



The Campaign for Fossil Free Buildings in Silicon Valley

350 Silicon Valley, Acterra, Bay Area for Clean Environment, Carbon Free Silicon Valley, Carbon Free Palo Alto, Carbon Free Mountain View, Citizens' Climate Lobby San Mateo County, Citizens Environmental Council of Burlingame, Clean Coalition, Climate Reality Project: Santa Clara County, Coltura, Cool Block, Earthy B, emeraldECO, Fossil Free Mid-Peninsula, GreenTown Los Altos, Kitchens of Life, Menlo Spark, Menlo Together, Mothers Out Front Silicon Valley, Pacifica Climate Committee, Peninsula Interfaith Climate Action, Project Green Home, Redwood Energy, SIDCO Homes, San Carlos Green, San Francisco Bay Physicians for Social Responsibility, Sierra Club Loma Prieta Chapter, Bay Area for Clean Environment, Securethefuture2100, Sustainable San Mateo County, Sustainable Silicon Valley, Sunnyvale Cool, Silicon Valley Youth Climate Action, and Silicon Valley Youth Climate Strike.

November 16, 2020

San José City Council
200 E. Santa Clara St.
San José, CA 95113

Via email: sam.liccardo@sanjoseca.gov, dev.davis@sanjoseca.gov, raul.peralez@sanjoseca.gov, lan.diep@sanjoseca.gov, sylvia.arenas@sanjoseca.gov, maya.esparza@sanjoseca.gov, charles.jones@sanjoseca.gov, sergio.jimenez@sanjoseca.gov, magdalena.carrasco@sanjoseca.gov, pam.foley@sanjoseca.gov, johnny.khamis@sanjoseca.gov

RE: Strong Support for Updated Natural Gas Infrastructure Prohibition Ordinance (as outlined in FILE: 20-1445 for consideration on November 17, 2020)

Dear Mayor Liccardo and Council Members,

On behalf of the Campaign for Fossil Free Buildings in Silicon Valley ([FFBSV](#)), this letter expresses our strong support for the proposed *Updated Natural Gas Infrastructure Prohibition Ordinance*, - **as proposed by staff without further amendments** - extending the gas prohibition adopted last year for new homes, ADUs, small apartments, and municipal buildings to other sectors. Although we are in unprecedented times with a pandemic and economic downturn, city building electrification regulations are critically needed to address the magnitude of the climate, air quality, health, and safety impacts of current fossil gas use in our homes and buildings.

FFBSV includes the 33 organizations listed above, working together to support an accelerated phase out of fossil fuels in buildings. A rapid transition away from fossil fuel use is critical to avoid the very worst and irreversible impacts of climate change. Preventing the use of fossil fuels, including natural gas, in new construction will create more affordable, cleaner, healthier, and more resilient housing and buildings for communities throughout San Jose.

The resilience of all-electric new construction is paramount as we face longer and more destructive wildfire seasons and increasing Public Safety Power Shutdowns. Not only are new gas appliances inoperable during grid outages (*for instance, pilot lights are now prohibited for new appliances by the state for safety reasons*), gas service also takes far longer to restore than electricity after an emergency outage. Further, as far as any concerns about grid reliability, the memo from city staff on this item correctly notes that grid impacts from the electrification of *new construction* will be marginal.

It has come to our attention that Bloom Energy has requested an exemption from the proposed Gas Prohibition. Bloom products are fuel cell-based electricity generators that use natural gas as the fuel source. They require gas infrastructure connections and continuous operation (with the associated CO₂ and methane emissions) just like conventional gas combustion devices. The Staff supplemental memorandum indicates that the purpose of the exemption is "in the event of an electric grid outage," but fuel cells are not economic to run only during a power outage and therefore run 24/7/365. It also states that "Natural Gas-fed fuel cell systems typically have a higher carbon pounds of CO₂ per megawatt-hour generated footprint than the same amount of natural gas-generated electricity provided by PG&E." **We are therefore strongly opposed to any exemptions allowing significant continuous fossil gas use in place of cleaner SJCE (or PG&E) electricity in new construction.** Any blanket exemption in this vein would severely undermine the intent of the proposed gas prohibition. The late attempt of a fossil fuel company to tamper with this policy is inappropriate.

Building Electrification is an Urgent Climate Action

This year we have experienced another devastating wildfire season, and yet the depth of the climate crisis is even worse than commonly understood, demanding urgent action. In 2018, the Intergovernmental Panel on Climate Change (IPCC) concluded that ***we must dramatically reduce Greenhouse Gas (GHG) emissions by 2030 through rapid, far-reaching, and unprecedented measures.***ⁱ Since that report was issued, we have seen greater impacts from climate change than anticipated.ⁱⁱ Current trends for carbon emissions and lack of action show that we are headed to *twice* the rate of warming that the Paris Climate Accord sought to contain.

San Jose joins at least 20 other cities that have adopted all-electric requirements for new construction that avoid new fossil gas use because there are many benefits to community health, safety, and a stable climate future, including:

- **Economic:** All-electric homes are less expensive to build (saving roughly \$3,000 or more for each new apartment unit, for example). In all of the buildings analyzed by the 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study, all-electric versions cost less to construct than their mixed-fuel counterparts. **All-Electric buildings are also more efficient.** For example, according to the California Energy Commission, a modern high efficiency heat pump electric water heater (available now at major retailers) costs roughly one third less on utility bills to operate than the most efficient gas water heater.ⁱⁱⁱ In addition, all-electric buildings include air conditioning combined with heating, resulting in less equipment, reduced maintenance costs and greater climate resilience.

- **Public Safety:** Fossil gas is highly flammable. In the past ten years, 9,000 gas explosions in the U.S. have killed over 500 people, and gas leaks have displaced and sickened thousands of people.^{iv} Fossil Gas also caused half the fires after two major California earthquakes.^v
- **Public Health:** Gas stoves release smog-forming compounds such as nitrogen dioxide, unburnt hydrocarbons and carbon monoxide pollution that doubles risks for heart and lung disease and triples the use of asthma medications.^{vi} ***In fact, studies have shown that children living in homes using gas for cooking have a more than 40% higher risk of having asthma.***^{vii} Further, improperly vented gas appliances lead to carbon monoxide poisoning that results in thousands of emergency room visits and several hundred deaths every year.^{viii}
- **Climate:** All-electric buildings are a highly visible and practical step forward to address the climate crisis, by breaking the cycle of fossil fuel dependency in buildings. The proposed measure would reduce over 600,000 tons of CO2 emissions over the estimated 50-year lifecycle of the new buildings covered by this update, which will help San José reach its Climate Smart electrification and zero net energy building goals.
- **Construction Time Savings:** All-electric buildings are generally faster to design, permit, and build. The code is easier for building and planning staff to apply, and it is also easier for everyone to understand.
- **Resilience:** All-electric code today prevents a complex, costly and likely inevitable switch to electricity in the future, since gas prices are expected to rise sharply, and California is planning to eventually end gas distribution. PG&E has asked for a 24% gas rate increase and SoCalGas, a 42% increase, over the next couple years, and this is just the beginning. **Building all-electric now will help future-proof San Jose.**

The recent national election was the first to feature the climate crisis as a pivotal issue, making coordinated federal action on climate a new possibility.^{ix} However, achieving meaningful progress will not be easy or timely. Local climate action will continue to be key to community resilience and laying a strong foundation for broader action. Please continue San Jose's legacy of climate leadership with this updated prohibition on gas infrastructure for new construction. We urge you to adopt the policy as staff carefully crafted it, without any further exemptions. Thank you for considering our comments.

Sincerely,

Monica Mallon, SV Youth Climate Action, San Jose team

Avi Subramanian, SVYCA, San Jose Team

Esther Duong, Co-lead, San Jose Youth Climate Action Team of SVYCA

Susan Butler-Graham, Mothers Out Front Silicon Valley

Karen Warner Nelson, Chair Climate Reality Project: Santa Clara County

Peter Pham, SV Youth Climate Action, San Jose resident

Michael Kutilek, Ph.D. Emeritus Professor, SJSU

Gary Latshaw, Chair of the Guadalupe Regional Group of the Loma Prieta Chapter of the Sierra Club

James Tuleya, Chairperson, Carbon Free Silicon Valley

Bruce Naegel, Sustainable Silicon Valley

Janelle London, Joint Venture Silicon Valley
Hoai-An Truong, Mothers Out Front Silicon Valley, Turnout4Transit
Abhimanyu Jayaraman, co-lead, state advocacy, Silicon Valley Youth Climate Action, HS student D1
Hoi Poon, co-founder, SVYCA; co-chair, environment committee, SVDC, D1 resident
Nicole Kemeny, 350 Silicon Valley
Robert M. Gould, MD, President, San Francisco Bay Physicians for Social Responsibility
Jeralyn Moran, Co-Chair, Unitarian Universalist Church of Palo Alto, Green Sanctuary
Sven Thesen, Founder, Project Green Home
Leane Eberhart, Architect
Raymond Larios, Advocate
Terry Nagel, Chair, Sustainable San Mateo County, and former Mayor, Burlingame
Lauren Weston, Executive Director, Acterra
Ellyn Dooley, Citizens' Climate Lobby San Mateo County
Gladwyn d'Souza, co-Chair, Conservation Committee, Loma Prieta Chapter Sierra Club
Suzanne Emerson, San Carlos Green
Constance Miller, GreenTown Los Altos
Diane Sweet, emeraldECO
Carol Cross, Fossil Free Mid-Peninsula
Suds Jain, 350 Silicon Valley City Teams co-leader, Acterra board member
Ruth Merino, Chair, San Jose Community Energy Advocates
Bruce Hodge, Carbon Free Palo Alto
Eva Markiewicz, Rewiring America Advocate
Spencer Ahrens, Facebook
Bruce Karney, Board Member of Carbon Free Silicon Valley
Daniel Tahara, San Francisco Climate Emergency Coalition
Lauren Weston, Executive Director, Acterra: Action for a Healthy Planet
Diana Moss, Teacher, Advisor The Harker School Green Team
Natasha Yen, Co-President, The Harker School Green Team
Debbie Mytels, Chair, Peninsula Interfaith Climate Action
Gary Ding, Public Relations Officer, The Harker School Green Team
Jared Johnson, Policy Fellow, Acterra: Action for a Healthy Planet
Logan Spalding, Beneficial Electrification, Acterra: Action for a Healthy Planet
Terry Nagel, Chair, Sustainable San Mateo County, and former Mayor, Burlingame
Mary Dateo, Board Member of Carbon Free Mountain View
Bret Andersen, Carbon Free Palo Alto
Carlos Davidson, Pacifica Climate Committee
Chloe Montgomery, Citizens' Climate Lobby San Mateo County
Rani Fischer, Peninsula Interfaith Climate Action, 350.org
Diane Bailey, Executive Director, Menlo Spark

Cc:

agendadesk@sanjoseca.gov

Rosalynn Hughey, Director, Planning, Building, and Code Enforcement, rosalyann.hughey@sanjoseca.gov

Kerrie Romanow, Director, Environmental Services, kerrie.romanow@sanjoseca.gov

Ken Davies, Deputy Director, ken.davies@sanjoseca.gov

Jim Ortbal, City Manager's Office jim.ortbal@sanjoseca.gov

[i] <https://www.ipcc.ch/sr15/> Also see: WRI blog for a roundup of the landmark reports of 2018 & a comparison of climate impacts in a 1.5 deg.C v. 2 deg.C world: <https://www.wri.org/blog/2018/12/2018-year-climate-extremes>

[ii] For example, the 2019-2020 Australian wildfire that destroyed over 10,000 buildings and killed at least 34 people, and a massive global bleaching event for coral reefs impacting hundreds of millions of low income people who rely on fisheries for their food or livelihoods.

See: A roundup on the latest global reports showing a worsened outlook than previously understood, including an estimated 3-5 degrees C of likely warming by the end of the century, [here](#):

https://docs.google.com/document/d/1-LHZe9kFhLymXE7CaVZmgQTx8VEfbGKAVOSK_x4TcDo/edit?usp=sharing

[This WRI blog](#) discusses the state of international climate negotiations as of COP25 and what is required moving ahead:

<https://www.wri.org/blog/2019/12/cop25-what-we-needed-what-we-got-whats-next>

[This NYT OpEd](#) discusses why climate action is essential in the midst of the COVID-19 pandemic and how to integrate a climate response into the economic recovery required: <https://www.nytimes.com/2020/04/15/opinion/climate-change-covid-economy.html?smid=em-share>

[iii] Rider, Ken, Email correspondence, ken.rider@energy.ca.gov. March 2020.

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

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

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

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

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

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

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

[ix] Fact Sheet: Why 2020 Will Be Remembered As a Climate Election, <https://evergreenaction.medium.com/fact-sheet-why-2020-will-be-remembered-as-a-climate-election-4c2860820f19>

Fw: Public Comment on 6.3 20-1445 Updated Natural Gas Infrastructure Prohibition Ordinance

Gregory, Barbara

Tue 11/17/2020 7:44 AM

To: Agendadesk <Agendadesk@sanjoseca.gov>;

📎 1 attachments (118 KB)

NRDC San Jose all-electric new buildings ordinance support letter.docx;

Thank You,

Barb Gregory



Analyst II

Office of the City Clerk

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San Jose, C-A 95112

408-535-1272 Fax: 408-292-6207

e-mail: barbara.gregory@sanjoseca.gov

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From: Walker, Olivia [REDACTED]

Sent: Monday, November 16, 2020 7:07 PM

To: City Clerk <city.clerk@sanjoseca.gov>

Subject: Public Comment on 6.3 20-1445 Updated Natural Gas Infrastructure Prohibition Ordinance

[External Email]

Hello!

I would like to submit the attached public comment letter in support of the updated natural gas infrastructure prohibition ordinance for tomorrow's council meeting. I've also included my comments below if you have any issues accessing the attachment. Thank you very much!

November 16, 2020

The Honorable Mayor Liccardo and City Councilmembers
San José City Council
200 E. Santa Clara St.
San Jose, CA 95113

Re: Support for the Updated Natural Gas Infrastructure Prohibition Ordinance

Dear Mayor Liccardo and City Councilmembers:

NRDC (Natural Resources Defense Council) is writing to support the proposed updates to the Natural Gas Infrastructure Prohibition Ordinance to expand the current ordinance to cover virtually all new construction in San José with limited exceptions. This expansion will ensure the future of your city's building stock is cleaner, healthier, and more affordable for local residents and businesses.

Your approval of these updates will further San José's goals to address the environmental crisis through ambitious policy to reduce greenhouse gas emissions and will reinforce San José's reputation as a leader on climate action among U.S. cities.

NRDC is the implementing partner of the Bloomberg Philanthropies American Cities Climate Challenge. The City of San José was one of 25 cities to be awarded participation in the Climate Challenge due to its ambitious vision and commitment to execute upon carbon-reducing policies and programs, including taking aggressive action to remove natural gas from newly constructed homes and buildings.

Expanding the Natural Gas Infrastructure Prohibition Ordinance to cover buildings of all types and sizes is a crucial step toward achieving the climate goals to which this Council has already committed. [Climate Smart San José](#), the City's ambitious climate action plan adopted by this Council in 2018, lays out the City's roadmap for reaching the targets set by the International Paris Agreement. Additionally, this Council signed onto a [Climate Emergency Resolution](#) in 2019 further emphasizing the urgent need for transformative climate action and laying out the specific steps for the City to pursue in the years to follow. Both Climate Smart San José and the Climate Emergency Resolution committed the city to prohibit natural gas in all new construction projects citywide, and this update presents this council with the opportunity to make good on those commitments.

Across the State of California, we have seen [nearly 40 other cities](#) approve codes that require or encourage transitioning from gas infrastructure to clean electricity. San José stands out as the largest city in the United States with a clean energy new construction code and will model the kind of ambitious leadership on climate action we need in our cities.

Making all of San José's new construction all-electric will present multiple benefits to the community:

- Improved indoor air quality by avoiding dangerous chemicals emitted by gas appliances, including carbon monoxide, formaldehyde, and nitrous oxide – chemicals tied to an increased likelihood of childhood asthma and poor respiratory health;
- Avoided GHG emissions, directly improving outdoor air quality, mitigating the urban heat island effect and reducing San José's contribution to the dangerous symptoms of climate change like wildfires and droughts; and
- Saving the San José community money in the long run as natural gas prices are projected to rapidly rise in the coming years. Requiring new construction to be fully electrified will shield developers and tenants alike from both higher gas bills and the costs of retrofitting existing buildings off of gas infrastructure down the line.

Furthermore, the California Statewide Codes and Standards Program has already found that with the appropriate design, fully electrified low-, mid-, and high-rise buildings are more cost-effective to build and operate than those with gas infrastructure. San José City staff and technical partners are already ensuring the development community has the necessary support to build all-electric in the most cost-effective way through public-facing educational resources and targeted technical assistance.

Expanding the gas infrastructure ban will make the city more resilient. Removing gas infrastructure from new construction projects minimizes the risks of explosion or fire caused by damage to gas piping due to a potential severe seismic event, a not uncommon occurrence in Californian cities.

We oppose the fourth exemption category added in a supplemental memo November 15 for “facilities with a distributed energy resource.” This eleventh-hour exemption for fuel cells—which will be powered by fracked gas for the foreseeable future—weakens the ordinance and is not needed. We urge you to keep San José’s climate leadership strong.

- If you must include this exemption, we urge you to require that use of gas-powered fuel cells should be limited to operate only as backup power for no more than 200 hours (8 days) per year to cover PSPS and other outages. Operation beyond that more than that should require compliance with RPS requirements with stringent quality controls to ensure so-called "renewable" gas is what it claims to be.

NRDC urges this Council to take this necessary step toward making San José a more resilient, affordable and sustainable city for all its residents.

Thank you for your consideration.

Sincerely,

OLIVIA WALKER

Research Associate, American Cities Climate Challenge

Healthy People & Thriving Communities Program

NATURAL RESOURCES DEFENSE COUNCIL



OWALKER@NRDC.ORG

NRDC.ORG

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Fw: Support gas ban ordinance at 11.17.20 City Council Meeting, Item 6.3

Gregory, Barbara

Tue 11/17/2020 7:38 AM

To: Agendadesk <Agendadesk@sanjoseca.gov>;

Thank You,

Barb Gregory



Analyst II

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From: Claire B. [REDACTED]

Sent: Monday, November 16, 2020 10:03 PM

To: Khamis, Johnny <johnny.khamis@sanjoseca.gov>

Cc: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>

Subject: Support gas ban ordinance at 11.17.20 City Council Meeting, Item 6.3

[External Email]

Dear Council Member Khamis:

As a resident of your district, and as a supporter of Mothers Out Front Silicon Valley, and 350 Silicon Valley, I **urge you to vote in favor of the [expanded gas ban ordinance](#)** at the city council meeting tomorrow, so that we can rein in the second-largest source of climate destabilizing emissions in our city: the burning of gas in buildings.

As you know, this Tuesday the San Jose City Council will vote on extending our city's existing "natural" gas ban to virtually all new buildings, including new high-rise apartment buildings. A key provision of this ordinance is requiring that builders apply for an exemption, if needed, rather than automatically receiving

one. This will greatly reduce emissions and will be a major step forward for climate, for air quality, and for health and safety. The ordinance **will only affect new construction**, not existing buildings.

As you also know, 98% of San Jose residents currently receive their electricity from clean, renewable sources through San Jose Clean Energy. By banning the use of "natural" gas (which emits large quantities of methane, a potent greenhouse gas that accelerates climate change), **you will be ensuring that new buildings in San Jose can be emission-free**. We and our children will be using these buildings for decades to come, so this is a vital step if we are to reach our goal of net zero emissions by 2045 -- which we MUST do in order to avoid the most devastating, existential threats from climate change.

Thank you for taking this important step to end the climate crisis and preserve a livable climate for future generations.

Sincerely,

Claire Bleymaier

[REDACTED]

[REDACTED]

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Fw: support gas ban ordinance at Nov 17 city council meeting, Item 6.3

Gregory, Barbara

Tue 11/17/2020 7:38 AM

To: Agendadesk <Agendadesk@sanjoseca.gov>;

Thank You,

Barb Gregory



Analyst II

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From: Lisa Feldberg [REDACTED] >

Sent: Monday, November 16, 2020 10:19 PM

To: Peralez, Raul <Raul.Peralez@sanjoseca.gov>; District3 <district3@sanjoseca.gov>

Cc: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>

Subject: support gas ban ordinance at Nov 17 city council meeting, Item 6.3

[External Email]

Dear Council Member Peralez:

As a registered voter in District 3 and as a supporter of Mothers Out Front Silicon Valley, **I urge you to vote in favor of the [expanded gas ban ordinance](#)** at the city council meeting tomorrow. Tuesday, November 17. It is so critical that we turn the tide on our climate crisis by helping to eliminate the second largest source of emission in our city, which is the burning of gas.

If the measure passes, it will extend the current city ban of "natural" gas to virtually all new buildings, including new high-rise apartment buildings. Rather than automatically granting waivers to the policy, it allows builders to apply for an exemption, which maintains the integrity of the measure. The ordinance also exempts existing buildings and homes, which would be difficult and costly to retrofit, including my residence built in 1937.

As you also know, 98% of San Jose residents (including myself) currently receive our electricity from clean, renewable sources through San Jose Clean Energy. By banning the use of "natural" gas (which emits large quantities of methane, a potent greenhouse gas that accelerates climate change), **you will be ensuring that new buildings in San Jose can be emission-free.** This is a critical step if we are to reach our goal of net zero emissions by 2045 -- which we MUST do in order to avoid the most devastating, existential threats from climate change.

Thank you for taking this important step to end the climate crisis and preserve a livable climate for current and future generations.

Sincerely,
Lisa B. Feldberg



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