

From: [Beverly Tharp](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Mar, Gordon \(BOS\)](#)
Subject: File #220249
Date: Sunday, July 17, 2022 3:01:11 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please, please PLEASE fund building electrification NOW!

We've got to get the methane out of our dwellings.

Already San Francisco lags in climate action.

Stop being timid! Time is passing.

Every year we delay makes the task harder.

Already weather patterns are changing drastically.

San Francisco is a leader.

Let's follow through on this.

For our sakes, for the world's sake.

Building decarbonization is one step.

Let's take it and keep going!

Sincerely,

Beverly Tharp
42 year SF resident

From: [Elena Engel](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Mar, Gordon \(BOS\)](#)
Subject: Hearing 220249 - Building electrification strategies in the Climate Action Plan
Date: Sunday, July 17, 2022 12:05:39 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

I am writing about the presentation by SFE on electrification of existing buildings.

This aspect of the CAP is both one of the most complex and also one of the most fruitful. Existing buildings present many challenges, but also many opportunities in furthering equity and in developing the workforce to do these retrofits. We must begin the process of retrofitting existing buildings, since buildings constitute almost 50% of our City's emissions. And yet it is one of the most challenging actions we must take.

I urge you to become very familiar with the subject. And to support the Climate Equity Hub which will help to untangle the challenges, make property owners, tenants, contractors, and City departments aware of the work that needs to be done, and smooth the way to implementation of building decarbonization of existing buildings.

But we will need resources, the willingness of Departments across the City to work together, and funding. I urge you to consider what avenues are open for helping to incentivize this work, including funding from the general fund, bonds, revolving loan programs, on-bill financing, State funding, and whatever other creative solutions you can find.

And you will need to have the unwavering commitment to this work--the political courage to do the right thing NOW. We have so little time to save ourselves and our beautiful planet. We count on you to move forward expeditiously.

Special thanks to Supervisor Mar who has been a great champion of moving forward on the electrification of existing buildings

Thank you.

Sincerely

Elena Engel
350SF, 350BA, SF-CEC

From: [Robyn Nason](#)
Subject: File # 220249
Date: Saturday, July 16, 2022 5:00:56 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi there,

I am a resident in District 2. I am writing in advance of Monday's BoS Land Use & Transportation Committee meeting to urge you to take effective climate actions. It is vital that we continue working towards a safer, cleaner, more equitable future. Electrifying our city is an important step in achieving this future. We know we desperately need more affordable housing, but we should ensure that this housing (and existing buildings) is protected from the worst of the consequences of climate change. This can't happen until the city makes real progress as a leader in the fight to protect our planet. Please include funds for building electrification, and make sure to build climate justice into future policies as well.

Thank you,
Robyn Nason

From: [Glen Thomas](#)
Subject: File # 220249
Date: Friday, July 15, 2022 7:17:19 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

As a San Francisco constituent, I am writing in support of maximum funding for the Climate Equity Hub and SFPUC affordable-housing electrification pilot. Clearly, the federal government is not dependable when it comes to climate action. As one of the wealthiest US cities, we need to take action immediately. This represents the best interests of many SF residents.

Thank you!

--
Glen Thomas (he/him)
ACSM Certified Exercise Physiologist
EXOS Certified Health Fitness Specialist

From: [Joni](#)
To: [Melgar, Myrna \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Preston, Dean \(BOS\)](#)
Cc: [Major, Erica \(BOS\)](#)
Subject: Re: 7/18/22 hearing, File # 220249
Date: Sunday, July 17, 2022 4:36:47 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors on Land Use & Transportation,

Please heed the urgent message from the Department of the Environment and your colleague Supervisor Mar. The decarbonization of all our City's existing buildings is urgent and absolutely crucial.

No matter how daunting and extraordinarily expensive it will be, acting boldly now will avoid much higher costs throughout society: more sickness & death from bad air, explosion danger of gas-lines (especially from an earthquake), ever-increasing costs of adaptation in the absence of emissions-reducing policies.

Senator Manchin's catastrophic refusal to allow any climate legislation at all to pass shows that he's a fossil-fueled monster of course, but it also shows that in the absence of federal action, cities and states must lead the way. San Francisco used to be "the City that knows how" - let's reclaim that moniker.

So often elected officials focus exclusively on obvious, immediate issues like inflation and so much more. Please don't be like them. Show people that global warming is not a distant problem, something we can solve in the future. You must make them see that it's an urgent problem for us to tackle today. It will not go away.

Thank you for your attention.

Sincerely,

Joni Eisen, grandmother & long-term SF resident
District 10

From: [Bill Weihl](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Mar, Gordon \(BOS\)](#)
Cc: [Mandelman, Rafael \(BOS\)](#)
Subject: File # 220249 - Building decarbonization
Date: Sunday, July 17, 2022 5:14:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I understand there is a meeting of the Board of Supervisors Land Use & Transportation Committee on Monday, July 18th. I will not be able to attend, so wanted to reach out to you folks and provide comments in advance of the meeting.

I live at 280 Clipper St, San Francisco, CA 94114 (District 8). I have lived at this location for 26 years (since 1994), and in SF for 28 years (since 1994).

The climate crisis is real and present - not just some remote future concern. We need to act boldly and decisively now - both to reduce emissions rapidly, and to adapt and build resilience. As you know, buildings are one of the biggest contributors to emissions, especially through their use of fossil fuels for heating, hot water, cooking, etc. Electrifying buildings, while in parallel decarbonizing the electricity sector, is one of the most important things we need to do. Driving this market transformation at the speed and scale required by the climate crisis will necessitate a combination of public and private funding. We need you - our Supervisors and city officials - to figure out how to provide the public funding now.

As I'm sure you know, getting methane (aka fossil gas) out of our buildings is critical for SF to meet our climate goals. We need to do it now - and do so equitably, to ensure that everyone in SF has a safe and healthy place to live.

We're behind on the pace of climate action already. Now is the time to be bold and focus on critical actions like building decarbonization. We clearly can't depend on the federal government right now - which makes it even more important that we do everything we can here in SF. We are one of the wealthiest cities in the world; there is no reason for us not to move boldly and decisively.

It's time for SF to show the kind of leadership it's long been known for!

Thank you.

Best,
Bill Weihl

--

Bill Weihl ([he/him/his](#))
Email: bill@weihl.com

[What's happening with my voice?](#)

From: [Barbara Jue](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Mar, Gordon \(BOS\)](#)
Cc: [DorseyStaff \(BOS\)](#)
Subject: File # 220249.
Date: Sunday, July 17, 2022 7:26:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm writing as a resident of District 6 who regularly votes and counts the climate crisis as a high priority issue that government needs to address. Our City/County has developed an ambitious Climate Action Plan that will drive significant advances against harmful greenhouse gases and build resilience in our most vulnerable communities. Because the federal government is paralyzed due to the divisiveness of our current two-party system, we must act immediately at the local level. Time is of the essence. I support the requests of the Climate Emergency Coalition:

- o Getting methane ("natural" gas) out of our buildings
- o Obtain funding for building electrification, now. We are one of the wealthiest cities in the world so we have no excuse not to provide the necessary funding.
- o Ensure continued funding of the Climate Equity Hub - transforming to a new energy platform requires equitable treatment across affected communities on an ongoing basis.

We have some aggressive climate goals to achieve in the next few years and we can't dally any longer. San Francisco and California are demonstrating what leadership looks like in taking bold actions to fight the climate crisis. In the long run, our economy and communities will thrive because of our actions.

Sincerely,
Barbara Jue
81 Lansing Street #411

From: [Marvis Phillips](#)
To: [Peskin, Aaron \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Mar, Gordon \(BOS\)](#); [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#)
Subject: Re: Tell the Supervisors it's time to be bold on climate
Date: Monday, July 18, 2022 2:03:24 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Land Use & Transportation Committee Supervisor's

Reference: File No. 220249: Please support and pass this important measure to help the Lower Income Community's and its residents, to "Decarbonization our homes/rooms" Since a majority of us live in Residential Hotels or small apartments it is essential that we live in the healthiest environments possible! Voting to support this measure and send it to the full,Board for review and approval is a vital step, in improving the home environment of San Francisco's most vulnerable citizens! Thank you in advance! Marvis J. Phillips (43 year resident Tenderloin) + Board Chair: TENDERLOIN/SOMA/WSOMA COMMUNITY PLANNERS: + Community Watch Block Captain (Tenderloin) (SF SAFE, INC){the civilian branch of the San Francisco Police Department}!

On Fri, Jul 15, 2022 at 6:24 PM Joni (SF Climate Emergency Coalition) <info@sfclimateemergency.org> wrote:



Important opportunity for your voice!

Hello Marvis J.,

Here's that update and reminder you've been waiting for.

Update

Thanks to advocacy from so many of us, the \$2.6 million for the Department of the Environment (SFE) to get the Climate Equity Hub up and running remains in the budget for the first year (the second year will have to be negotiated all over again anyway). Unfortunately, the little we got (\$700K) for the SFPUC (not SFE) to initiate an affordable-

housing electrification pilot has disappeared. We will not give up; we will simply try again.

Reminder

Monday, July 18th, 1:30 pm start, BoS Land Use & Transportation Committee (Chair Melgar, Peskin, Preston).

The hearing, called by Supervisor Mar on building decarbonization, includes a 10-minute presentation by SFE on the status and plans for the Building Operations sector of the Climate Action Plan. Supervisor Mar wants to bring this topic to greater prominence so that the Supervisors will understand the complex issues involved in retrofitting existing buildings.

We can demand that the City's climate actions are swift and equitable, and that officials be held accountable for completing them. Make public comments 3 ways:

1. Via email - TODAY or at least least before the meeting begins Monday. Put in your subject line **File # 220249**. Send to:

- Clerk of the Committee: Erica.Major@sfgov.org
- Myrna Melgar (Chair): Myrna.Melgar@sfgov.org
- Aaron Peskin (member): Aaron.Peskin@sfgov.org
- Dean Preston (member): Dean.Preston@sfgov.org
- Gordon Mar: Gordon.Mar@sfgov.org

2. In-person Monday - City Hall, Legislative Chamber, Room 250. Item #6 probably will not come up before 2:30 or 3pm. [Here's the agenda](#), which includes detailed instructions for participation. Those who show up in person get to speak first. People lined up to speak makes a great impression - but whatever you can do is fine.

3. By calling in to the meeting - 1 (415) 655-0001 / Meeting ID: 2485 132 7480 # # When it's time to comment, press *3 to enter the speaker line. Don't mute yourself - your phone will be automatically muted and then unmuted when it's your turn to talk.

Some talking points (mention your district):

- We need our Supervisors to figure out how to fund building electrification, now. We are one of the wealthiest cities in the world so we have no excuse not to provide the necessary funding.
- Getting methane ("natural" gas) out of our buildings is a critical part of our Climate Action Plan. Unless we do it, while making sure *everyone* has the wherewithal to achieve a safe and healthy place to live, we can't make our climate goals.
- This city is behind the curve on climate action already. The Supervisors must be bold and focus on the actions necessary to stave off the worst consequences of climate destruction.

- The recent horrifying anti-climate actions of the Supreme Court and Senator Joe Manchin make it all the more obvious that we can't depend on the feds right now. It's up to us.

Onward climate soldiers!

SF Climate Emergency Coalition

Sent via [ActionNetwork.org](#). To update your email address, change your name or address, or to stop receiving emails from San Francisco Climate Emergency Coalition, please [click here](#).

--
Marvis J. Phillips
Board Chair
District 6 Community Planners

From: [Dave Rhody](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Peskin, Aaron \(BOS\)](#)
Cc: [Mar, Gordon \(BOS\)](#); [Wright, Edward \(BOS\)](#)
Subject: Bldg. Electrification #220249 / Land Use & Trans. Committee 7/18/22
Date: Friday, July 15, 2022 3:58:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Date: July 15, 2022

To: Supervisors / Land Use & Transportation Committee

Re: Building Electrification / Item #220249

Nothing is more important for the future of San Francisco than climate action. As SFEnvironment has reported, "energy use from buildings in San Francisco contributes to 41% of the citywide GHG pollution, and natural gas is responsible for 87% of the building GHG emissions."

Please, do everything in your power to initiate, support and enact legislation that continues San Francisco's building decarbonization. And I ask that you empower the Department of Environment (SFEnvironment) to monitor and enforce new building electrification codes.

My thanks to Supervisor Gordon Mar for taking a leading role on building electrification and my thanks to you for recognizing the urgency of climate action.

-Dave Rhody
1594 45th Ave.
San Francisco, CA 94122
[Climate Reality Leader](#),
[Climate Reality Project](#)

From: [David Harrison](#)
To: [Major, Erica \(BOS\)](#)
Subject: BOMA SF Comment Letter for Hearing on Climate Action Plan Building Operations Component, #220249
Date: Thursday, July 14, 2022 4:54:04 PM
Attachments: [2022_07_14_BOMASF_CAP_Letter_220249.pdf](#)

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi Erica,

Please find the attached letter for Monday's Land Use and Transportation Committee hearing, file #220249. Thank you.

All the best,

David Harrison
Manager of Government and Public Affairs
[BOMA San Francisco](#)
(202) 262-5860 (Mobile)
davidh@boma.com



July 14, 2022

The Honorable Gordon Mar
Supervisor, District 4
City Hall, Room 244
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Honorable Members and Staff
Land Use and Transportation Committee
City Hall, Room 244
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

**Re: Hearing on the Building Operations Component of the 2022 Climate Action Plan
File #220249**

Dear Supervisor Mar,

I write to you on behalf of the Building Owners and Managers Association of San Francisco (BOMA SF) in response to file number 22049, the request for a hearing examining the findings, strategies and supporting actions of the building operations component of the City's 2021 Climate Action Plan. BOMA SF strives to be a partner with the City on our ongoing decarbonization efforts. We sincerely hope that our feedback will be taken into consideration for implementing legislation.

For decades, our members have championed sustainability, and we are pleased to regularly participate in City taskforces and working groups for new local initiatives. As a federated local association of BOMA International, we are proud of greater BOMA International's standing as a leader in decarbonizing the built environment. In fact, BOMA International has been named the Energy Star Partner of the Year 15 times. Through these achievements, San Francisco boasts one of the most efficient building stocks in the world. Our members more than agree with the stated goals of decarbonizing the built environment but recognize the challenges that make doing so no small feat.

A successful transition in San Francisco will require a thoughtful approach that prioritizes the right policies and economic incentives to accomplish this massive transformational change to our building infrastructure. The magnitude of this opportunity presents tremendous challenges that will require unprecedented innovation and cooperation between business and government. Furthermore, this transition does not come without tremendous cost to both property owners and

their tenants. We urge government to work as collaboratively as possible with the commercial real estate industry to find workable solutions that drive the desired outcomes while minimizing disruption to business operations.

In this letter, we seek to present what we foresee to be the major compliance challenges for large commercial buildings with the 2021 Climate Action Plan. You will find that our solutions are centered on the premise of encouraging action under normal building capital investment and system replacement cycles. We also propose these solutions with the hope that any Climate Action Plan implementing legislation aligns with the larger policy ecosystem rather than creating conflicting regulatory mandates. Ultimately, it is our sincere hope that we can find clear consensus on a pathway to net carbon neutrality, allowing San Francisco to serve as a model for effective policy leadership in this arena.

Conceptual Priorities for Implementing Legislation

Priority 1: Ample Planning Time and Technical Support are Key

According to an analysis of client projects from Gridium, the cost for electrification for a typical, large commercial building in San Francisco averages to roughly \$10 per square foot in capital improvements plus an additional \$0.75 per square foot in operating expenses. This is an enormous cost for the industry to bear at a time of great economic uncertainty. Capital planning and amortization will be key to achieving these efforts.

Subsequently, the Zero Emissions Task Force reflected these planning aspects as central to the Climate Action Plan and its implementing legislation: “Planning is Key: Help owners create and electrification plan and allow for capital planning to leverage investment over time.” Calculating the impact that policies can have on day-to-day operations and capital decisions helps real estate integrate policy requirements into its business plan.

BOMA’s members need to be able to expect what’s coming and price out scenarios based on regulatory compliance versus life cycle capital investments. We urge any implementing legislation to take this viewpoint into account. Furthermore, we would caution against any hasty policy proposals that would change this delicate planning process.

On the technical side, many large commercial buildings face difficult constraints that present significant challenges to electrification. This is mainly due to building design, as typical office space heating designs in our market rely on a central boiler system to feed a hot water loop at ~ 180F supply temperature to deliver space heating through perimeter terminal units in the building.

As we will discuss later in this letter, electrifying these large commercial buildings efficiently presents a major technical challenge. The Zero Emissions Task Force was also clear about the need for assistance in this space, noting that “pilots and case studies are needed,” and that “technologies and methods must evolve.” Recognizing these challenges, we urge the City to work collaboratively, not punitively, with building owners who face these challenging cases. This responsibility cannot fall solely on building ownership. We are hopeful that we can work with City leaders to utilize these

types of technical assistance to achieve workable pathways to electrification for even the most challenging of cases.

Priority 2: Promote Consistency Within the Greater Policy Ecosystem

At the state level, our members' efficiency standards are regulated by Title 24. BOMA SF remains concerned about the contradictions between the Plan's assumptions and the California Energy Code. Contained in our previous technical feedback to the Department of Environment and below, you will see that many large commercial buildings have no feasible economic nor technical pathway to electrification other than electric resistance heat. This method is quite inefficient, so much so that the current California Energy Code does not allow replacement of gas heating systems with electric resistance heat in many cases. This underscores the potential that forced, early electrification to electric resistance heat could promote over-reliance on energy-intensive heating methods and require costly upgrades to upstream electrical grid capacity. This not only increases utility rates but could contradict statewide climate goals.

A review of the California Air Resources Board's draft Scoping Plan underscores these policy contrasts. The state plan targets 2045 for carbon neutrality and makes a broader assumption than the City does regarding how long natural gas will be utilized in commercial buildings. Most notably, the draft Scoping Plan assumes that natural gas systems will not be subject to early replacement, but rather, systems will be replaced at the end of their natural life. We agree with this approach of phasing out natural gas equipment at the end of useful life rather than prematurely replacing it.

If they are not addressed, these sharp contrasts relative to local and state policy stand to confuse building owners and create potential conflicts. To avoid these conflicts, we urge you to align with state policies as you consider implementing legislation. This approach will not only help building owners with planning and compliance but will also preserve critical government resources that would otherwise be spent on disputes over preemption and code compliance.

Priority 3: Cost Recovery for BOMA Members

Commercial buildings are largely passthrough entities, organized to allocate standard building operating costs to tenants that desire a long-term lease. For the vast majority of our members, increased operational costs and the capital costs associated with regulatory rule changes will need to be shared by tenants.

For implementing legislation to be successful, BOMA members must be able to rely on legislative language to share some of the costs of electrification with tenants through traditional commercial real estate business operations. Most critically, we suggest that implementing legislation should avoid the use of penalties entirely. Instead, we urge the use of alternative compliance payments or other regulatory mandate practices that work within traditional commercial real estate leasing frameworks. This will further allow our industry to create business plans and project compliance scenarios with our tenants.

BOMA supports the Climate Action Plan strategy of allowing the payment of annual compliance fee in lieu of electrification. This will help our members make the economic case for electrification and

helps to avoid the most-costly retrofits. We suggest that the fees are tied to other traded environmental commodities on a kBTU-equivalent basis, such as the California Carbon Allowance market or Low Carbon Fuel Standard (LCFS). The City participates in both markets. BOMA would prefer that any associated fees be channeled to environmental credit retirement. Should the City wish to invest the funds in low-income decarbonization, then that investment should have equal or lower cost per ton of emissions reductions and address issues such as additionality and leakage. We stand ready to assist with implementing legislation on this subject and urge you to collaborate with us to ensure the best outcome for all stakeholders.

Priority 4: More Clarity on Other Uses of Natural Gas

In our initial comment letter, BOMA highlighted other, more complex, uses of natural gas in commercial buildings that have not been fully addressed in the Climate Action Plan. We offer the same insight now, with the hope that these concerns will be addressed in implementing legislation. We again stand ready to provide our feedback on these issues and urge you to collaborate with us to ensure that this implementing legislation achieves the best outcome for all stakeholders.

1. Steam: Many BOMA members rely on the steam loop (about 180 buildings). The Department of Environment has indicated verbally that steam is judged as a Scope 2 emission at the building level, and therefore electrification rests on Clearway Community Energy. This presumption must be codified in legislation. Successful implementation will also heavily rely on the technical feasibility of electrification of the plant. Implementing legislation must confirm that BOMA members are not subject to electrification as long as Clearway Community Energy's electrification is a going concern.
2. Fuel Cells: The Climate Action Plan does not address fuel cells. However, many operate in the city with long asset lives, local resiliency, and back up applications. BOMA recommends exclusion of fuel cells from implementing legislation. If one part of government subsidized their installation through SGIP and a locality banned them due to emissions impacts, it would create a major policy conflict.
3. Cogeneration Facilities: Many buildings make effective use of waste heat from cogeneration facilities. We recommend these are excluded from implementing legislation.
4. Absorption Chillers: The Climate Plan does not address natural gas use for cooling. Several large installations of absorption chillers help alleviate peak load on the hottest days, where California carbon intensity is the highest. We recommend these are excluded from implementing legislation.
5. Biomethane: The Climate Action Plan does not address biomethane or future renewable gas options, nor does it address the carbon accounting for those fuel sources. However, these resources are under active development and will be delivered in the period of Climate Action Plan implementation. We recommend that this be addressed in implementing legislation.

Technical Concerns and Potential Solutions

BOMA SF has outlined many of our technical concerns in our previous correspondence with the Department of Environment. We again offer the following proposed exclusions with the hope that

they be considered with implementing legislation. We have identified these specific technical exemptions as we believe that they will not advance the City's climate goals and are in direct conflict with other California policies.

Electrification that Makes Buildings Significantly Less Efficient

The current market presents building owners with two mediocre options for all-electric heating and cooling systems. Buildings are forced to accept being constrained by the large space requirements and high capital costs associated with air source heat pumps or must select an electric resistance option that increases energy cost and may yield worse carbon performance than a natural gas boiler plant for the foreseeable future. We have also already addressed the related code compliance issues, with California Title 24 prohibiting electric resistance in most circumstances.

Despite the fact that California generates much of its electricity from renewable sources, a review of the California Independent System Operator's monthly greenhouse gas tracking reports shows that the grid is not low carbon when heating systems peak. Resistance heating options are therefore likely to remain worse than natural gas boilers on a carbon basis until the California grid can consistently rely on 100% renewable energy sources. Per 2018's SB 100, California has set a target to have all of its electricity come from renewable or zero-carbon energy sources by 2045. We understand that the Climate Action Plan seeks to address this issue by mandating that large commercial buildings purchase 100% renewable energy. However, BOMA does not agree that this mandate mitigates the reality of our grid's system level carbon accounting.

We remain particularly concerned about near-term, mandatory electrification for buildings with no feasible pathway to efficient electrification. We fear that the efficiency losses from a policy that will lead to installations of mostly electric resistance heat will lead to major unintended consequences, including significant increases in energy demand that the grid may not be able to sustain and tremendous increases in operating costs that will likely fall on tenants. Furthermore, in the near-term, we fear that this policy could inadvertently increase statewide or regional emissions as the California grid does not project to be able to supply 100% renewable energy until 2045.

The Climate Action Plan component BO.2-1 calls for "annual reporting on whether fossil-fuel using equipment is being switched at a rate sufficient to meet climate goals." We want to caution that this premature switching is precisely what we fear could *undermine* the City's climate goals as electrification increases demand from the grid during the grid's dirtiest hours. BOMA recommends the following compliance exemptions be included in the implementing legislation until the California Independent System Operator certifies that our state energy supply is consistently generated from solely 100% renewable energy:

- Any building whose gas use is from a system that remains within its useful life, as per manufacturer's guidelines, shall not be subject to early replacement. These buildings should remain subject to enhanced benchmarking, auditing, and other efficiency requirements instead.

- Any building with no feasible path to electrification other than electric resistance heat, as certified by a California registered Professional Engineer, shall be subject to compliance pursuant to implementing legislation.

BOMA also remains concerned that overreliance on electrification in the near-term could lead to a larger carbon footprint in some of our most efficient buildings. From a thermal equivalent, a building that uses natural gas but records an ENERGY STAR score of 90 is much more efficient than any building that is utilizing electric resistance heat technology. We caution that forcing this type of electrification, particularly the early replacement of existing natural gas equipment, runs counter to the City's ultimate climate goals and potentially punishes the very entities that have been diligently leading on emissions reductions. We therefore recommend the following compliance exemption in the implementing legislation:

- Any building with an Energy Star score of 90 or more shall not be subject to replacement of their system until the California Independent System Operator certifies that our state energy supply is consistently generated from solely 100% renewable energy:

Other Uses of Natural Gas with Net Carbon Benefits

As we mentioned in our priorities above, BOMA would like to highlight the complexities of the following use types of natural gas that are particularly complex. We stand ready to provide additional context and technical assistance on this issue, and recommend exclusion for the following use types with net carbon benefits, including:

- Fuel Cells
- Absorption Chillers
- Cogeneration Facilities
- Systems using biogas

Economic Concerns and Potential Solutions

As BOMA SF has argued, the GHG emissions reductions that the Climate Action Plan hopes to achieve will necessitate significant capital investments and higher operational costs for both building owners and their tenants. Even in a building that does not face the technical challenges mentioned above, the prospect of transitioning this equipment will be tremendously expensive.

We have attempted to make two initial sets of considerations on how some of these economic consequences may be mitigated with assistance from the City. First, the need for future capital expenditures or expected stranded assets that will need to be written off may very well negatively impact commercial property values or business operations. Second, while buildings might be stationary, tenants are not, and consideration must be taken to minimize their burden—especially small business tenants.

Finally, we continue to worry about the economics and sustainability of the gas system for other users. As large commercial users electrify, that will cause price increases to smaller users still on the

gas infrastructure, which will disproportionately negatively affect mid and lower income communities.

Property Value and Stranded Capital Impacts

The City relies heavily on commercial property taxes for its budget revenue. BOMA SF is particularly concerned about the future prospects of buildings without a feasible economic pathway to electrification through the project's simple payback. We urge City leaders to consider a wide array of financial assistance for these specific cases, but propose the following two exemptions to offset the impacts of these potential value losses:

- Any building with no feasible economic path to electrification through a project simple payback, including noncompliance fees of 6 years or greater, as certified by a California registered Professional Engineer, shall not be levied with more than 10 years of annual fees.
- The City shall explore the waiver of transfer tax obligations, gross receipts tax obligations, or commercial property tax obligations when the purchaser agrees to an electrification plan that will be executed within two years of the sale of the building.

Assistance with Operational Costs

Absent of electrification efforts, utility prices continue to rise by double digits in California. Recent CPUC research shows that rates are expected to climb leading to \$0.30/kWh power prices in 2030. On a fuel equivalent basis, electric resistance averages to a total increase of 20% of the average utility bill for BOMA members. If you take a case where you go from natural gas to electrification without the use of a heat pump, you could be facing a 400% increase in thermal costs.

As the push for decarbonization grows, leasing practices are evolving to shift the responsibility for utilities to tenants. BOMA SF urges the City to consider financial assistance through utility credits for the following tenants until the cost of renewable electricity is more competitive with the price of natural gas. The following tenant types that assume responsibility for utilities in a building that has been electrified should qualify:

- Small businesses, defined as businesses with 100 employees or less, and/or additional businesses that demonstrate need. This should be particularly focused on assisting businesses that are female-owned, minority-owned, veteran-owned, or owned by a member of the LGBTQIA+ community.
- Non-profit organizations.
- Arts and culture institutions

Conclusion

BOMA SF is committed to our leadership and BOMA International's global leadership on the response to the climate crisis. We remain hopeful that we can collaborate with City to shape implementing legislation that makes San Francisco a model city for workable climate action and that the above comments are useful as you consider the legislation that will stem from the Climate Action Plan. We urge City leaders to come together with entities such as BOMA to answer tough

questions and develop legislation that we can wholeheartedly support. It is critical that you engage consistently with all key stakeholders as this legislation is being developed. We welcome further discussion with our members to answer and refine these issues.

Sincerely,



John R. Bryant
CEO, BOMA San Francisco

Cc: The Honorable London Breed, Mayor, City and County of San Francisco
The Honorable Tyrone Jue, Acting Director, San Francisco Department of the Environment
Honorable Members and Staff, Land Use and Transportation Committee

From: [Nancy Haber](#)
To: [Major, Erica \(BOS\)](#); [Melgar, Myrna \(BOS\)](#); [MelgarStaff \(BOS\)](#); [Preston, Dean \(BOS\)](#); [Peskin, Aaron \(BOS\)](#); [Mar, Gordon \(BOS\)](#)
Subject: Hearing 220249 - Building electrification strategies in the Climate Action Plan
Date: Friday, July 15, 2022 1:12:20 PM

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Dear Supervisors,

I want to thank Supervisor Mar for requesting this hearing on plans for forging ahead with total Building Electrification in San Francisco, as detailed by the SF Department of the Environment based on our Climate Action Plan. As a climate activist and SF resident of District 7, I appreciate the work Director Jue and the Department staff have done in moving forward with the implementation of our updated and comprehensive CAP.

Our buildings and appliances emit 40% of our total GHG emissions in SF and represent a huge opportunity to mitigate immediate environmental dangers in SF and meet our climate goals by electrification. It is imperative that we act as quickly and as aggressively as possible to stave off the ever increasing dangers of climate change, affecting us right now in the polluted air we breathe both inside (methane and other poisonous gases from gas appliances) and outside our homes. While we are confronted every day with these dangers, it is all too easy to put off action in the face of what seem to be more pressing issues or too great an expense, but the truth is that climate change and environmental collapse affect every aspect of our lives: our health, social and environmental inequalities, certainly our economy; and these problems become ever more expensive to solve with any delay. We cannot afford to wait any longer to use all our wealth, talent, and political courage to address our climate emergency and immediate air pollution!

I appreciate all the work our Board of Supervisors has done to this point to help the City address climate change and environmental problems, and help move us towards a just transition to a liveable City. I urge you to keep your focus on empowering SFE and our urgent need to electrify our buildings, and be unstinting in your efforts to support the Department and the CAP with funding, legislation, and all resources at your disposal.

Sincerely,
Nancy Haber
SF District 7



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