel that it is much safer to have natural gas than to have tanks of propane which is an option.
- Neutral = this is a good idea, but the total GHG reduction for this is minimal(?) & folks will avoid permits
- Yay! These are so dumb anyway!!
- I do not believe that it will save any money. On cool nights we use our fire pit for heat. Do you expect me to use an electric space heater?
- Propane tanks release more propane when being installed/removed and fire pits use a lot of them over their lifetime. Better to feed them directly
- But you'll use dirty energy to supply the electric grid for electricity at this scale and countries like China an India to flaunt the rules.
- For pools it's ok but fire pits and BBQ s you are really out of touch with the real world. That tiny bit of carbon isn't even measurable and people will just use propane. You should call it an overreach code as people will just ignore it. Why don't you require more greenery with all the new construction that will actually reduce CO2, this is all just a bunch of feel good language that will do nothing.
- You, the city, are telling us that gas will be prohibited in the future. So we have to agree with you
- We don’t need fossil fuels!!!
- For pools yes. What is the estimated impact of fire pits and grills? If someone can't hard-line a grill they will continue to use bottled gas so no change there. Without the option of a gas fire pit, will residents just burn wood?
- Homes with existing gas meters should be allowed to continue to use plumbed gas for indoor and outdoor fireplaces and grills.
- Pools okay but grills and fire pits are such minor contributors.
- As little new pools allowed as possible - our water crisis is NOT going to improve
- WHAT, YOU want to take away my enjoyment of an outdoor barbecue? That’s the last straw
- Grills will have either gas or charcoal which is best?

- My gas barbeque isn't contributing, nor is anyone else's, to green house gas buildup. So now you are micromanging how I cook for friends and family?
- There is no electrical replacement for firepits; and wood fire is worse for the environment
- The issue of heating pools is already addressed in Option 4A. People will grill and use firepits. If the gas isn't piped in they will resort to propane. Although there area many environmental advantages to burning propane vs natural gas, there are many issues in the materials used to store and transport propane. There are the needed metal containers which require mining, refining and manufacture. Trucks and trains to transport them. What is their environmental impact? There is the waste they produce, or the energy needed and the cost to recycle the canisters. Are our recycle centers prepared to handle the additional wasted or recycled metal containers? There is no clear-cut answer here.
- How do fire pits and grills work without gas? This just means that those would have to use propane tanks, so has negative environmental effect.
- Should be banning personal pools California can no longer afford these as water crises deepens
- Better than 4A
- Alternative food preparation cooking is necessary when electricity is not available.
- Ridiculous. This is a minimal use of gas and yet another impact to personal enjoyment of our homes.
- Similar to 4A on absence of comprehensive details.
- Any new construction should be Converted to electric

Question 15: Do you have any other comments about Reach Code Option 5?

- Need to manage the operating noise of heat pump water heater which will increase price. Many water heaters are in living spaces such as a home, JADU. Need PCE rebates available. Other incentives include eliminate the permit fee. Expidite the permitting process at no charge. These cover the installation costs. Based on our hi gas efficeny water heater it is the lowest of our few gas appliances in terms of gas usage
- Older small homes sometimes have the gas water heater in an interior closet. There is not enough physical space or air flow for a physically larger heat pump water heater. Is an all electric resistance heater ok? It would not be as energy efficient, but would get rid of the natural gas.
- I strongly approve. Is anyone actually installing new pools these days? Solar heating is a great option in most cases.
- The market is not yet at a place where gas to electric conversions are simple replacements. This could result in people being without hot water for extended periods and has troubling cost implications for low income households.
- More thought needs to be put in place of how we switch from gas to electricity. Most heating devices use a large amount of electricity and must be offset with solar panels. That load on the grid could cause blackouts and the grid must be outfitted to handle that load before passing these codes. We also must reconcile eliminating gas for outdoor amenities. People are accustom to being able to cook with gas and use fire pits for family gatherings. Large propane tanks will replace natural gas if it is eliminated and filling tanks has a much bigger carbon footprint than natural gas for this use.
- This makes a lot of sense, but there needs to be a process for potential exceptions/unique situations.
- I challenge your premise that any electrical appliance replacing a gas appliance will save money.
- With these types of regulations we will soon be like Europe is going to be this winter. Prices that will severely impact the majority of Americans Where is the alternative energy coming from?
- I'm not spending 5000 dollars for a water heater, I will just install another gas one, another stupid rule that people will ignore.
- Why are you targeting only SFR; not condos or other residential facilities, nursing homes, etc?
- Force people to consider the future
- Are these more efficient than tankless heaters? Can there be allowances for installation of electric tankless heaters?

- As a community, as we makes plan for transition to all electric, may be be mindful of our citizens who may not have the financial resources to make the necessary changes?
- Not sure how long heat pump water heaters have been in use.
- Heat pump water heaters should be required whenever a gas water heater is replaced.
- I support moving to electrification if there are rebates or discounts given because some of these costs are prohibitive...
- make it as affordable as possible for low-income homeowners
- Stupidest idea I've ever heard of. Water heater replacement already costs $2000, now you want to triple that!
- Tankless electric water heaters should perhaps be a second option.
- added expense that may not be affordable to all house owners
- What about convection heaters for hot water
- It is very easy for you to spend someone else's money, but replacing a water heater is already not cheap, and you are going to force us to now add on heat pumps?
- Heat Pump water heaters are very, very noisy - and can impact the livability of the home based on where they are placed.
- Burdensome, heavy, and unnecessary upfront and ongoing costs.
- I support the change to electric, but feel that restricing the options to heat pumps is not the right solution. Inline water heaters might be better solutions in some applications. These can also help save water in our drought stricken area. More than one electrical option would be better. Solar hot water heaters should also be permitted.
- There are incentives to cut the cost of this.
- In most cases this will work, but again, these requirements have no exceptions for site conditions. Better to have rebate program to support heat pump purcahses.
- Massive cost impact (once mandated extra cost will easily more than double)
- Facilitate more contractors to pick up on this work
- Our electric grid is already over-taxed and this will just add to the cost of purchase and operation of living and working in
- See comments for heat pump AC units
- Considerable upfront cost potential here. What happens when a water heater just dies, which occurs with some frequency? Is City going to beat homeowners up for simply needing to replace existing water heater? That would be outrageous!
- Heat pump water heating is quite noisy. Not all homes have adequate sound barriers. I believe this appliance would be disruptive to the tranquility of one's home
- High upfront cost. Need more information re available financial aid or incentive

Question 18: Is there anything else you would like to share about these green building reach code options?

- "May need to include a hi efficiency gas option for #5. However make the incentives for heat pump water heater so convincing.
- Overall the proposed codes when coupled with installation and operating costs rebates are a good first step orientating the city for an electric future. If too financially burdensome for all residents then residents will install without permits, delay installation, or decide not to install and instead purchase space heaters and coolers for each room. Need to avoid this for all residents"
- Given the catastrophic impacts of climate change, and timelines for implementation, and observed benefits, I believe the proposed reach codes do not go far enough.
- These codes should apply to offices, businesses also and multifamily dwellings.

- For most households, the greenhouse gas reduction benefits of these measures outweighs concerns about costs. However, for core energy services like water heating, we need to have policies and programs in place that protect low income customers from upfront cost barriers and utility bill impacts.
- There are very few new build SFR. If it is a new development some of these would make sense. For new builds with existing gas lines this does not make sense. There are very few of these and not allowing any gas adversely impacts those few homeowners that buy a teardown and want to improve our neighborhoods. This is unfair if they are otherwise improving the energy efficiency in other ways.
- Replacing systems used on a daily basis with electricity makes sense (dryers, heating, water heating, pools). That is the source of nearly all household emissions. Making people only install an electric BBQ pushes it too far - and has almost no impact on emissions.
- I believe you should make incentives for people to be “green”, but to make all these things mandatory seems cost prohibitive and extreme. We don’t want to deter people from bettering their home by adding too many requirements. I fee this might increase the amount of unpermitted work being done as well.
- "I think that these requirements are fine for commercial and institutional buildings but I think that they go to far for the individual homeowner. I think that if you can provide solar panels on your home, these are great choices but some homes are too shaded, or do not have the proper orientation for solar and so these electrical requirements become a burden. The current electrical grid will be overloaded and become a larger problem than the emmission from a gas cooktop.
- "
- I think the City of San Mateo is leading in a reasonable way on these Reach Codes. Part of why we live in the City of San Mateo is a certain pragmatism/realistic approach to things even when being a leader. For example, even if everything became all electric in the City, the net effect on GHG world wide would basically be zero given how small our GHG is versus the world. This DOES NOT mean don't make progress and work to reduce GHG. Just at some point funds would be better spent helping "others" that are bigger producers of GHG versus spending those same funds here. There are other environmental costs to forcing change outs earlier than end of life (e.g., landfill, environmental damage from the production of new appliances/etc.). We have this view in CA to be "perfect" environmentally while exporting our environmental damage to other places in the world where the laws/regs are poor. There is a balance on being "aggressive but reasonable" at the same time given all the considerations. And, the thought some how all this "free money" from the State or US Gov't is going to solve this problem is a misplaced. The funds come from somewhere (e.g., taxes, utility bills, fees, etc.). We do not have unlimited funds ourselves.
- I support these green building reach codes and hope the city passes them so we can be a leader to other jurisdictions in the state considering similar measures. The City of San Mateo might be small but the impact of influencing/encouraging others to do the same would be huge.
- Please take as much time as necessary to educate the public about the need for all this. Amazingly, there are still people who don't see any crisis regarding fossil fuel consumption, methane, energy use, etc. Many people will only look at cost. So poll the wealthy big local companies (especially those that will benefit from electrification) for financial donations.
- My problem is that electricity is much more expensive than gas. Last winter I used 43 therms of gas to heat my house, water, cook and dry my clothes. One therm of energy is equal to about 30 KWH. My 43 therms of energy is about 1,290 KWH. At my current rate of $1.97 a therm those 43 therms cost me $87.71. If that energy came from electricity those 1,290 KWH would cost me about $470.85 at my current average rate of $0.365. Please explain to me how I'm saving money, Thanks,
- Moving forward without any clear viable alternative for this approach and closing our nuclear plants is the definition of stupidity.
- Concern that people will not be supportive because of the cost. Concerned that housing in general will be more expensive sure to added costs.

- The amount of the world's CO2 that San Mateo puts out is not even measurable and will make no difference, let the people who want to do it but leave the rest of us alone as we will not comply with these big brother regulations.
- If the city is requiring green, the City needs to offer tax incentives to do these to help fray the costs for the homeowner, such as property tax credit.
- We should be requiring all remodels to be permitted… make it easier. AND also make home inspection reports PUBLIC and available to EVERYONE!!! There is NO reason why new homeowners should have to guess at the renovations done to their home or the actual condition it is in. Please keep these records public. Every house should have history like a car. Except houses are more expensive! We need a lemon law for homes. Why don't we have wind turbines all along the bay where the electrical towers are? We get so much wind and sun we should be completely fossil fuel free by now!!!
- I'm afraid all this is too late. We have too many people on the planet.
- The larger question here is whether we have the infrastructure to support an all-electric system. PGE have proven they can not sustain existing infrastructure and with the increase of electric vehicles our system is being strained. We risk an increase in brown- and black- outs and an unreliable system. I would like to see a move more to city-wide solar and local storage systems subsidized by the City.
- "We are on a fixed income and been in our home for 49 years. We cannot afford any of these options. When we die, our house will be demolished and rebuilt. Until then, we cannot afford any of this. Our house has the original gas wall heater. We pray that it will keep
- working!"
- It's commendable that as a city, San Mateo is focusing on what it's residents should do to reduce greenhouse emmisions. As a community, let's not forget that for many of our residents these changes may be cost-prohibitive, so let's work together to make sure that if/when these changes are enacted, they are feasable for all. This could be by allowing for grants, rebates, or some other form of finacial support if needed.
- Our electric grid is barely functioning; adding to load seems unwise.
- In discussing reach codes, the City appears to be concerned only about the cost to building owners in making a transition to all electric buildings. The City never includes a discussion about the cost to the general public from greenhouse gas emissions. These are not abstract costs. They are quantified as "the social cost of carbon" which the federal government currently estimates to be $51/tonne of CO2e. Leaving these costs out of the equation distorts the cost/benefit analysis and prejudices the discussion in favor of destructive gas appliances.
- Again, any incentives and/or rebates you can provide to property owners will help encourage people to adopt these greener technologies. We as a family 100% support our city's efforts to make buildings as green as possible. For many property owners, cost will undoubtedly be the major hurdle to adoption.
- I think every new construction in San Mateo should have grey water, solar panels, and all be Gold or LEED Platinum Certified buildings. Most homeowners are trying to get electric cars, plant drought tolerant gardens, etc. and are doing their part for climate change. But it seems like all the office and residential construction backed by investors are not being asked to do their part for climate change. For every 200 unit residential unit built there should be an equal amount of trees and green space created for the residents and their mental and physical and emotional health.
- Show people the long term savings. Consider low interest loans for installation if cost is too much.
- Right now the building dept doesn't even require an unpermitted AC unit using to be replaced with an energy efficient model. Start with the holes in our current code that are more egregious. Concentrate on essential vs necessary uses in determining code changes. Don't saddle homeowners with major costs otherwise they will bypass the permit process. Homeowners have limits.
- Stop allowing home demolition, which is incredibly wasteful--- especially for pre-1940 homes
- not at this time
- This is crazy. PG&E use natural ga to generate electricity what's the difference.
- So you want to upend my entire life, destroy my remodeling plans by tripling the cost but you're concerned I'm using profanity in this survey.

- The reach code options should all be adopted, but they simply do not go far enough given the urgency of the climate crisis. The City should be adopting the Bay Area Reach Codes Group's full model code for existing buildings, with an implementation date of 1/1/25 for all measures not included in Staff's proposal. Thanks to the Inflation Reduction Act, California's new budget targets, and PCE's new on-billing financing program (among other funding and financing options), the funding/financing is in place to adopt the full model code for existing buildings with a delayed implementation date of 1/1/25.
- This is a decent start; however, time is not on our side, and the Bay Area Reach Codes Group's plan would be more effective than the plan proposed here. It would also be great if the city incorporated funding assistance for the installation of solar panels in order to make the transition to all electric homes a long-term financial win for residents (while somewhat alleviating short term cost concerns).
- I strongly support the San Mateo Climate Action Team's position: "The measures proposed by Staff do not go far enough, and the City should adopt the Bay Area Reach Codes Group's* full model code for existing buildings, with a delayed implementation date of 1/1/25 to allow the City ample time to line up all sources of funding/financing, and other support programs."
- Nothing in here about requiring restaurants to use low-flow water toilets -- toilets in these locations have many more uses per day than a toilet in a house/apartment; and water usage has an impact on the climate and his a major issue in California
- I know that gas economically and comfortably heats a home's air space and water. It also does a superior job in temperature control and burn safety to cook with versus electric stoves. Please don't force these additional costs on people to put in inferior systems. This will also only add to the electrical supply and demand imbalance. Local reach codes won't solve the larger challenge and only introduce heavy costs and problems for San Mateo residents. Remember, most San Mateans aren't tuned into this initiative, but would suffer the consequences from it if it were adopted, while receiving no noticeable benefit from an improved climate. Addressing climate change meaningfully requires broader participation (Paris Global Accord etc.).
- Ban new indoor fireplaces that aren't electric. We need additional codes regarding water use, gray water reuse, and rainwater capture and discharge into landscape. Imagine the energy savings if we don't have to use electricity to clean and transport water that is safe to use in the landscape, and using rainwater to hydrate our soils instead of cleaning and pumping water for irrigation. Separate water meters for landscape and household use water would be helpful to monitor useage. Enforce MWELO for all properties, not just new installations. It will reduce the city's energy usage since we will clean and pump less water. Requiring the installation of electric appliance, not just installing outlets, seems better. I'm concerned about the amount of electricity that we are able to pull into our homes off the poles. Transformers on poles will need to be upgraded to allow for increased electrical useage in homes without charging the customers directly for this upgrade. For a church improvement project that I am working on, we are unable to upgrade to all electric appliances because we can't pull enough energy off the pole without paying for a very expensive upgrade of current coming into our buildings off the pole. The city should also incourage solar panels and back-up batteries. This will help reduce infrastructure use on the larger electrical system. Time to localize electrical generation by putting it on our homes and businesses when applicable. Require a solar energy study on new construction and installation of solar panels. I am EXTREMELY concerned about the cost of these upgrades for low income homeowners. There need to be cost sharing programs. For public buildings, consider requireing green roof installations. There are many environmental gains for green roofs in addition to energy savings.
- While the above measures are helpful, they do not go far enough. I would encourage San Mateo, and all local cities, to adopt this Fall the Bay Area Reach Codes Group's full model code for existing buildings, with an implementation date of 1/1/25.
- The Inflation Reduction Act and current State legislation awaiting the governor's signatures provide/will provide incentives to make electrification affordable. We are feeling extreme heat right now. In my 35 years of living in the Bay Area I have not needed air conditioning, but I could have used it in today's 107 degree heat. A heat pump heater would have provided me air conditioning.

- Depending on the power source for electrical service, these code changes can have a negligable or negative impact on carbon emissions. Unfortunately electrical service is not completely reliable, and as we are seeing in the current heat wave, additional electrical power for peak periods is generated using combustion sources rather than clean sources, or there are brownouts and blackouts.
- Incentivize reuse of materials. Promote/subsidize building or landscaping options that reduce the need for air conditioning/heating.
- Should also lead city into work to educate contractors, home appliance stores, and other relevant people about the incentives that are out there, including the new IRA funds coming soon. Focus on making it simple for the average person, and prioritize fiscal resources on the most neediest.
- We are in an electrical shortage period in California already. This overreach of state codes is going to increase the problem. Just look at what has happened in Europe with policies like this, they are returning to coal use to produce energy! A large amount of natural gas is already necessary to produce the electricity we presently use. Changes in natural gas usage at the local level will not stop gas use to produce electricty. Wait for the State to change the codes. Stop the over-reach.
- "Requiring electrical replacement of gas appliances in existing locations is not cost effective nor is it feasible. Existing electric infrastructure cannot handle additional loads. China has boosted their coal usage 18-24%. The marginal carbon benefits of making property owners convert to all-electric using products that have not yet proved reliable and durable is foolish.
- New construction codes need to be different from code requirements for retrofitting."
- To have a positive impact on climate change, eliminate ALL gas blower use NOW. Gas blower use is out of control; it goes on all day, everyday. It has been shown to cause more pollution than cars. This is low hanging fruit, for which there are viable options. Do it.
- "When it comes to existing homes, changes to electric or solar should be OPTIONAL, not mandated. I needed a new roof a few years ago and looked into solar and found it cost prohibitive. Also, there seems to be a near-blind rush to eliminate gas while the electric grid is insufficient (as illustrated this past week). Alternatives are needed and gas should not be eliminated until there is a track record of ample electric and solar. The stats in the survey demonstrate very little GHG reductions will be accomplished with such mandates compared to the distress new rules will cause homeowners. Not necessary to ""reach"" so far.
- Also, seems calculated to not hear from majority of potentially impacted public when hearings are held in late August/early September. Questionable transparency. Plus, entire approach is not facilitating input from those who can't stay up late for meetings or use technology. "
- When building a new home, it’s good to install what could be needed to provide energy and power. However, these should be optional and not overpriced.
- For brand new construction building as green as possible is great. For current homes and replacement projects it seems to go too far. I think it will discourage necessary upgrades due to cost and functionality.
- Replacing gas with electric at residences will not offer any measurable impact on greenhouse gas levels. Recommend the city focus on transportation improvements
- I believe more study is needed to compare existing PG&E fossil fuel based electricity production versus the burning of fossil gas in one’s home. There are also negative health impacts with the use of solar, and wind electric production and battery Storage. ie disposal of and recycling of the hazardous materials within these units.
- There is some up-front cost to these measures, but electrification should be much more stable in price and save money over the longer term, even if you ignore the costs of pollution and catastrophic climate change.
- Where cost is an issue, subsidies for low income residents may be appropriate.