

# Please vote Yes on the expanded gas ban ordinance

Jenny Green [REDACTED]

Sun 11/8/2020 10:47 AM

To: District9 <district9@sanjoseca.gov>;

Cc: Agendadesk <Agendadesk@sanjoseca.gov>;

[External Email]

Dear Council Member Foley,

As your constituent and as a member of Mothers Out Front Silicon Valley, I urge you to vote in favor of the expanded gas ban ordinance at the San Jose City Council meeting on November 17. This is an essential step in moving toward zero emissions and stopping the existential threat that we face from climate change.

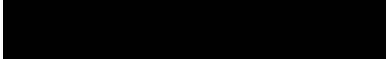
This decision by the San Jose City Council has implications not only for our own city, but for the entire Bay Area, the state of California, and eventually for the country as a whole. Over the past year I've attended council meetings in several of the cities and towns surrounding San Jose as they voted to pass reach codes. One argument that their council members almost always advanced in favor of reach codes and gas bans is that San Jose had already done it. They are looking to San Jose as their guide. And the rest of California is looking to Silicon Valley as a guide. This past week, in fact, I received a call from a member of a climate commission in San Diego County asking about reach codes. And as you know, states around the country that want to lower their greenhouse gas emissions are looking to California as a model.

Please Reach for the Future and vote to keep gas out of our new buildings. Our country, our children and their children will thank you.

Sincerely,  
Jenny Green

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# Support gas ban ordinance at 11.17.20 City Council Meeting

Serena Zhao 

Thu 11/12/2020 11:58 AM

To: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>; District4 <District4@sanjoseca.gov>;

Cc: Agendadesk <Agendadesk@sanjoseca.gov>;

[External Email]

Dear Mayor Liccardo and Council Member Diep

As your constituent and as a member of Mothers Out Front Silicon Valley, I urge you to vote in favor of the expanded gas ban ordinance. I was thrilled when you passed a strong reach code and a historic gas ban last year, and I hope you will move forward on November 17th to approve the expanded gas ban ordinance to cover virtually all new buildings. This essential step will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected increases in the cost of fossil gas. You will also be blazing a climate-smart trail for cities around the nation to follow. Please Reach for the Future and vote to keep gas out of our new buildings. Our children and their children will thank you.

Sincerely,

Serena Zhao

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November 13, 2020

San Jose City Council

Regarding: November 17, 2020 Agenda Item 6.3 Natural Gas Infrastructure Prohibition

Dear Council members,

On behalf of the 70 architects and staff at EHDD Architecture we are writing in support of your proposed Natural Gas Infrastructure Prohibition. We have been designing all-electric buildings around the Bay Area for almost twenty years now and have found them robust, reliable, healthy, and cost-effective solutions for our clients.

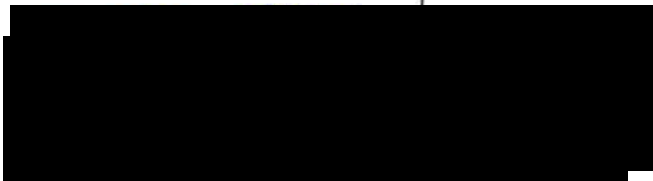
As electric reach codes began emerging two years ago, we met with our colleagues at other firms and our mechanical engineering partners and asked if the State of California was broadly ready to shift from gas to electric. The responses we got back were yes, with few exceptions the design and construction industry is ready for this transition as noted in their attached comments. We began collecting examples of all-electric projects of all building types from around the state and have attached a slide deck showing over 150 examples.

There are many robust studies showing the cost effectiveness of building electrification, and we have found that to be the case in our practice. A heat pump provides heating and cooling in one appliance which is lower cost than having two appliances--a gas furnace and electric air conditioner. This eliminates the gas service to the building, the meter, gas piping inside the building, and flues through the roof, all reducing cost. Going to a single utility does not reduce resilience since all modern gas appliances need electricity for electronic ignition and controls—they will not work in a power outage.

We have grown increasingly concerned about the very real health impacts of combusting fuel inside homes. The research shows that fossil fuel combustion inside living spaces is not safe and leads to NOx levels that exceed the outdoor legal limits. The warning labels clearly posted on camp stoves and portable generators to not use them indoors indicates the risks of combustion inside our homes. California tops the American Lung Association list of most polluted cities every year. Even though buildings use only slightly more gas than power plants in California, they emit seven times more NOx because unlike powerplants they have no pollution controls. All-electric buildings reduce indoor and outdoor air pollution.

We are especially concerned that continuing to build new fossil fuel infrastructure will then require expensive retrofits of relatively new buildings to meet California's legislated 2045 climate goals. This will saddle building owners with disruptive renovations in occupied buildings--let's just build them right to start with. For the health, safety, climate benefits, and financial savings, we urge you to take approve a strong all-electric ordinance.

Sincerely,



Duncan Ballash, President  
Jennifer Devlin, Principal  
Scott Shell, Principal  
Rebecca Sharkey, Principal  
Brad Jacobson, Principal



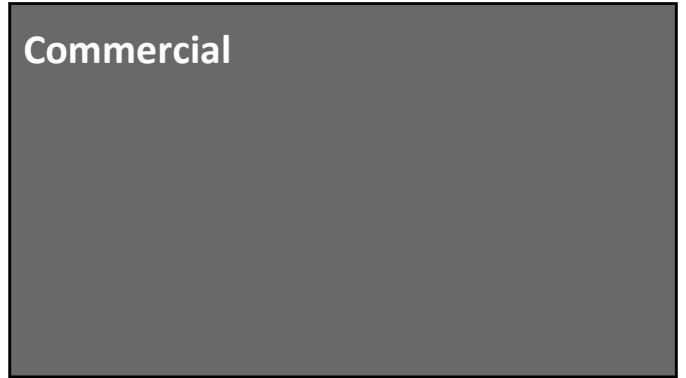
# All Electric Buildings

Current examples  
October 24, 2020

AIA|CA Committee on the Environment  
Scott Shell, FAIA

[https://drive.google.com/file/d/1BLqWDbk18tsSOINDjSY6GGBtm\\_Zu70s/view](https://drive.google.com/file/d/1BLqWDbk18tsSOINDjSY6GGBtm_Zu70s/view)

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# Commercial

2



## 500 Santana Row

San Jose  
236,000 SF, Office  
WRNS Architects  
Interface Engineering

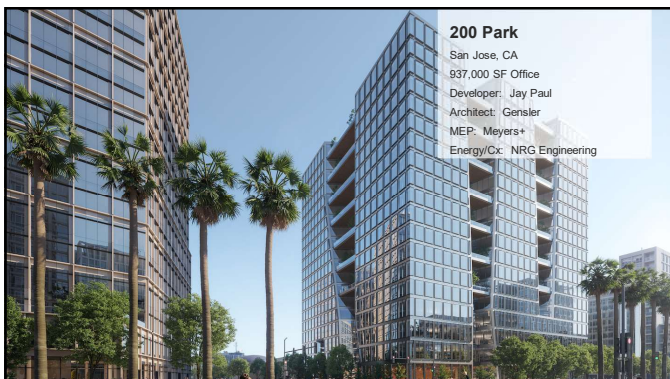
3



## CityView

San Jose, CA  
3,800,000 SF Office  
Developer: Jay Paul  
Architect: Gensler  
MEP: PAE  
Energy/Cx: NRG Engineering

4



## 200 Park

San Jose, CA  
937,000 SF Office  
Developer: Jay Paul  
Architect: Gensler  
MEP: Meyers+  
Energy/Cx: NRG Engineering

5



## 700 Santana Row

San Jose  
829,000 SF, Office  
WRNS Architects  
Interface Engineering

6



**Adobe HQ**  
 650,000 sf  
 San Jose  
 Architect: Gensler  
 MEP: Taylor Engineering

7



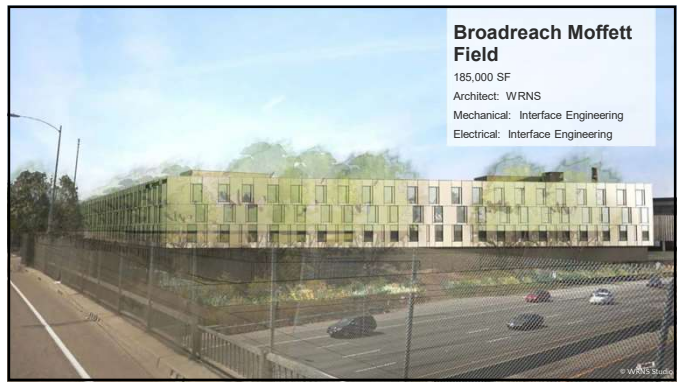
**Microsoft Silicon Valley Campus**  
 640,000 SF  
 Architect: WRNS  
 Mechanical: Interface Engineering

8



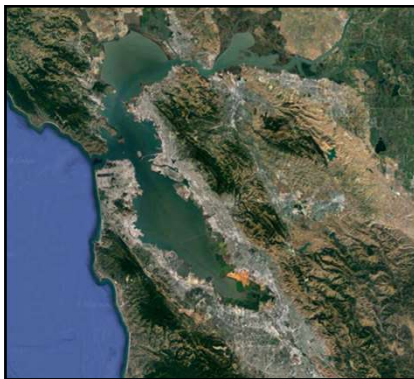
**3450 Park**  
 Palo Alto, CA  
 31,354 SF Office  
 Developer: Jay Paul  
 Architect: DES  
 MEP: Critchfield  
 Energy/Cx: NRG Engineering

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**Broadreach Moffett Field**  
 185,000 SF  
 Architect: WRNS  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

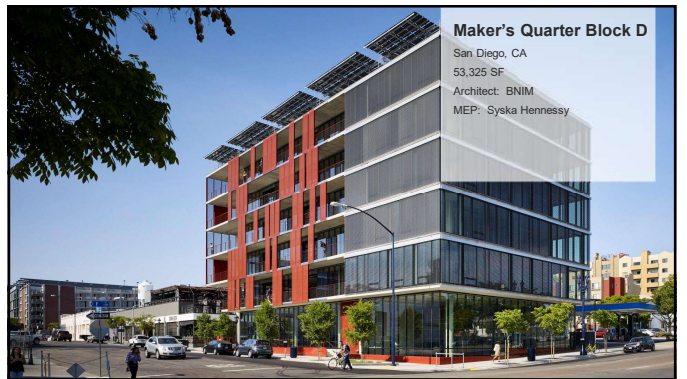
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**Large Offices  
 Confidential Clients**  
 Architects: Multiple  
 MEP: Multiple

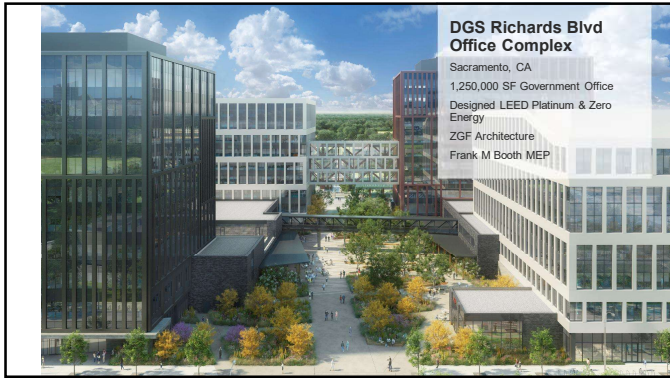
Mountain View	800,000 sf
San Jose	650,000 sf
Sunnyvale	418,000 sf
Sunnyvale	180,000 sf
San Bruno	287,000 sf
Berkeley Lab	400,000 sf

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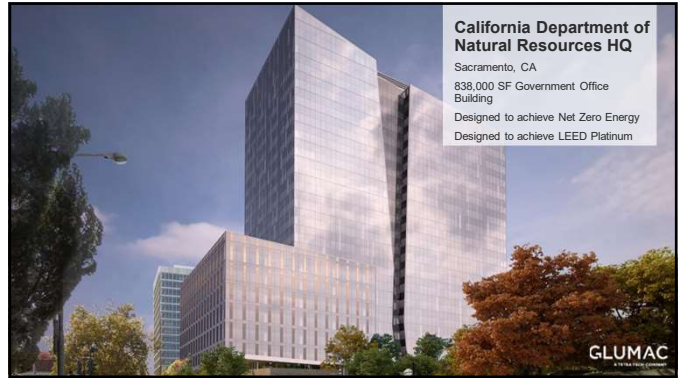


**Maker's Quarter Block D**  
 San Diego, CA  
 53,325 SF  
 Architect: BNIM  
 MEP: Syska Hennessy

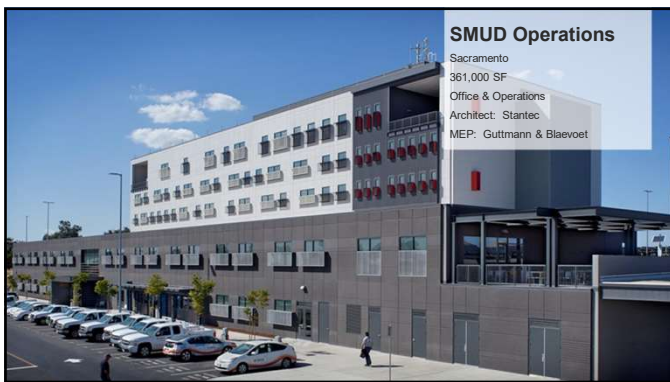
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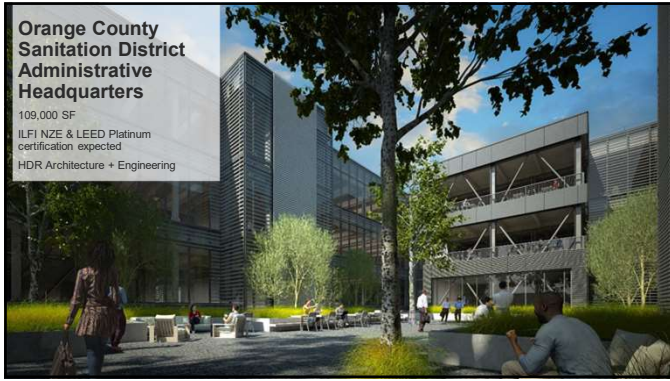
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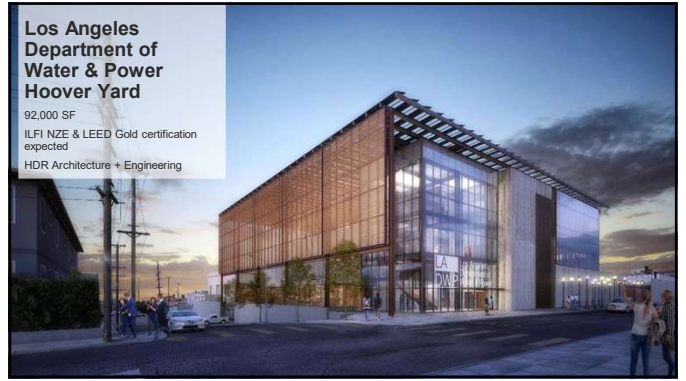
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**Audi Fletcher Jones**  
Costa Mesa, CA  
42,000 SF Show Room and Dealership

25



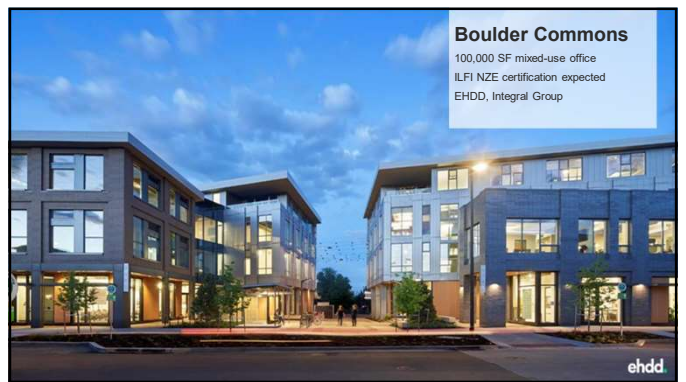
**CSUN Sustainability Center**  
Northridge, CA  
4,000 SF campus building  
LEED Platinum, Net Zero Energy  
Gensler

26



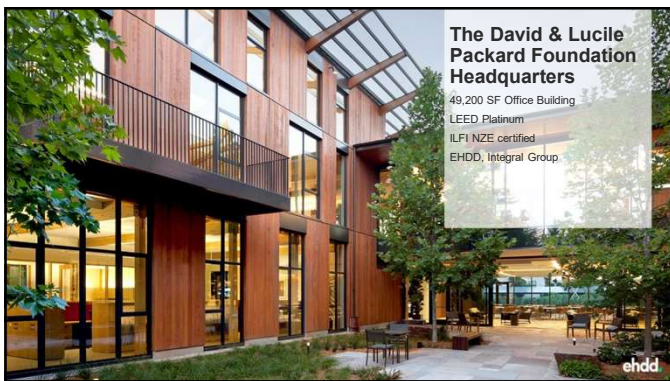
**California Lottery Santa Fe Springs**  
12,000 SF  
Architect: LPAS  
MEP: Integral Group

27



**Boulder Commons**  
100,000 SF mixed-use office  
ILFI NZE certification expected  
EHDD, Integral Group

28



**The David & Lucile Packard Foundation Headquarters**  
49,200 SF Office Building  
LEED Platinum  
ILFI NZE certified  
EHDD, Integral Group

29



**UC Berkeley - Berkeley Way**  
320,000 SF  
Architect: WRNS  
Mechanical: Interface Engineering

30





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**Hormoz Janssens, Principal**  
**INTERFACE ENGINEERING**

Almost all our projects are all-electric, I have only been using gas systems where required by the client.

Electric is almost always less expensive or cost neutral. Very rarely is it more expensive. Often it is our value engineering option.

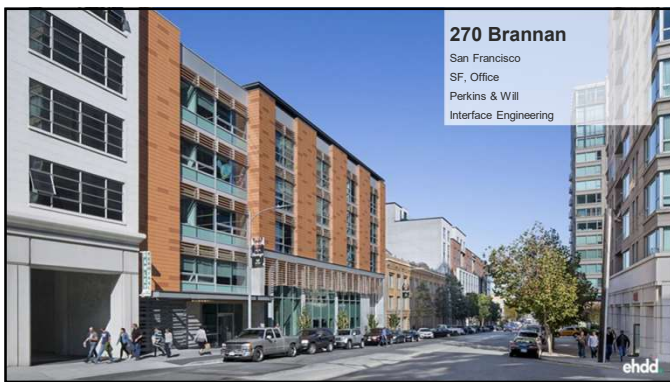
We are doing a 500,000 sf all electric office with major cost savings using heat pumps vs a central plant.

Bay Meadows our all electric design for 1 million sf of development was significantly less expensive than a traditional rooftop package unit + boiler + reheat system.

A huge benefit for heat pumps is reducing water use.

We've done several all electric commercial food service projects that have been very successful. The Chef's quite skeptical at the beginning, but now say they will never go back to cooking on gas.

32



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**100 Flatbush Ave, NY**  
 38 Floors  
 Mixed Use: Residential, Office, Retail  
 Alloy Development  
 Architect: ARO  
 Sustainability: Thornton Tomasetti

35



36



**Microsoft Puget Sound**  
 2,500,000 SF  
 Zero Carbon, LEED Platinum  
 Architect: LMN, NBBJ, WRNS, ZGF

37



**4th and Harrison**  
 950,000 SF  
 Architect: HOK  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

38



**Berkeley Commons**  
 400,000 SF  
 Architect: Gensler  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

39



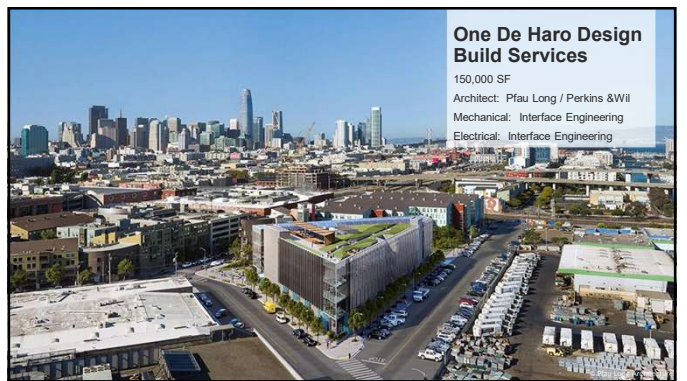
**2800 Third Street PDR**  
 240,000 SF  
 Architect: Perkins + Will  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

40



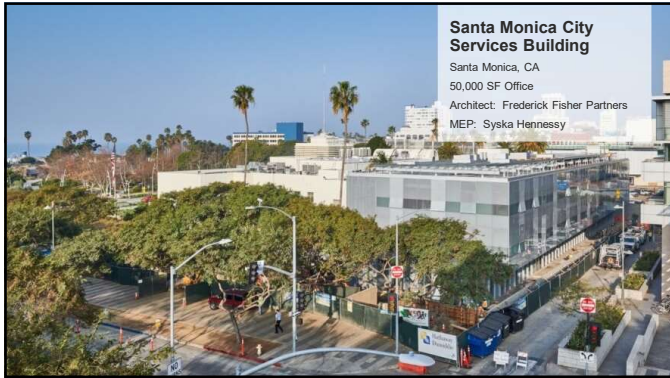
**200 Rhode Island**  
 90,000 SF  
 Architect: Perkins&Will  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

41



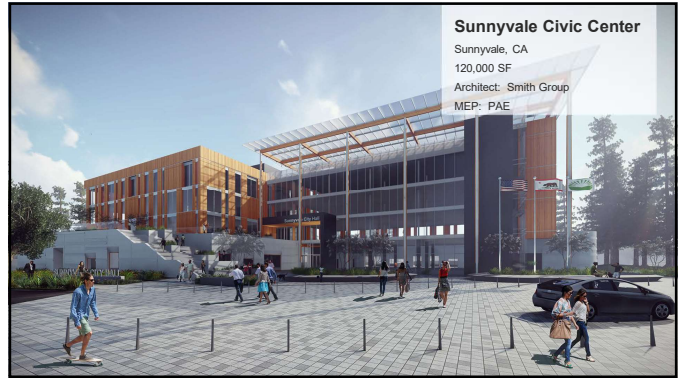
**One De Haro Design Build Services**  
 150,000 SF  
 Architect: Pfau Long / Perkins & Will  
 Mechanical: Interface Engineering  
 Electrical: Interface Engineering

42



**Santa Monica City Services Building**  
 Santa Monica, CA  
 50,000 SF Office  
 Architect: Frederick Fisher Partners  
 MEP: Syska Hennessy

43



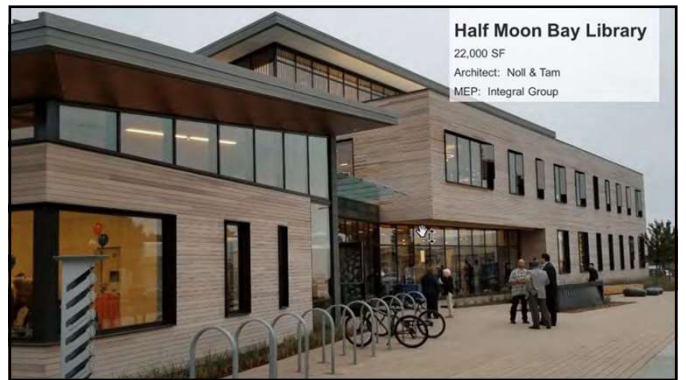
**Sunnyvale Civic Center**  
 Sunnyvale, CA  
 120,000 SF  
 Architect: Smith Group  
 MEP: PAE

44



**Watsonville Water**  
 16,000 SF  
 Architect: WRNS  
 MEP: Integral Group

45



**Half Moon Bay Library**  
 22,000 SF  
 Architect: Noll & Tam  
 MEP: Integral Group

46



**Los Altos Community Center**  
 24,500 SF  
 Architect: Noll & Tam  
 MEP: Integral Group

47



**San Mateo County Government Center**  
 160,000 SF  
 Architect: Studio Gang  
 MEP: Integral Group

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# Universities

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## California Universities Are Transitioning to All-Electric Buildings

The University of California system and Stanford University are making all-electric buildings the default in new construction.

JUSTIN GERDES | SEPTEMBER 24, 2018



“No new UC buildings or major renovations after June 2019, except in special circumstances, will use on-site fossil fuel combustion, such as natural gas, for space and water heating”

[https://www.greentechmedia.com/articles/read/california-universities-are-transitioning-to-all-electric-buildings?QUSW\\_6](https://www.greentechmedia.com/articles/read/california-universities-are-transitioning-to-all-electric-buildings?QUSW_6)

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UC Santa Cruz Student Housing West



UC Irvine Student Housing West, Developer ACC



UC Riverside Dundee Residence Hall, Developer ACC

David Phillips, Associate Vice President for Energy & Sustainability  
UC Office of the President



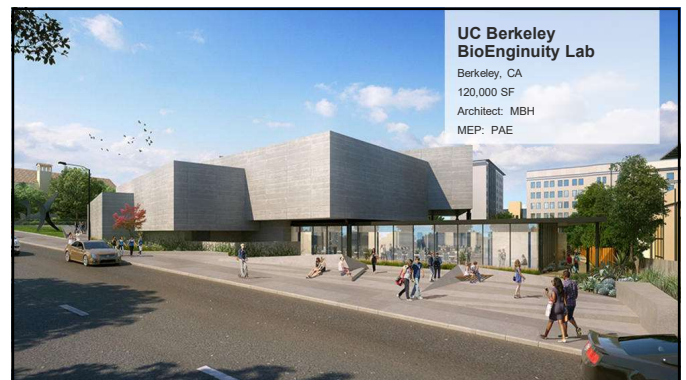
The University of California has committed to carbon neutrality by 2025. We are prioritizing all-electric new buildings (required starting June 2019), and then electrifying existing buildings & systems over time.

Our studies show that all electric mechanical equipment capital costs are comparable for academic & lab buildings, and the costs are lower for residential buildings. Twenty year life cycle costs are comparable for Academic and labs buildings, and lower for residential buildings.

UC has many all-electric housing projects, office buildings, and laboratories now in place and many more in design.

UC's carbon neutrality strategies are pragmatic: don't allow growth to increase carbon emissions; and then transition existing buildings and systems off fossil fuels over time.  
Decarbonizing Your Campus thru Electrification, SCUP 2019

57



### UC Berkeley BioEnginuity Lab

Berkeley, CA  
120,000 SF  
Architect: MBH  
MEP: PAE

58



### CSU East Bay Core Library

100,000 SF  
Architect: Carrier Johnson  
MEP: Integral Group

59



### City College of San Francisco Multi-Use Building

102,000 SF  
Architect: Pfau Long Architecture  
Mechanical: Interface Engineering

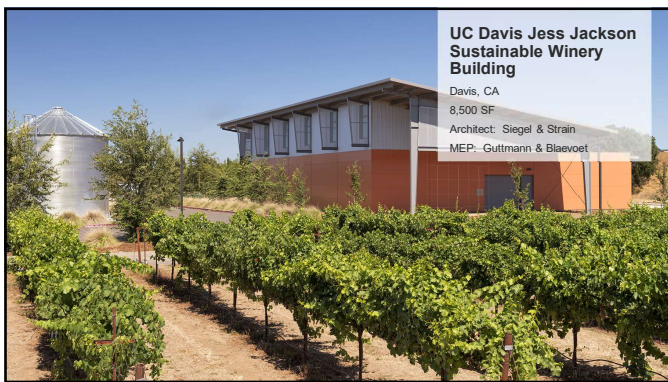
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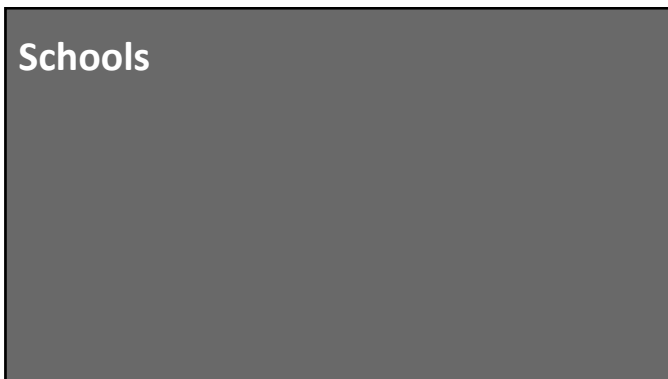
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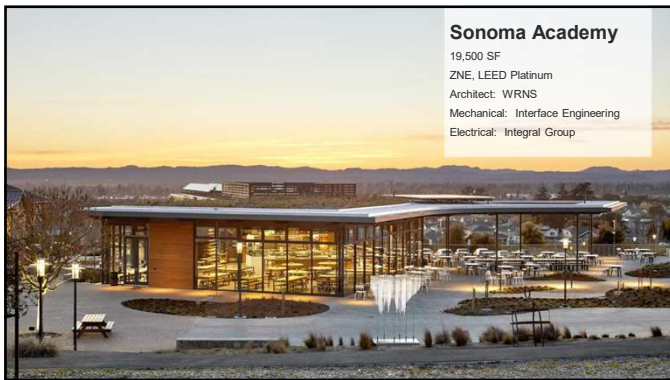
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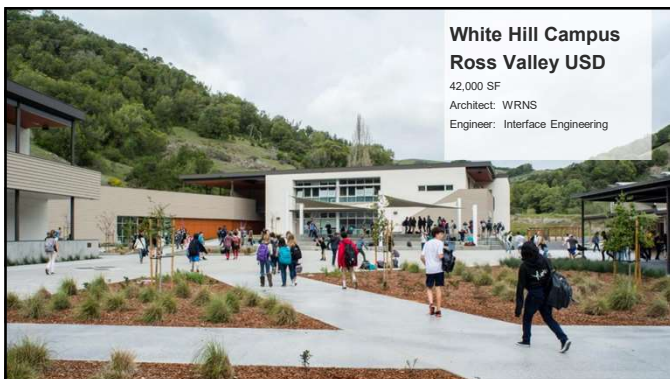
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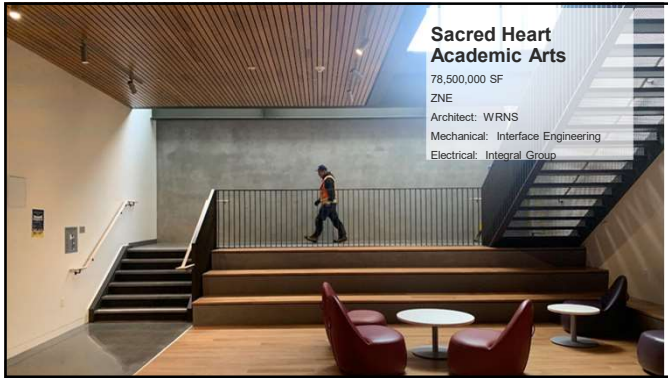
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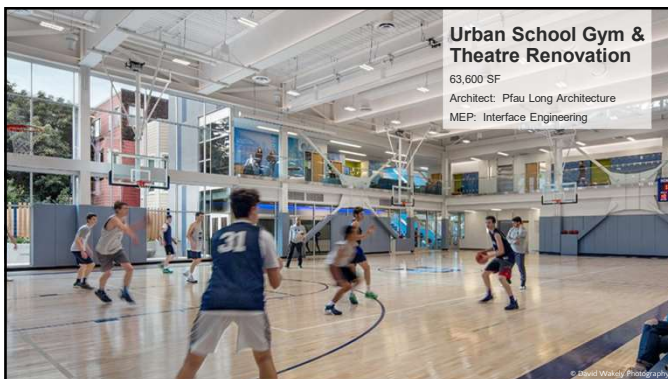
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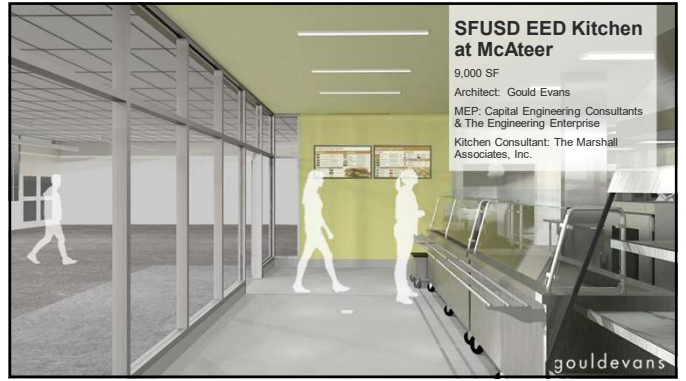


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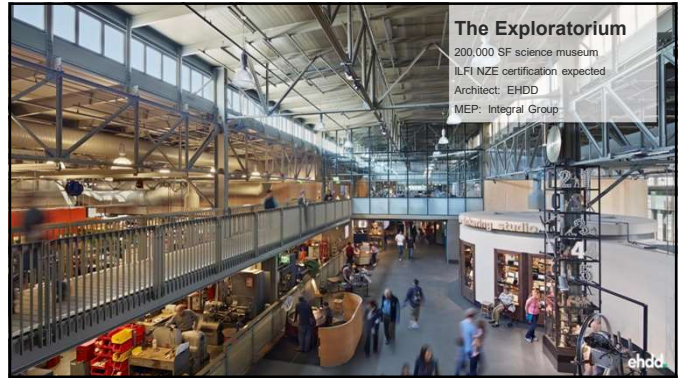
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# Renovations

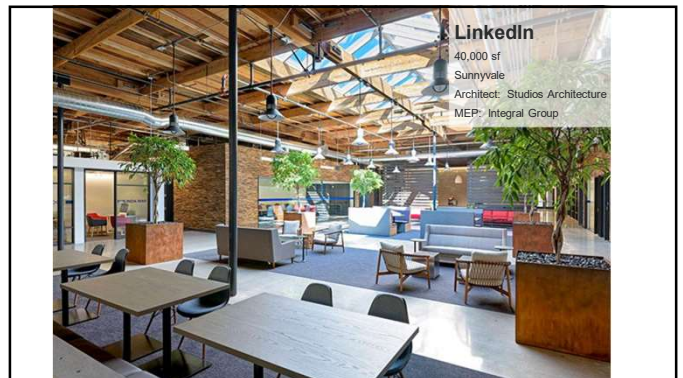
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**Peter Rumsey, Principal**  
  
**There are great examples of all electric buildings for virtually every building type that are cost effective. It is very easy for our firm to design these systems,**  
 For Multifamily projects we are seeing a lot of developers use electric heating with high levels of insulation in apartments that don't need cooling.  
 All electric air-cooled VRF heat pumps are very common on multifamily projects up to ten stories where cooling is needed; this is very cost effective.  
**The market for all electric buildings and heat pumps has been making significant inroads in California, and this had gotten the attention of manufacturers. General Contractors and mechanical subcontractors are getting more familiar with this approach as well.**

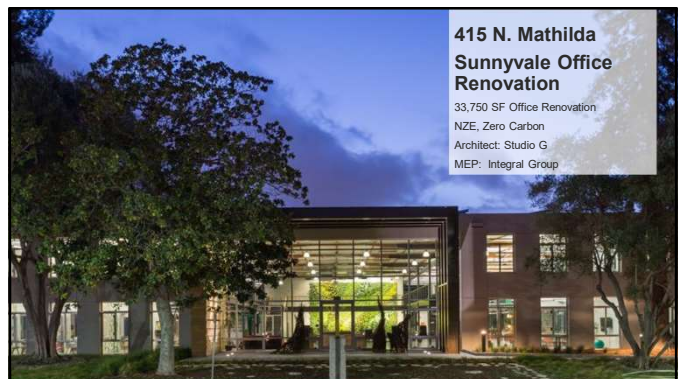
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**AP+I Office  
Mountain View  
Office Renovation**

14,300 SF Office Renovation  
NZE, Zero Carbon  
Architect: AP+I  
MEP: Integral Group

91



**380 N. Pastoria  
Mountain View  
Office Renovation**

42,000 SF Office Renovation  
NZE, Zero Carbon  
Architect: WRNS Studio  
MEP: Integral Group

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**IBEW Local 595  
ZNE Center  
San Leandro, CA  
Renovation**

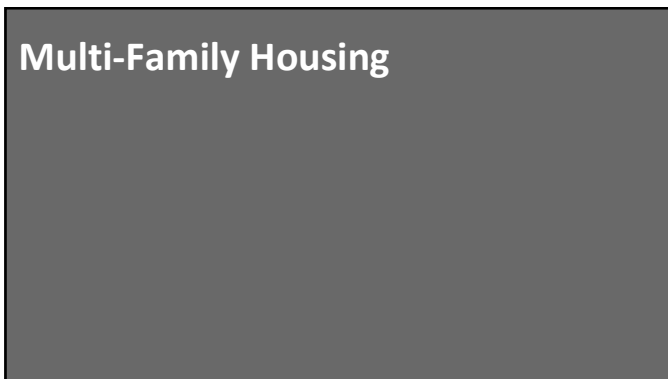
46,000 SF Office Renovation  
NZE  
Architect: FCGA  
MEP: ACCO

93



**• Pier 70**  
• San Francisco  
• MEP BOD: Point Energy Innovations

94



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**Walnut Park Apartments, Los Angeles County**  
Affordable – 64 Units

Hollywood Community Housing Corp, Koning Eizenberg Architecture, Breen Engineering, VCA Green Energy  
Central Heat Pump Water Heating

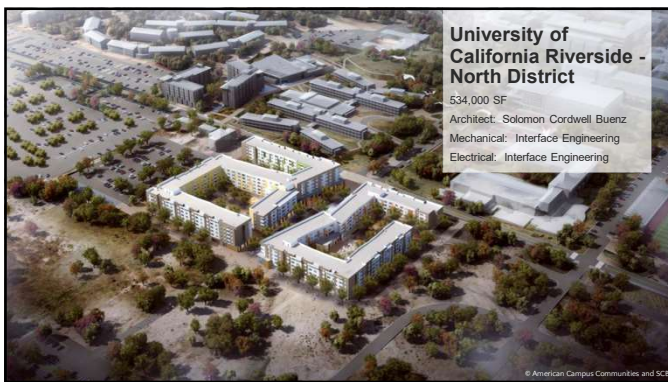
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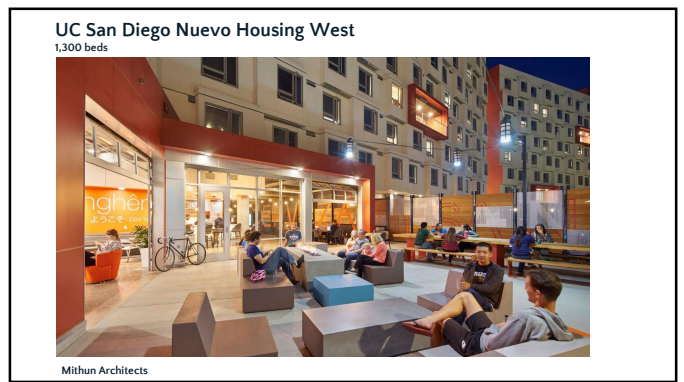
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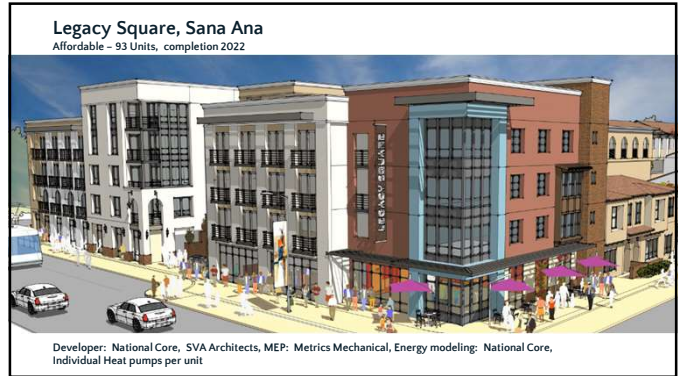
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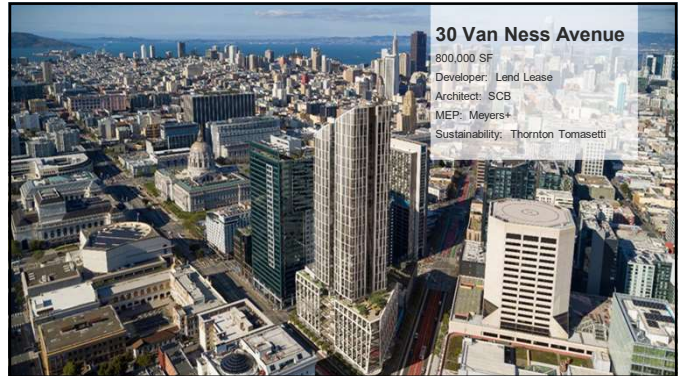
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**California projects**  
Redwood Energy, Sean Armstrong

Spring Lake in Woodland, by Mutual Housing    King's Station in King City, by King City Pacific    Valley Glen in Dixon, by Dixon Pacific

Lakeport Senior Apartments in Lakeport, by Lakeport Pacific    Colonial House Apartments, in Oxnard, by Oxnard Pacific    Plaza Point in Arcata by Danco Communities

115

**California projects**  
Redwood Energy, Sean Armstrong

Heritage Square in Pasadena by BRIDGE Housing    Cloverdale, by Corporation for Better Housing    Atascadero, Corporation for Better Housing

Castroville, by Corporation for Better Housing    Quetzal Gardens in San Jose by RCD Housing


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Sean Armstrong, Redwood Energy  
**Redwood Energy**  
*Forward. Done. Not Energy. Sustainable in Multiple Meanings.*

**All-electric construction consistently reduces construction costs and ongoing utility bills.**

It saves between \$2,500 and \$5,000 per residence for the developer to not plumb gas. When infrastructure and appliance costs are added up, a recent study done by Rocky Mountain Institute found a median increased cost of \$8,800 more per house for gas infrastructure, piping, purchasing appliances and venting.

Developers have been choosing all electric construction because it cost less to build and that trend has been going on for 20 years now.

All Electric Construction Guides: 

<https://www.redwoodenergy.tech/research/>

Quetzal Gardens, San Jose    Valley Glen, Dixon    Plaza Point, Arcata

117

**Depot Station Townhomes, Morgan Hill**  
29 Units

City Ventures, Hunt Hale Jones Architects

118

**2437 Eagle Ave, Alameda**  
Affordable - 20 Units, Occupied

Housing Authority of the City of Alameda, Anne Phillips Architecture, Fard Engineers, Association for Energy Affordability

119

**Casa Adelante, 2060 Folsom, San Francisco**  
127 Units, under construction

Developers: TNDC/CDDC, Architect: Mithun & YA Studio, Association for Energy Affordability  
Central Heat Pump Water Heating

*Mithun: "We have found first costs to be neutral going all electric"*

120



**Malcolm Harris, Principal**  
**MITHÜN**

We have a number of all-electric multifamily projects and I'm a huge, huge fan of this change to all-electric multifamily housing.

It is better in every way, a great simplification of the system. Less expensive, higher performance, less maintenance, more sustainable.

At Maceo May we saw big savings from eliminating gas fired hydronic heating, the gas connection, and the solar thermal which paid for continuous exterior insulation, energy recovery ventilators (eliminating Z-ducts), electric resistance heat, and PVs. With these upgrades we are beating Title 24 by 20%, getting more Green Points, and lower GHGs on a grid that's getting cleaner.

The occupants get better indoor air quality benefits from the energy recovery ventilators.

121

**Balboa Upper Yard Family Apts, San Francisco**  
120 units, in design development



Developer Mission Housing Development & Related California, Architect: Mithun  
Central Heat Pump Water Heating

122

**Maceo May Veterans Apartments, Treasure Island**  
105 units, in permitting



Chinatown Community Development Center, Swords to Plowshares, Mithun, Association for Energy Affordability  
Central Heat Pump Water Heating

123

**Hunters Point Shipyard Block 52, San Francisco**  
136 units total, in Design Development



Developer McCormack, Baron, Salazar, Architect: Mithun  
Central Heat Pump Water Heating

124

**Hunters Point Shipyard Block 54, San Francisco**  
136 units total, in Design Development



Developer McCormack, Baron, Salazar, Architect: Mithun  
Central Heat Pump Water Heating

125

**681 Florida, San Francisco**  
136 units total, In Design Development



Developers: TNDC & MEDA, Architect: Mithun  
Central Heat Pump Water Heating

126



**Linda Vista, Mountain View**  
101 units, In bidding phase



Palo Alto Housing is Developer, architect is Van Meter Williams Pollack, Integral Group  
Central Heat Pump Water Heating

127

**Coliseum Place, 905 72nd Ave, Oakland**  
59 units, In Construction Documents



*DBA: "Construction cost is not an issue IF you can help subcontractors understand what you are asking them to price"*

Developer Resources for Community Development, David Baker Architects, Energy Modeling by Redwood Energy, MEP by EDesignC

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**Quetzal Gardens, San Jose**  
71 Units



RCD Housing is Developer, SGPA Architects, Redwood Energy

129

**St. Paul's Commons, Walnut Creek**  
Affordable - 45 Units, Under construction



*Pyatok: "It is critical to share information about best practices and lessons learned"*

RCD, Pyatok Architects, Fard Engineers, Association for Energy Affordability  
Central Heat Pump Water Heating

130


**Altamira Family Apartments, Sonoma**  
Affordable, 48 units



Developer is SANA, Pyatok Architects, Fard Engineers, Association for Energy Affordability

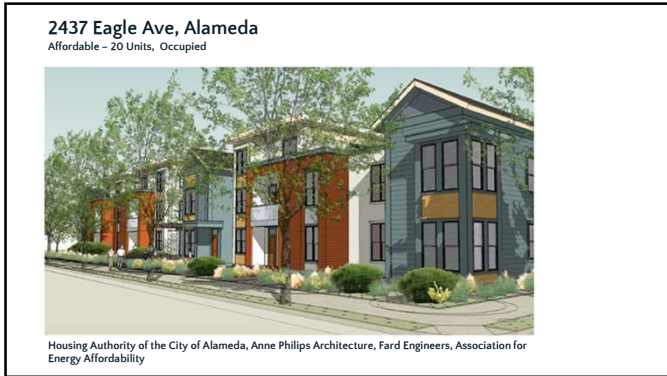
131

**Stoddard Housing, Napa**  
Affordable - 50 Units, Under construction

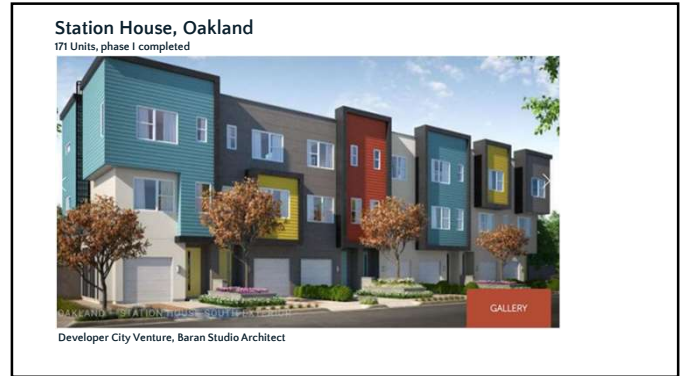


Burbank Housing, Dahlin Group Architects, Emerald City Engineers, Association for Energy Affordability  
Central Heat Pump Water Heating

132



133



134



135



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137



138


**Cascade Apartments, Seattle**  
230 Units, 44 floors. At 95% Construction Docs.

Developer is Vulcan, Ankrom Mosian Architects, Engineering by Ecotope

139

**4700 Brooklyn, Seattle**  
227 Units, 24 floors. Under Construction



Developer is FH Brooklyn, NBBJ Architects, Engineering by Ecotope

140

**1200 NE 45th Seattle**  
230 Units, 44 floors. At 50% Design Development



Developer is barrientos RYAN Runberg Architecture Group Engineering by Ecotope

141

**Shawn Oram, Principal**  
ecotope

Ecotope has completed 26 central heat pump water heating projects since 2008, mostly 100-500 unit projects. Partial list:

- Mid Rise | 30-400 dwelling units**
  - Strom - 134 units - 25 10T Calmac Air Source HP in below-grade parking
  - Summit Towers - 92 units - Calmac in below-grade parking
  - Blackhouse - 120 units - Calmac in underground parking deck
  - Aspen Apartments - 214 units - Calmac in below-grade parking
  - Bank Apartments - 186 units - Calmac in underground parking deck
  - Harbor 1 - 222 - Calmac in underground parking deck
  - Jackson Apartments - 324 units - Calmac in underground parking deck
  - Colma Apartments - 130 units - Stacker, Overhead
  - The Hill Apartments - 134 units - Variable 2, Multi-Phase
  - Westwood Plaza - 107/120 units - Variable 2, Multi-Phase
  - Harborside - 47 units - Stacker, Overhead
- Mid Rise | 200-450 dwelling units**
  - 4700 Brooklyn - 227 units - Calmac with VRF Temp Maintenance
  - Coastline - 430 units - Calmac with VRF Temp Maintenance
  - 1200 NE 45th units - In Design








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**1075 Nelson, Vancouver**  
435 Units, 60 Stories, Design Development



Henson Development, Architect WKK and IBI Group, MEP Integral Group?? RDH  
All electric with possible exception of gas for cooking in penthouse units.

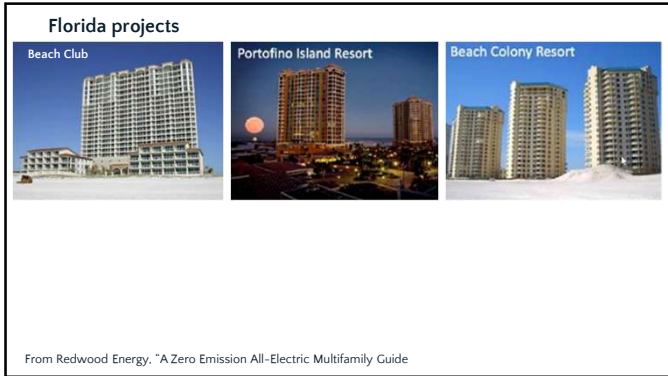
143

**Hawaii projects**

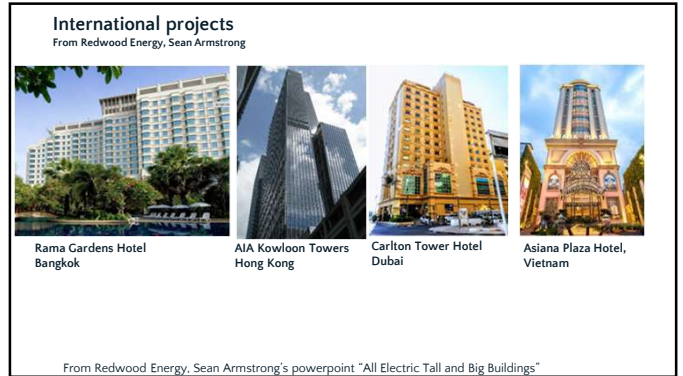





From Redwood Energy, Sean Armstrong's powerpoint "All Electric Tall and Big Buildings"

144



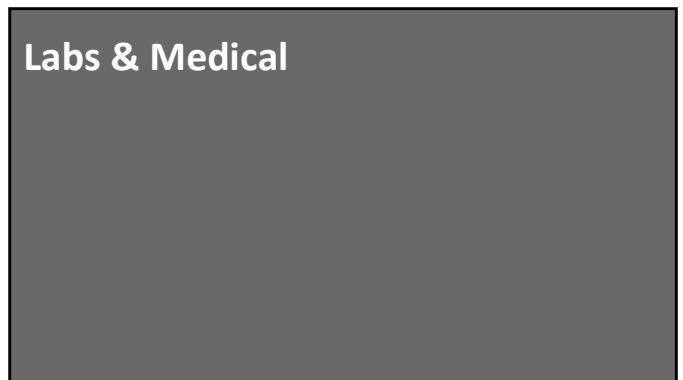
145



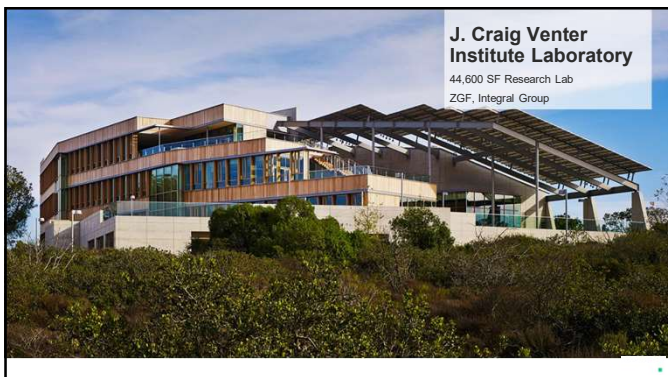
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147



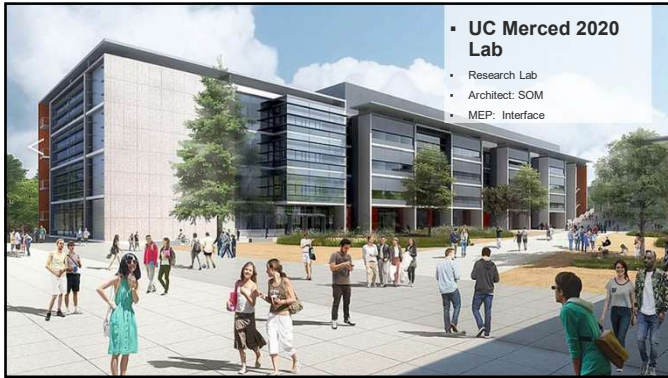
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150



- UC Merced 2020 Lab
- Research Lab
- Architect: SOM
- MEP: Interface

151



- LBNL BioEpic Lab
- 70,000 SF Research Lab
- Architect: Smithgroup

152



- Kaiser Santa Rosa Medical Office
- 87,300 SF Medical Office
- LEED Platinum, ZNE
- Architect: HPS
- MEP: Integral Group

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**DAN DOZER, RA**

"I have been in the lab design market for a long time and have worked on a large number of laboratory projects. My goals and expectations are that every project presents a new learning experience for

- We are seeing very little requirement for gas
- We hardly ever install central gas systems anymore
- They use heat guns, they don't use burners anymore
- Electric options are available for almost all equipment
- Only question is steam for cage wash
- I don't think eliminating gas will have much impact at all
- Currently working on Bioscience research stem cell lab in British Columbia and it has no gas

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**DESIGN for SCIENCE**

**Glen Berry**

- I've long advocated for eliminating central gas systems
- Instead of expensive central systems, use portable or local distribution from cylinders
- There is no technical issue, it is only a people issue because some are used to doing it a certain way
- Gas is used for heating or disinfecting. Other equipment is readily available. It doesn't affect the science.
- Currently renovating the USC Hoffman vivarium, replacing large gas & steam autoclave with an electric model
- A large tunnel washer may not be as cost effective w/o gas
- Industry is changing, a lot more electric equipment

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## Restaurants & Commercial Food Service

Resources:  
<https://www.buildingdecarb.org/kitchen-electrification-group-resource-directory.html>

156

**All Electric Kitchen**  
Troisgros Grande Maison  
Roane, France  
Michelin 3 stars  
[https://troisgros.fr/page\\_3-maisons](https://troisgros.fr/page_3-maisons)

157

**All Electric Restaurants at LAX**  
Bradley Terminal

Andre Salvador. So Cal Edison food service expert helped these tenants adapt to all electric, he's a great resource!

158

**SUSTAINABILITY OFFICE SFUSD**  
NIK KAESTNER  
DIRECTOR OF SUSTAINABILITY

- Has one electric kitchen under construction, Claire Lilienthal Elementary
- Currently designing all electric kitchens at Clarendon, Hillcrest, and West Portal schools as all electric
- Worked with chef and staff to understand induction cooking
- Visiting Food Service Technology Center in San Ramon to give staff a hands-on look at the equipment
- Doing some training with staff to get them accustomed to induction
- **Bids for electric equipment are coming in cheaper than gas**
- Biggest energy hogs are the fryers and also make the least healthy food, so promoting other equipment is healthy!

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**Chatam University Dining Commons**  
All electric kitchen, 250 meals 3 times a day

- **The chef was initially reluctant, and had never cooked on induction before**
- **It took some time to adjust to new kitchen**
- **But now he loves it and says he will never go back to gas**

Interface Engineering

160

**Sonoma Academy**  
19,500 SF  
ZNE, LEED Platinum  
Architect: WRNS  
Mechanical: Interface Engineering  
Electrical: Integral Group

161

David Shell - 2nd  
Energy Sales Supervisor at Gulf Power Company

- **60% of full service restaurants in our territory are all electric**
- We've had success selling Wendy's and McDonald's on electric cooking
- The new combi ovens, steam cabinets, holding cabinets and induction cooktops work great!
- **All Fast Food Chains have both gas and electric kitchen options**

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163

**Resources**

All Electric Construction Guides: <https://www.redwoodenergy.tech/research/>

California Cities Lead the Way: <https://www.sierraclub.org/articles/2020/03/californias-cities-lead-way-gas-free-future>

The economics of electrifying buildings: <https://rmi.org/insight/the-economics-of-electrifying-buildings/>

Are we ready for all electric buildings?: <https://tinyurl.com/y3unn3r4>

The smog in your kitchen: <https://www.fresnobee.com/opinion/readers-opinion/article222726175.html>

164

# All-Electric Buildings

Comments from Architects & Engineers

August 4, 2020

Scott Shell, FAIA  
EHDD, Principal  
[Scott.shell@ehdd.com](mailto:Scott.shell@ehdd.com)

ehdd.





Casa Adelante, 2060 Folsom, San Francisco



Maceo May Veterans Apartments, Treasure Island



Balboa Upper Yard Family Apts, San Francisco

## Malcolm Harris, Principal

### **MITHŪN**

We have a number of all-electric multifamily housing projects. I'm a huge, huge fan of this change to all-electric multifamily housing. It is better in every way, a great simplification of the system. Less expensive, higher performance, less maintenance, more sustainable.

**It is a major cost saving move that pays for a lot of other upgrades.**

At Maceo May we saw big savings from eliminating gas fired hydronic heating, the gas connection, and the solar thermal required by T24.

The savings paid for continuous exterior insulation, energy recovery ventilators (eliminating Z-ducts), electric resistance heat, and PVs. With these upgrades we are beating Title 24 by 20%, getting more Green Points, and lower GHGs on a grid that's getting cleaner.

The occupants get better indoor air quality benefits from the energy recovery ventilators.



Hunters Point Shipyard Block 52, San Francisco



Hunters Point Shipyard Block 54, San Francisco



681 Florida, San Francisco

**Malcolm Harris, Principal**

**MITHUN**

Overall the system is just much simpler—there is just one energy system—electrical, rather than two.

The gas fired boiler & hydronic systems are very problematic at every step from design to construction to maintenance. During construction there are often leaks. Commissioning is a constant challenge, and there are lots of tenant complaints in first few months. Operations is challenging as maintenance staff are not equipped to operate the digital BMS system.

**Casa Adelante** 127 residential Units, 9 stories, under construction. Developers: TNDC/CCDC, Architect: Mithun & YA Studio.

**Maceo May** 105 residential units, in permitting. Chinatown Community Development Center, Swords to Plowshares.

**Balboa Upper Yard Family Apts** 120 residential units, in design development. Developer Mission Housing Development & Related California.

**Hunters Point Shipyard Block 52** 136 residential units total, Design Development. Developer McCormack, Baron, Salazar.

**Hunters Point Shipyard Block 54** 136 residential units total, Design Development. Developer McCormack, Baron, Salazar.

**681 Florida** 136 residential units total, In Design Development. Developers: TNDC & MEDA



Santana Row Lot 11



UC Davis Webster Hall Replacement



American Geophysical Union

## Hormoz Janssens, Principal



Almost all our projects are all-electric, I have only been using gas systems where required by the client.

**Electric is almost always less expensive or cost neutral. Very rarely is it more expensive. Often it is our value engineering option.**

Most project types work just fine. We are doing a 500,000 sf all electric office for Microsoft, with major cost savings using heat pumps vs a central plant.

We do lots of detailed cost analysis with developers to find the most cost-effective solution. For example, at Bay Meadows our all electric design for 1 million sf of development was significantly less expensive than a traditional rooftop package unit + boiler + reheat system.



UC Santa Cruz Student Housing West



270 Brannan, San Francisco



Chatam University Dining Commons

## Hormoz Janssens, Principal

**INTERFACE**  
ENGINEERING

The space requirements are smaller for all-electric, instead of having two to three separate systems for space heating, cooling, and hot water, we can do it with a single heat pump system, that space can be used for other things or the building made smaller for more savings.

Maintenance is less than most conventional systems because you have just one system. Maintenance is just like an air-conditioning system, it's the same thing in reverse, and you eliminate the boiler.

A huge benefit for heat pumps is reducing water use. Using an air source heat pump for cooling rather than a cooling tower has large water savings.

We've done several all electric commercial food service projects that have been very successful. The Chef's quite skeptical at the beginning, but now say they will never go back to cooking on gas.



UC Santa Cruz Student Housing West



UC Irvine Student Housing West, Developer ACC



UC Riverside Dundee Residence Hall, Developer ACC

**David Phillips, Associate Vice President for Energy & Sustainability**  
**UC Office of the President**



The University of California has committed to carbon neutrality by 2025. We are prioritizing all-electric new buildings (required starting June 2019), and then electrifying existing buildings & systems over time.

Our studies show that all electric mechanical equipment capital costs are comparable for academic & lab buildings, and the costs are lower for residential buildings. Twenty year life cycle costs are comparable for Academic and labs buildings, and lower for residential buildings.

**UC has many all-electric housing projects, office buildings, and laboratories now in place and many more in design.**

UC's carbon neutrality strategies are pragmatic: don't allow growth to increase carbon emissions; and then transition *existing* buildings and systems off fossil fuels over time.

Decarbonizing Your Campus thru Electrification, SCUP 2019



Exploratorium, San Francisco



Packard Foundation, Los Altos



Marin Country Day School, Corte Madera

## Scott Shell, Principal



We have completed a dozen or so all electric buildings. 10-15 years ago it was not common in California, and we saw some cost premium on those early projects.

In the last 5-7 years all-electric has become much more common on our projects which are primarily commercial and educational. It is now generally cost neutral or less expensive. There are more manufacturers providing equipment, and the subcontractors are more familiar with installing it.

Last year we had an all-electric project go to bid and the total cost came back higher than expected. In an attempt to reduce cost, we asked the mechanical contactors to price a standard gas heating system instead. They came back with no cost savings between gas and all electric, so the client decided to stay with the preferred all-electric option.



Mark Day School, San Rafael



Boulder Commons



Lick Wilmerding High School, San Francisco

## Scott Shell, Principal



When the University of California, one of our largest clients, decided to prohibit gas in new projects that really got our attention. It now seems irresponsible to recommend gas to our clients who may then have to retrofit them before that equipment reaches the end of its life in order to meet their carbon goals or local mandates to decarbonize. We don't want to be saddling our clients with stranded assets.

Last year I interviewed seven leading mechanical engineers that we work with asking if the building industry is ready to go all electric. They agreed that the vast majority of buildings can go all-electric, and the cost is competitive with a few exceptions.

Most of our all electric projects also include PVs, it is LESS expensive for our clients to get their electricity from PV than from their utility. With a power purchase agreement there is no out of pocket cost. Some clients decided to fund the PVs themselves since it provides a favorable financial return. Ten years ago solar was seen as an expensive solution for projects with big budgets. It is amazing to see how quickly that has flipped.





Cascade Apartments, Seattle



4700 Brooklyn Ave NE, Seattle

## Shawn Oram, Principal



Ecotope has completed 26 central heat pump water heating projects since 2008, mostly 100-500 unit projects. Partial list:

### Mid Rise | 50-400 dwelling units

- Stream - 134 units - (2) 10T Colmac Air-Source HP in below-grade parking
- Sunset Electric - 92 units - Colmac in below-grade parking
- Stackhouse - 120 units - Colmac in underground parking deck
- Augusta Apartments - 224 units - Colmac in below-grade parking
- Batik Apartments - 195 units - Colmac in underground parking deck
- Yesler 3 - 227 - Colmac in underground parking deck
- Jackson Apartments - 526 units - Colmac in underground parking deck
- Colina Apartments - 131 units, Sanden - Decentralized
- The Vale Apartments - 134 units - Versati 2, Multi-Pass
- Waterfront Place - 137/135 units - Versati 2, Multi-Pass
- Hopeworks - 67 units, Sanden CO2 Stacks

### High Rise | 200-450 dwelling units

- 4700 Brooklyn - 284 units - Colmac with VRF Temp Maintenance
- Cascade - 430 units - Colmac with VRF Temp Maintenance
- 1200 45<sup>th</sup> -245 units - In Design



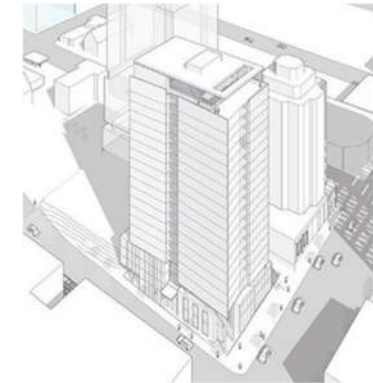
Batik Apartments, Seattle



Jackson Apartments, Seattle



August Apartments, Seattle



1200 NE 45th, Seattle





Coliseum Place, Oakland



Altamira Family Apartments, Sonoma

## Peter Waller, Principal

### **PYATOK**

We have several current all-electric multi-family projects. In our experience it has been indispensable to have a knowledgeable energy/Title 24 consultant on the team to help guide both analysis and design.

It is critical to share information about best practices and lessons learned. By sharing best practices we can reduce mistakes.

We work with both non-profit and for-profit housing developers that own and operate lots of buildings. It is important to make sure everyone is aware of the potential challenges that come with new technology.

The life span of the current generation of heat pump water heaters may be less than the traditional gas fired boilers, depending on operating conditions. We expect the life span will increase as the market becomes deeper and more sophisticated, but we try to be open about this reality with our clients. With that in mind provide access for maintenance and future replacement down the road.



Quetzal Gardens, San Jose



Valley Glen, Dixon



Plaza Point, Arcata

**Sean Armstrong, Redwood Energy**

**Redwood Energy**

*Foremost Zero Net Energy Specialists in Multifamily Housing*

**All-electric construction consistently reduces construction costs and ongoing utility bills.**

It saves between \$2,500 and \$5,000 per residence for the developer to not plumb gas. When infrastructure and appliance costs are added up, a recent study done by Rocky Mountain Institute found a median increased cost of \$8,800 more per house for gas infrastructure, piping, purchasing appliances and venting

Only education is preventing developers from profiting from the technological innovations available in the all-electric domain.

Developers have been choosing all electric construction because it cost less to build and that trend has been going on for 24 years now.

New construction is easy technically and financially and because the construction cost savings justify going all-electric.



Cloverdale, Corporation for Better Housing



Colonial House Apartments, Oxnard



Atascadero, Corporation for Better Housing

## Sean Armstrong, Redwood Energy

### Redwood Energy

*Foremost Zero Net Energy Specialists in Multifamily Housing*

New construction is easy technically and financially and because the construction cost savings justify going all-electric.

Because an all-electric building can achieve higher mechanical system efficiency than a gas burning building, it is lower cost for developers building all-electric to comply with the Title 24 Energy Code. We documented this in our report A Zero Emissions All-Electric Multi-family Construction Guide, see the graphic on page 7.

<https://fossilfreebuildings.org/ElectricMFGuide.pdf>



152 N. 3<sup>rd</sup>, San Jose



The Tidelands Housing, San Francisco

## Peter Rumsey, Principal



**There are great examples of all electric buildings for virtually every building type that are cost effective. It is very easy for our firm to design these systems, we are very familiar with them.**

For Multifamily projects we are seeing a lot of developers use electric heating with high levels of insulation in apartments that don't need cooling.

All electric air-cooled VRF heat pumps are very common on multifamily projects up to ten stories where cooling is needed; this is very cost effective.

Developers are using VRF systems on small to medium sized commercial buildings. Production home builders have been using central heat pump heating and cooling units for many years. And we are seeing a surge in the use of larger heat pumps for generating hot water systems. Central hot water systems can have a cost premium, but it is very small as a percentage of the building cost.



Pier 70, Building 12



The Exploratorium, San Francisco

## Peter Rumsey, Principal



Large 20 story multifamily high-rise require a water source heat pump and that equipment still has a cost premium.

Cooking remains a hard sell in many cases, a lot of people are very skeptical of giving up gas. Technically this isn't a problem, the experts at the Food Service Technology Center in San Ramon say an electric fryer provides better and more even heat than gas. Induction ranges are excellent.

The market for all electric buildings and heat pumps has been making significant inroads in California, and this had gotten the attention of manufacturers. General Contractors and mechanical subcontractors are getting more familiar with this approach as well.

Title 24 used to discourage electric heating of all types and is now more neutral on the issue. I understand that future versions of title 24 are going to be more encouraging of some types of electric heating.



Alexander Valley Medical Center



Goldman School of Public Policy + Housing



SMUD Office & Operations Building, Sacramento

## Ted Tiffany, Principal



We have designed quite a few all electric buildings. The Goldman School of Public Policy is as designed all-electric and construction cost compared favorably to gas. This also allowed for individually metered apartments so tenants paid their own utility bills.

The UCOP did a robust cost analysis of various building types and in almost all cases it found lower life cycle costs with all-electric buildings. It is important to manage TOU rates. First cost savings are partly dependent on if you can eliminate the gas service, which in most cases you can; if you do this generally makes the construction cost less than mixed fuel buildings.

<https://www.ucop.edu/sustainability/files/Carbon%20Neutral%20New%20Building%20Cost%20Study%20FinalReport.pdf>



Albany High School



Silver Oak Winery



Sonoma Clean Power

## Ted Tiffany, Principal



For most building types and sizes, there is no technical reason preventing the industry from shifting to all-electric buildings.

Laboratories and Hospitals can be more of a challenge as all electric due to the high outside air loads, demands for sterilization, and high hot water loads. They are possible, but more challenging.



J. Craig Venter Institute Lab, San Diego



SFO Consolidated Admin Facility



Integrated Genomics Lab, LBNL

## Eric Solrain, Principal



Integral currently has dozens of all-electric buildings recently complete, in construction, and in design. There has been a big sea change in recent years towards all-electric. Around 50% of our work is currently electric.

**There is lot of momentum in Multi-family Residential and in Commercial projects moving to electric systems.**

Comparing the construction cost of all-electric to gas depends on what you are comparing it to. If comparing to a high-performance design such as LEED Gold then all-electric is cheaper. If comparing to moderate performance building then all-electric is cost neutral. If comparing to the most basic design, there may be a small cost premium.

There are some significant code changes in California energy code in 2019 that will make all electric even more cost competitive, especially for multifamily.





435 Indio, Sunnyvale



415 Mathilda, Sunnyvale



380 N. Pastoria, Mountain View

## Eric Solrain, Principal



All electric has several big advantages:

- Electric equipment takes up significantly less space and that space can be used for other things. At 1700 Webster the gas option filled the roof with equipment, while the heat pump option had much less equipment so they were able to put a nice deck and pool on the roof.
- Getting gas service to the equipment, and a flue out through the building can be challenging problems and cost money. Getting make-up air to gas boilers can be challenging.
- For large multi-family projects heat-pump dryers avoid all the problems associate with venting.
- There have been good advances in heat pump choices in recent years. Aermec and Climacool make excellent equipment, that can heat and cool simultaneously with robust controls.
- There are huge climate benefits to shifting from gas to electric. London is completely redoing it's 10 year old decarbonization plan which was drafted when they had a dirty electric grid. Their grid is much cleaner now so they are quickly revising the plan to promote electrification.



Edwina Benner, Sunnyvale



Stoddard Housing, Napa



Casa Adelante, San Francisco

## Nick Young



In multifamily buildings with individual heating and hot water systems for each unit it's a no-brainer to go all-electric, from a cost, modeling, technology, and code compliance perspective. **All-electric should be the standard design for these projects.**

For Multifamily buildings with central domestic hot water there are also excellent options using electric heat pumps. We are seeing these projects go with Sanden, Colmac, and Nyle heat pumps.

A significant challenge is that Title 24 doesn't have a modeling pathway for central hot water systems. The CEC is working on fixing this, targeting the 2019 code cycle.

Our all-electric multi-family projects include: Edwina Benner Plaza in Sunnyvale, 2437 Eagle Ave in Alameda, St Paul's Commons in Walnut Creek, Stoddard Housing in Napa, Casa Adelante in San Francisco, and Maceo May in San Francisco.

# Fw: Support Expanded Gas Ban Ordinance

Susan Butler-Graham [REDACTED]

Sun 11/15/2020 12:31 PM

To: Agendadesk <Agendadesk@sanjoseca.gov>; agendadesk@sanjose.gov <agendadesk@sanjose.gov>; cityclerk@sanjose.gov <cityclerk@sanjose.gov>; City Clerk <city.clerk@sanjoseca.gov>;

[External Email]

Dear City Clerk,

I used the wrong email address for you when sending this letter to Councilmember Foley last Thursday. Please include my letter in the City Council Meeting materials for Tuesday's meeting.

Thank you.

Sincerely,

Susan Butler-Graham

**Mothers Out Front Silicon Valley**

Pronouns: She/her/hers

[www.mothersoutfront.org](http://www.mothersoutfront.org)

----- Forwarded Message -----

**From:** Susan Butler-Graham [REDACTED]  
**To:** Office of Councilmember Pam Foley <district9@sanjoseca.gov>  
**Cc:** agendadesk@sanjoseca.org <agendadesk@sanjoseca.org>  
**Sent:** Thursday, November 12, 2020, 11:12:01 AM PST  
**Subject:** Support Expanded Gas Ban Ordinance

Dear Councilmember Foley,

As a mother, grandmother, and District 9 resident, I encourage you to vote in favor of the expanded gas ban ordinance. I was so proud and excited last year when you passed a strong reach code and gas ban, and hope you will approve the ordinance to include nearly all new construction on November 17th.

This ordinance will be a win for the climate, for outdoor and indoor air quality, for fiscal prudence, and for environmental justice and equity. For the climate, it will reduce methane emissions and lower our city's carbon footprint. For outdoor and indoor air quality, it will lessen the toxic emissions such as nitrogen dioxide and formaldehyde in and around our homes and other buildings. For fiscal prudence, it will lower construction costs and protect residents from the increased cost of fossil gas. For environmental justice and equity, it will

protect the families who will live in these buildings for generations to come from increased levels of childhood asthma and other respiratory diseases.

Please Reach for the Future and set a climate-smart example for the rest of our state and our nation and vote to keep gas out of our new buildings. Our kids are counting on you.

Sincerely,

Susan Butler-Graham

**Mothers Out Front Silicon Valley**

Pronouns: She/her/hers

[www.mothersoutfront.org](http://www.mothersoutfront.org)

**Live in San José?** Join the [Climate Smart Challenge](#)! Learn easy ways to save energy, lower your bills, get fit and make a difference in the fight against climate change.

**Live elsewhere?** Join [WeRenew](#)!

"The iron law of climate change is that the less you did to cause it, the sooner you feel its effects...Those who poured the most carbon into the air will be dead before its effects are fully felt." -Bill McKibben

"Do-nothing climate policy is racist policy." -Ibram X. Kendi

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

**BERG & BERG ENTERPRISES, INC.**

*10050 Bandlely Drive  
Cupertino, CA 95014-2188  
Ph (408) 725-0700 Fax 408-703-2035  
[mcrawford@bergvc.com](mailto:mcrawford@bergvc.com)*

11/13/2020

**Mayor Sam Liccardo & Council Members**

**City of San Jose**

**200 East Santa Clara Street,**

**San Jose, CA 95110**

**Ph 408-535-4800 Fax 408-297-6422**

[mayoremail@sanjoseca.gov](mailto:mayoremail@sanjoseca.gov); [District1@sanjoseca.gov](mailto:District1@sanjoseca.gov); [District2@sanjoseca.gov](mailto:District2@sanjoseca.gov); [District3@sanjoseca.gov](mailto:District3@sanjoseca.gov);  
[District4@sanjoseca.gov](mailto:District4@sanjoseca.gov); [District5@sanjoseca.gov](mailto:District5@sanjoseca.gov); [district6@sanjoseca.gov](mailto:district6@sanjoseca.gov); [District7@sanjoseca.gov](mailto:District7@sanjoseca.gov);  
[district8@sanjoseca.gov](mailto:district8@sanjoseca.gov); [District9@sanjoseca.gov](mailto:District9@sanjoseca.gov); [District10@sanjoseca.gov](mailto:District10@sanjoseca.gov);  
[webmaster.manager@sanjoseca.gov](mailto:webmaster.manager@sanjoseca.gov); [city.clerk@sanjoseca.gov](mailto:city.clerk@sanjoseca.gov)

**Dear Council Members & Mayor,**

**Reference: Council Agenda 11/17/20**

**Say No To Item 6.3 Expansion Of Prohibition of Natural Gas**

**Subject: Do Not Approve The Expansion Of Natural Gas Prohibitions**

**Just because another City passes a prohibition on natural gas is no reason for San Jose to do it.**

- 1) The passage of AB 32 requiring first 30% renewable electrical and then subsequently 50% renewable electrical has driven the electrical rates to double the pre AB 32 legislation. All you have to do is just look at your current and prior AB 32 electrical bill statements to verify that . The 50% renewable requirement will drive the rates to triple +- the pre AB 32 legislation.**
- 2) Using electricity versus natural gas to heat, cook and provide hot water is more expensive, you are misinforming your constituents. Natural gas is typically half the price of electric heating. It's even more efficient and heats up homes faster on average.**
- 3) The scientific community is not unified on what causes the earth to warm or GHG to increase. The global warming GHG alarmist are not well informed. Patrick Moore the original founder of Green Peace did extensive ice core studies and research and has shown that the world was hotter and had higher levels of CO2 previously than today and we had a subsequent ice age following that period. Industrial CO2 production could be insignificant versus the earths natural cycles. We could in fact be near the beginning of another cooling phase. See "22514hearingwitness testimony moore.pdf" attached. Patrick Moore's presentations can also be found on youtube <https://www.youtube.com/watch?v=TjlmFr4FMvI> among others.**

- 4) **Natural gas is an alternative and natural form of energy, which can be used to replace traditional fossil fuel (gasoline and diesel). Using natural gas will help reduce the amount of harmful emission released into the atmosphere. There are major advantages to gas cooking. Those include finer temperature control, quicker temperature response times, easy cleaning, and reliability when the power goes out. Ask anyone who watches the Food Network or who works at a restaurant whether they'd like to use a gas range or an electric range.**
- 5) **Jim Cowell, vice president of facilities for the California Institute of Technology (Caltech), which generates about 90 percent of its annual 120 gigawatt-hour power consumption on site, uses Bloom technology for about 21 percent of that electricity. (That's 3 MWs so far.) During the eight years Caltech has been using the servers, they've never been offline, he said. The university's new neuroscience research building, slated to open by 2020, will use 1 MW of Bloom's technology as its primary generation source. That will bring Caltech's installations up to 4 MW of capacity.**
- 6) **By banning natural gas you are precluding the fuel cell technology developed by Bloom Energy. What is the one thing you hear about during the PGE shut downs, we need to have smaller independent power grids. One place you can expect to see Bloom ramp up its sales outreach during 2019 is in microgrid installations — the company is positioning its technology as both a viable standalone option as well as something that can be integrated cost-effectively with solar and energy storage. And unlike many microgrids powered by renewables, Bloom's technology can help negate the need for a diesel backup generator, according to the company**

**The GHG proposition: The company claims virtually no nitrogen oxide, sulfur oxide or particulate emissions. That doesn't address the methane leakage issue associated with natural gas production and distribution. But Bloom's argument is that its technology emits 60 percent less carbon dioxide than the typical baseload options available on the U.S. power grid. The company is also hard at work on a biogas clean-up module that will help Bloom servers use biogas produced by landfills, wastewater treatment plants and agricultural operations.**

**Bloom's natural-gas-powered fuel cells can serve as a reliable primary power source for microgrids. And microgrids are finally seeing some commercial growth, after a long stay in pilot project purgatory.**

- 7) **BUSINESS IS EMBRACING NATURAL GAS WHILE MUNICIPALITIES ARE THROWING ROAD BLOCKS IN THEIR WAY. At a time when companies are increasing their use of natural gas you politicians are working to destroy the natural gas infrastructure. UPS Inc. announced it will spend \$450 million to add 6,000 vehicles powered by compressed natural gas as well as supporting infrastructure beginning next year. It is the largest multiyear commitment UPS has made to date for alternative fuel vehicles. The latest CNG fleet expansion also provides additional truck capacity for expanding the use of renewable natural gas.**

**“Building CNG truck capacity is vital to increasing our use of RNG and ultimately meeting our 2025 sustainability goals,” Juan Perez, chief information and engineering officer at UPS, said in a release. “We intend for 25% of our vehicles purchased in 2020 to run on alternative fuels.” RNG is produced from landfills, dairy farms and other bio sources, and yields up to a 90% reduction in life-cycle greenhouse gas emissions compared with conventional diesel.**

**As of this month, UPS has agreed to purchase 230 million gallon-equivalents of RNG over the next seven years, making the company the largest consumer of RNG in the transportation industry. By the end of 2019, UPS reported it will be operating 61 natural gas fueling stations strategically located across the United States and abroad in Vancouver, Canada, and Tamworth, United Kingdom.**

- 8) The logic behind the Berkeley ban seems to be this: we can help the planet and reduce carbon emissions by eliminating natural gas and switching to electric heating and cooking. This is completely warped: the electric grid is powered predominantly by fossil fuels. The state prides itself on having very little coal, but it imports electricity from neighboring states like Utah and Arizona where it is generated by coal. Somehow displacing the emissions from California to another state, and charging the taxpayers more, fulfills the criteria for being "green."**

**Natural gas is incredibly clean, producing very low emissions. In recent years, thanks to the fracking revolution, American natural gas production has exploded – and it’s just the beginning. Experts estimate that Alaska is sitting on 200 trillion cubic feet of untapped natural gas, and the state is working on building a new pipeline to help bring it to market.**

**Berkeley’s natural gas ban adds to the ever-increasing cost of homeownership in California, which has already been stressed by eco-demands. The state is mandating that, beginning next year, every new home must be fitted with solar panels, raising the cost of a new home by \$10,000. Higher home prices, higher electric bills, fewer choices – that’s the future Californians are being promised by their government. It’s no wonder families are fleeing the state, and that California is led only by New York in out-migration.**

- 9) Just look to our friends in Europe to see how damaging eco-policies can be. Citizens of Germany and Denmark, for instance, face electric rates around three times that of America. Is this the future we want for our country? The answer is clear, but it seems those running city government in Berkeley and San Jose have a different idea. That American citizens should be deprived of access to natural gas makes very little sense from an economic, environmental, or even logical sense. But that didn’t prevent Berkeley from pursuing it anyway.**

**During the high of California’s drought, it was the rich who didn’t conserve water and who continued lawn and pool upkeep. It was the poor who were fined. Similarly, under this silly plan, San Jose and Berkeley’s wealthy will**

**find a way to bypass the law and get the gas stoves and gas heating they want. It's always the regular, average citizens who suffer when elites and politicians decide to be "green."**

- 10) Your assertions that the natural gas infrastructure is aging and needs to be replaced, SO WILL THE ELECTRICAL INFRASTRUCTURE, so far the gas infrastructure is and will be more reliable than the electrical infrastructure.**
- 11) The governor falsely accuses PGE and global warming for the increased fires. The truth is the State of California has for years neglected and rejected good forestry practices of thinning forests of dead trees and fuel loads. Industry was willing to perform the work in many cases for the value of the lumber they would obtain from thinning. Unfortunately the state rejected good forestry practices and yielded to the so called environmentalist who wanted the forests left as is. The state of California is responsible in good part for increased fire threats and costs.**

**The governor wants PGE to pay for fire damage costs and outage related costs. What the governor is really saying is that the PGE rate payers will pay the costs, the utilities like any other business must make a profit to stay in business and provide services. The governor is hypocritically trying to shift all the blame to PGE and drive electrical rates even higher and in turn punishing the rate payers once again.**

**San Jose's proposal to acquire portions of PGE's franchise area will only increase PGE's unit costs and in turn increase the utility rates on the balance of PGE's rate payers, say no to the San Jose takeover proposal.**

**Government actions have help push us into 3<sup>rd</sup> world status of having our power shut off simply because the wind blows, costing consumers, businesses and the economy billions. Before regulations are past the full economic consequences should be considered.**

**Thank you,**

**Myron Crawford**

**CC:** Chris Burton  
Economic Development Officer  
City of San Jose  
200 East Santa Clara Street, 3<sup>rd</sup> Floor  
San Jose, CA 95113  
Tel: 408-535-8114 direct, 408-535-3555 main, Fax: 408-292-6719  
Email: [chris.burton@sanjoseca.gov](mailto:chris.burton@sanjoseca.gov)



# Agenda Item 6.3: Updated Natural Gas Infrastructure Prohibition Ordinance

Kat Baumgartner-Wilson [REDACTED]

Mon 11/16/2020 8:25 AM

To: District2 <District2@sanjoseca.gov>;

Cc: Agendadesk <Agendadesk@sanjoseca.gov>;

[External Email]

Dear Councilmember Jimenez,

As a member of Climate Reality: Santa Clara County, I ask you to vote in favor of the updated *Natural Gas Infrastructure Prohibition Ordinance*.

I was so proud of San Jose when you passed the important reach code for All Electric/gas ban in 2019. This next phase of the ordinance is an incredibly important step to creating a safer and healthier world for us and our children. I urge you to stand by our community and on November 17th approve this gas ban ordinance update that will include almost all new building construction.

The facts are undeniable that eliminating natural gas significantly reduces climate-disrupting methane emissions, improves our indoor and outdoor air quality to support better health, increases safety, lowers construction costs, and leads to on-going energy cost reductions from more efficient heat pump and sustainable energy generation technology.

Our welfare rests in your hands and will be demonstrated by a YES vote for the 2020 new construction gas ban ordinance update.

Thank you so much for your support,

Kat Wilson  
San Jose District 2 resident

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# Pls Vote "YES" on the updated gas ban prohibition ordinance

Shruti Gopinathan 

Sun 11/15/2020 2:43 PM

To: Liccardo, Sam <sam.liccardo@sanjoseca.gov>; Davis, Dev <dev.davis@sanjoseca.gov>; Peralez, Raul <Raul.Peralez@sanjoseca.gov>; Diep, Lan <lan.diep@sanjoseca.gov>; Arenas, Sylvia <sylvia.arenas@sanjoseca.gov>; Esparza, Maya <Maya.Esparza@sanjoseca.gov>; Jones, Chappie <Chappie.Jones@sanjoseca.gov>; Jimenez, Sergio <sergio.jimenez@sanjoseca.gov>; Carrasco, Magdalena <Magdalena.Carrasco@sanjoseca.gov>; Foley, Pam <Pam.Foley@sanjoseca.gov>; Khamis, Johnny <johnny.khamis@sanjoseca.gov>;  
Cc: Agendadesk <Agendadesk@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>;

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, and Khamis,

As a Bay area resident, and as a member of Mothers Out Front Silicon Valley, I urge you to vote in favor of a strong **Updated Natural Gas Infrastructure Prohibition Ordinance**. I was thrilled when you passed a strong reach code and historic gas ban last year, and I hope you will move forward on November 17th to approve the expanded gas ban ordinance to cover virtually all new buildings. One of the most important pieces of this ordinance is the requirement that businesses seeking an exemption must apply for it, rather than being granted one automatically. This essential step will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected increases in the cost of fossil gas. You will also be blazing a climate-smart trail for cities around the nation to follow. Please Reach for the Future and vote to keep gas out of our new buildings. Our children and their children will thank you.

Sincerely,

Shruti Gopinathan

Sunnyvale, CA

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# Vote YES to extend building electrification code

Stephanie Morris 

Mon 11/16/2020 9:32 AM

To: Liccardo, Sam <sam.liccardo@sanjoseca.gov>; Davis, Dev <dev.davis@sanjoseca.gov>; Peralez, Raul <Raul.Peralez@sanjoseca.gov>; Diep, Lan <lan.diep@sanjoseca.gov>; Arenas, Sylvia <sylvia.arenas@sanjoseca.gov>; Esparza, Maya <Maya.Esparza@sanjoseca.gov>; Jones, Chappie <Chappie.Jones@sanjoseca.gov>; Jimenez, Sergio <sergio.jimenez@sanjoseca.gov>; Carrasco, Magdalena <Magdalena.Carrasco@sanjoseca.gov>; Foley, Pam <Pam.Foley@sanjoseca.gov>; Khamis, Johnny <johnny.khamis@sanjoseca.gov>;  
Cc: Agendadesk <Agendadesk@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>;

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, and Khamis,

I urge you to vote in favor of a strong **Updated Natural Gas Infrastructure Prohibition Ordinance**. Please **Reach for the Future** on Tuesday November 17th. **Vote to keep fossil fuel gas out of our new buildings and to require applications to justify any exemptions**. The climate crisis has arrived, and it's up to us to **act now**. Our new buildings will be around for 50 or more years, so decisions made today are critical.

**Did you know that nearly [one-quarter](#) of climate-changing pollution in Silicon Valley comes from natural gas used in our homes and buildings?**

The research is clear: **Building electrification significantly reduces carbon emissions**. It is **safer** for [indoor air quality](#) and [our environment](#). It is also the [more cost effective](#) choice. [Silicon Valley Clean Energy](#) is providing us with the power to make all-electric lifestyle choices that eliminate greenhouse gas emissions, save money and build a cleaner, greener Silicon Valley for everyone. However, if our buildings continue to use large amounts of fossil gas, we **fall short of our potential** to access the environmental and health benefits of this clean energy program.

One of the most important pieces of this ordinance is the requirement that **businesses seeking an exemption must apply for it**, rather than being granted one automatically.

This **essential step** will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected

increases in the cost of fossil gas.

Thank you for passing a strong reach code and historic gas ban last year. As a local resident and as a member of Mothers Out Front Silicon Valley, I urge you to move forward on November 17th to **approve the expanded gas ban ordinance to cover virtually all new buildings**. We must consider our impact and act for the health of our environment - for today and for the next seven generations.

**Stephanie Morris**

**Mothers Out Front** Silicon Valley Leadership Team

Stephanie Morris



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# Support for the Updated Natural Gas Infrastructure Prohibition Ordinance considered on the Nov 17th Council meeting agenda

Karen Nelson <knelson@pacificmedia.com>

Mon 11/16/2020 10:48 AM

To: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>; Liccardo, Sam <sam.liccardo@sanjoseca.gov>; Davis, Dev <dev.davis@sanjoseca.gov>; Peralez, Raul <Raul.Peralez@sanjoseca.gov>; Diep, Lan <lan.diep@sanjoseca.gov>; Arenas, Sylvia <sylvia.arenas@sanjoseca.gov>; Esparza, Maya <Maya.Esparza@sanjoseca.gov>; Jones, Chappie <Chappie.Jones@sanjoseca.gov>; Jimenez, Sergio <sergio.jimenez@sanjoseca.gov>; Carrasco, Magdalena <Magdalena.Carrasco@sanjoseca.gov>; Foley, Pam <Pam.Foley@sanjoseca.gov>; Khamis, Johnny <johnny.khamis@sanjoseca.gov>;

Cc: Agendadesk <Agendadesk@sanjoseca.gov>;

[External Email]



November 16, 2020

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

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

**RE: Support for the Updated Natural Gas Infrastructure Prohibition Ordinance**

Dear Mayor Liccardo and Council Members,

The Climate Reality Project: Santa Clara County with a significant membership in San Jose, expresses our enthusiastic support for the proposed *Updated Natural Gas Infrastructure Prohibition Ordinance*. Our membership recognizes that extending the gas prohibition adopted last year to other new construction is essential to the effectiveness of local emission reduction policy. All Electric regulations are critically needed to address the rapidly deteriorating air quality impacts of fossil fuel use, with the ensuing harm to health and safety.

As we draw ever closer to a tipping point, with cascading and impossible to control impacts, we must take robust action now. We are already experiencing the beginning of uncontrollable climate tipping points. Our wildfire seasons now run almost year-round and the number of acres burned this year is exponentially higher. Other clear signs of a run-away climate

are evident with species extinction and dramatic weather changes that increase drought conditions and limit adequate water supply for our community. And these are just a few of the wide-ranging impacts already being felt.

And still our carbon emissions continue to grow at an alarming rate.

All-electric new construction is a priority mitigation measure to reduce emissions as we face longer and more destructive wildfire seasons and increasing Public Safety Power Shutdowns. And reliance on gas is not a solution to the PSPS, given the use of electric ignition systems in new gas appliances.

We applaud San Jose's first phase move to ban gas in single-family construction, ADUs and low rise residential. By adopting the updated prohibition on gas infrastructure for new construction, San Jose as the 10<sup>th</sup> largest city in the nation can continue to provide desperately needed climate leadership to the country. Your recognition of the problem and positive action will help create a strong foundation for broader climate action throughout the country.

Thank you so much for considering our comments.

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

Karen Nelson

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## FW: Support natural gas ban ordinance, Item 6.3, at TOMORROW's San Jose City Council Meeting

City Clerk <[REDACTED]>

Mon 11/16/2020 11:07 AM

To: Agendadesk <[REDACTED]>

---

**From:** Deborah Garvey <[REDACTED]>

**Sent:** Monday, November 16, 2020 10:30 AM

**To:** District 6 <[REDACTED]> Davis, Dev <[REDACTED]>

**Cc:** The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk <[REDACTED]>

**Subject:** Support natural gas ban ordinance, Item 6.3, at TOMORROW's San Jose City Council Meeting

[External Email]

*Dear Council Member Davis:*

*As your constituent and a member of Mothers Out Front Silicon Valley, I urge you to vote **in favor of the expanded natural gas ban ordinance** at the city council meeting on Tuesday, November 17. We must act now to rein in the second-largest source of climate destabilizing emissions in our city: the burning of gas in buildings.*

*As you know, the proposed ordinance applies **only to new construction**, not existing buildings. It will extend our city's existing natural gas ban to virtually all new construction, including most commercial structures and high-rise apartment buildings. A key provision of the ordinance requires builders to apply for an exemption, if needed, rather than automatically receive one. An expanded natural gas ban will greatly reduce our city's greenhouse gas emissions and thereby improve air quality and our residents' health outcomes.*

*As you may know, 98% of San Jose residents currently receive their electricity from clean, renewable sources through San Jose Clean Energy. Banning the use of natural gas (which emits large quantities of methane, a potent greenhouse gas that accelerates climate change) in buildings, **will render new construction in San Jose emission-free.***

*We, our children and grandchildren will be using these buildings for decades to come. This ordinance is a vital step if we are to reach our goal of net zero greenhouse gas emissions by 2045 — a goal we **MUST** achieve to avoid the most devastating, existential threats from climate change.*

***Thank you for taking this important step to address the climate crisis and preserve a livable planet for our children.***

*Sincerely,*

*Deborah Garvey, PhD*

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

City Clerk <[REDACTED]>

Mon 11/16/2020 11:08 AM

To: Agendadesk <[REDACTED]>

---

**From:** Michael Kutilek <kut[REDACTED]>

**Sent:** Monday, November 16, 2020 10:18 AM

**To:** City Clerk <[REDACTED]>

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

[External Email]

***Dear Mayor Liccardo,***

***I urge you to vote in favor of the [expanded gas ban ordinance](#) at the city council meeting this Tuesday, November 17, so that we can rein in the second-largest source of climate destabilizing emissions in our city: the burning of gas in buildings.***

***Thank you for taking this important step to end the climate crisis and preserve a livable climate for our children.***

*Sincerely,*

*Michael Kutilek*

[REDACTED]

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

City Clerk <[REDACTED]>

Mon 11/16/2020 11:09 AM

To: Agendadesk <[REDACTED]>

---

**From:** KELLY Graham <[REDACTED]>

**Sent:** Monday, November 16, 2020 10:08 AM

**To:** Davis, Dev <[REDACTED]>

**Cc:** The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk

<[REDACTED]>

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

[External Email]

*Dear Council Member Davis*

I am writing to you today as a resident of your district and supporter of Mothers Out Front Silicon Valley. I am urging you to **vote yes** on expanding the natural gas ban ordinance November 17th.

We need to stop burning gas in new building construction the second largest emitter of green house gases. The residents of San Jose have shown a willingness to move toward renewable clean energy sources. Banning natural gas in new commercial buildings ensures a emission free existence for decades and moves us on our way to goals set for 2045. Lets not kick this down the road and miss the opportunity you currently have before you, please take action now our children's future is at stake.

Sincerely,

Rosaline Graham

[REDACTED] d [REDACTED]

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**FW: Approve gas ban ordinance item 6.3 on 11/17 @ city council meeting**

City Clerk <[REDACTED]>

Mon 11/16/2020 11:10 AM

To: Agendadesk <[REDACTED]>

-----Original Message-----

From: Jean Farrell <[REDACTED]>

Sent: Monday, November 16, 2020 9:28 AM

To: Davis, Dev <[REDACTED]>

Cc: The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk

<[REDACTED]>

Subject: Approve gas ban ordinance item 6.3 on 11/17 @ city council meeting

[External Email]

Dear Council Member Davis,

I am one a resident of your district and a supporter of mothers out front. I'm sure you agree with many of us that we all

must do everything within our power to reduce emissions and restore climate health and cleaner air.

This past year of fires and unhealthy air has shown us all the dangers of ignoring climate change. It is urgent that we all resolve that we must do everything possible to protect our climate, our children, our lives. Please support the expanded gas ban ordinance tomorrow, 11/17.

Sincerely,

Jean Farrell

Sent from my iPhone

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

City Clerk <[REDACTED]>

Mon 11/16/2020 11:10 AM

To: Agendadesk <[REDACTED]>

---

**From:** Cristin Boyd <cristin@cristinanderic.com>

**Sent:** Monday, November 16, 2020 9:00 AM

**To:** Davis, Dev <[REDACTED]>

**Cc:** The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk

<[REDACTED]>

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

[External Email]

*Dear Dev,*

*As a resident of D6, an environmentally concerned citizen, and 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!*

*We must rein in the second-largest source of climate destabilizing emissions in our city: the burning of gas in buildings.*

*Tomorrow! Please 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**; no builders should automatically receive one.*

*This small step will greatly reduce emissions and will be a major step forward for climate, for air quality, and for health and safety.*

*98% of San Jose residents currently receive their electricity from clean, renewable sources through San Jose Clean Energy. We need to match those numbers for commercial, non-residential spaces. This vote is a step in the right direction.*

*As the mother of a non-voting-aged-teen, I know that our children are afraid, very afraid of the world we will leave them. Please vote for our children and a livable world on any and all votes related to a sustainable, livable climate.*

*I will look forward to hearing about your support of this important ordinance in your next D6 newsletter.*

*Thank you,*

*Cristin Boyd*

[REDACTED]

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

City Clerk <[REDACTED]>

Mon 11/16/2020 11:11 AM

To: Agendadesk <[REDACTED]>

---

**From:** Kelsie Brady <[REDACTED]>

**Sent:** Monday, November 16, 2020 8:31 AM

**To:** Foley, Pam <[REDACTED]>

**Cc:** City Clerk <[REDACTED]> The Office of Mayor Sam Liccardo

<[REDACTED]>

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

[External Email]

*Dear Council Member Foley:*

*As a resident of your district, 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 this Tuesday, November 17, 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 our children.***

*Sincerely,*

*Kelsie Brady*  
[REDACTED]

**FW: Please Vote in Favor of Updated Natural Gas Infrastructure Prohibition Ordinance**

City Clerk <[REDACTED]>

Mon 11/16/2020 11:13 AM

To: Agendadesk <[REDACTED]>

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**From:** Stacy Dever Levy <[REDACTED]>

**Sent:** Monday, November 16, 2020 7:41 AM

**To:** Liccardo, Sam <[REDACTED]> Davis, Dev <[REDACTED]> Peralez, Raul

<[REDACTED]> Diep, Lan <[REDACTED]> Arenas, Sylvia

<[REDACTED]> Esparza, Maya <[REDACTED]> Jones, Chappie

<[REDACTED]> Jimenez, Sergio <[REDACTED]> Carrasco, Magdalena

<[REDACTED]> Foley, Pam <[REDACTED]> Khamis, Johnny

<[REDACTED]>

**Cc:** [REDACTED] City Clerk <[REDACTED]>

**Subject:** Please Vote in Favor of Updated Natural Gas Infrastructure Prohibition Ordinance

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, and Khamis,

*As a San Jose resident in District #1 and as a member of Mothers Out Front Silicon Valley, I urge you to vote in favor of a strong **Updated Natural Gas Infrastructure Prohibition Ordinance**. I was thrilled when you passed a strong reach code and historic gas ban last year, and I hope you will move forward on November 17th to approve the expanded gas ban ordinance to cover virtually all new buildings. One of the most important pieces of this ordinance is the requirement that businesses seeking an exemption must apply for it, rather than being granted one automatically. This essential step will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected increases in the cost of fossil gas. You will also be blazing a climate-smart trail for cities around the nation to follow. Please Reach for the Future and vote to keep gas out of our new buildings. Our children and their children will thank you.*

Sincerely,

Stacy Levy

[REDACTED], San Jose

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## FW: Support for Agenda Item 6.3 (Natural Gas Infrastructure Prohibition)

City Clerk <[REDACTED]>

Mon 11/16/2020 11:15 AM

To: Agendadesk <[REDACTED]>

---

**From:** Kevin Ma <[REDACTED]>

**Sent:** Sunday, November 15, 2020 10:04 PM

**To:** Liccardo, Sam <[REDACTED]> Davis, Dev <[REDACTED]> Peralez, Raul  
<[REDACTED]> Diep, Lan <[REDACTED]> Arenas, Sylvia  
<[REDACTED]> Esparza, Maya <[REDACTED]> Jones, Chappie  
<[REDACTED]> Jimenez, Sergio <[REDACTED]> Carrasco, Magdalena  
<[REDACTED]> Foley, Pam <[REDACTED]> Khamis, Johnny  
<[REDACTED]>

**Cc:** City Clerk <[REDACTED]>

**Subject:** Support for Agenda Item 6.3 (Natural Gas Infrastructure Prohibition)

[External Email]

Dear San Jose City Council,

As a Santa Clara County resident, I urge you to vote in favor of a strong ban on natural gas infrastructure. You have demonstrated environmental leadership with a strong reach code and historic gas ban last year, and you should continue this with the proposed ordinance. In doing so, you would continue to lead an example for the rest of the county to follow suit, as well as provide pressure on other cities to do their part in addressing climate change as an existential crisis.

One important part of this draft is that exemptions must be applied for rather than being granted automatically. All developments should be pushed to be greener, especially since [fully-electrified buildings are more cost-effective in the long term](#). Gas will eventually be phased out, so any gas infrastructure built now will be a burden on future businesses to address (as well as the environmental and safety hazards towards people in the meantime).

Sincerely,  
Kevin Ma

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**FW: Support for Updated Natural Gas Infrastructure Prohibition Ordinance (as outlined in FILE: 20-1445)**

City Clerk <[REDACTED]>

Mon 11/16/2020 11:15 AM

To: Agendadesk <[REDACTED]>

-----Original Message-----

From: Paul Wermer <[REDACTED]>

Sent: Sunday, November 15, 2020 10:03 PM

To: City Clerk <[REDACTED]>

Subject: Support for Updated Natural Gas Infrastructure Prohibition Ordinance (as outlined in FILE: 20-1445)

[External Email]

Dear Mayor Liccardo and City Council Members:

I fully support the proposed update to the ordinance banning Natural Gas ((Chapter 17.845).

The evidence that electrical energy can replace natural gas in new construction is overwhelming, and with few exceptions is cost effective to implement. That is why numerous non-profit agencies providing low income housing are building all-electric housing. The technology exists, the price is right, and it is time to stop adding to GHG emissions and natural gas demand.

These amendments are important because they will reduce GHG emissions now and they will reduce the burden of retrofitting gas fueled to all-electric as natural gas is phased out to meet the states GHG targets.

Perhaps even more significant is that this ordinance sends a clear signal to building equipment suppliers, architects and contractors that all electric is the future - which means that suppliers will focus more investment on producing heat-pumps instead of gas burners; architects will encourage clients to go all electric, and contractors will invest in training their crews to install all-electric systems, building the critical capacity needed to address the complex task of converting existing buildings to all electric.

Thank you, San Jose, for showing leadership in addressing the climate crisis and creating a roadmap for other cities to follow.

Sincerely,

Paul Wermer

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

City Clerk <[REDACTED]>

Mon 11/16/2020 11:16 AM

To: Agendadesk <[REDACTED]>

---

**From:** Lynn Osband <[REDACTED]>

**Sent:** Sunday, November 15, 2020 4:23 PM

**To:** Foley, Pam <[REDACTED]>

**Cc:** The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk  
<[REDACTED]>

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

[External Email]

*Dear Council Member Foley:*

*As a resident of your district, 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 this Tuesday, November 17, 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 our children.***

*Sincerely,*

*Lynn Osband*  
[REDACTED]



Vote YES on the updated Natural Gas Infrastructure Prohibition [REDACTED]

[REDACTED] <[REDACTED]>  
Mon 11/16/2020 1:42 PM

To: The Office of Mayor Sam Liccardo <[REDACTED]> District 10

<[REDACTED]>  
Cc: Agendadesk <[REDACTED]>

[External Email]

RE: Support gas ban ordinance, City Council, 11-17-20

Dear Mayor Liccardo and Councilmember Khamis,

I'm writing today to urge you to vote tomorrow in favor of the updated Natural Gas Infrastructure Prohibition Ordinance. I support San Jose in adopting policies which will lead us toward a lower gas emission future which is so needed to mitigate climate change and improve our health. I buy Total Green from San Jose Clean Energy and was proud of San Jose in passing the reach code for All Electric/gas ban in 2019. Tomorrow's vote brings us to an important next step. I urge you to stand by our community and on November 17th approve this gas ban update that will include almost all new building construction. Eliminating natural gas significantly reduces methane emissions. Please support this important next step.

Thank you,  
Judy Chamberlin  
District 10, San Jose

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## Natural Gas Ordinance

Felicia Gershberg <[REDACTED]>

Mon 11/16/2020 1:50 PM

To: District1 <[REDACTED]> District2 <[REDACTED]> District3 <[REDACTED]> District4  
<[REDACTED]> District5 <[REDACTED]> District 6 <[REDACTED]> District7  
<[REDACTED]> District8 <[REDACTED]> District9 <[REDACTED]> District 10  
<[REDACTED]> The Office of Mayor Sam Liccardo <[REDACTED]>  
Cc: Agendadesk <[REDACTED]> City Clerk <[REDACTED]>

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, and Khamis,

As a South Bay resident and co-lead of Together We Will - San José, a grassroots group of over 2000 activists, and in company with Mothers Out Front Bay Area, I urge you to vote in favor of a strong Updated Natural Gas Infrastructure Prohibition Ordinance.

We appreciated the strong reach code and historic gas ban that you passed last year and hope you will move forward tomorrow to approve the expanded gas ban ordinance to cover virtually all new buildings. \*\*One of the most important pieces of this ordinance is the requirement that businesses seeking an exemption must apply for it, rather than being granted one automatically.\*\* This essential step will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected increases in the cost of fossil gas. You will also be blazing a climate-smart trail for cities around the nation to follow.

Please Reach for the Future and vote to keep gas out of our new buildings. Our children and their children will thank you.

Sincerely,  
Felicia Gershberg, PhD

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

City Clerk <[REDACTED]>

Mon 11/16/2020 2:38 PM

To: Agendadesk <[REDACTED]>

---

**From:** Isabelle Y. Chappuis <[REDACTED]>

**Sent:** Monday, November 16, 2020 2:30 PM

**To:** Diep, Lan <[REDACTED]>

**Cc:** The Office of Mayor Sam Liccardo <[REDACTED]> City Clerk  
<[REDACTED]>

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

[External Email]

*Xin vui lòng gửi cho Council Member Diep:*

*As a resident of your district, 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 this Tuesday, November 17, 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 our children.***

*cám ơn nhiều,*

YênChi Isabelle Chappuis Nguyễn

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

Thomas Habermann <[REDACTED]>

Mon 11/16/2020 3:02 PM

To: Foley, Pam <[REDACTED]>

Cc: Liccardo, Sam <[REDACTED]> Agendadesk <[REDACTED]> City Clerk

<[REDACTED]>

[External Email]

*Dear Council Member Pam Foley:*

*As a resident of your district, and as a member of Mothers Out Front Silicon Valley, **I urge you to vote in favor of the [expanded gas ban ordinance](#)** at the city council meeting this Tuesday, November 17, 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 our children.***

*Sincerely,*

*Thomas Habermann*

[REDACTED]

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**FW: Agenda 6.3 20-1445 Support of Prohibit Natural Gas Ordinance**

City Clerk <[REDACTED]>

Mon 11/16/2020 4:43 PM

To: Agendadesk <[REDACTED]>

---

**From:** Christine <[REDACTED]>

**Sent:** Monday, November 16, 2020 4:31 PM

**To:** City Clerk <[REDACTED]>

**Subject:** Agenda 6.3 20-1445 Support of Prohibit Natural Gas Ordinance

[External Email]

**RE: Support for Natural Gas Infrastructure Prohibition Ordinance**

San Jose City Council,

Thank you for considering and implementing strong initiatives to combat Climate Change. I am impressed with your city's climate action goals, which includes: new building, Reach Codes. A large city like yours will be able to make a huge difference in emissions reduction, but what is most important is the ability of leading the way for other cities to do the same.

Thank you,

Christine Yballa

[REDACTED]

Sent from [Mail](#) for Windows 1

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# Agenda Item 6.3 (Natural Gas Infrastructure Prohibition)

Hoai-An Truong [REDACTED]

Mon 11/16/2020 11:48 PM

To: Liccardo, Sam <sam.liccardo@sanjoseca.gov>; Davis, Dev <dev.davis@sanjoseca.gov>; Peralez, Raul <Raul.Peralez@sanjoseca.gov>; Diep, Lan <lan.diep@sanjoseca.gov>; Arenas, Sylvia <sylvia.arenas@sanjoseca.gov>; Esparza, Maya <Maya.Esparza@sanjoseca.gov>; Jones, Chappie <Chappie.Jones@sanjoseca.gov>; Jimenez, Sergio <sergio.jimenez@sanjoseca.gov>; Carrasco, Magdalena <Magdalena.Carrasco@sanjoseca.gov>; Foley, Pam <Pam.Foley@sanjoseca.gov>; Khamis, Johnny <johnny.khamis@sanjoseca.gov>;

Cc: Agendadesk <Agendadesk@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>; campaign [REDACTED] <campaign [REDACTED]>

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, Khamis, and incoming Council Member Cohen (because it's important for you to read this as well, though you cannot yet vote) -

As a San Jose resident (District 3) and as a member of Mothers Out Front Silicon Valley, I urge you to vote in favor of a strong Updated Natural Gas Infrastructure Prohibition Ordinance.

There is a **30-year lag** between the time that greenhouse gases are emitted and when the effects are felt. The devastating wildfires we are experiencing today are largely due to emissions from **30 years ago**.

In 2018, the California wildfires burned almost 2 million acres. The Australian wildfires late 2019 to early 2020 have burned around **46 MILLION ACRES**. We cannot afford such fires here. We have run out of time to waste on half-measures, on compromises.

I urge you do NOT grant any blanket exceptions to the reach code. We already know we are not moving nearly fast enough to deal with the climate crisis. This would be a considerable setback to reaching our climate goals. And even if we stop using all fossil fuels today, the wildfires raging out of control, drought which threatens our food supply, floods and other climate effects will increase - for years to come. **The orange skies foretell increasing disaster**. We must do everything we can to protect our young people's future to the best of our ability ASAP.

I was thrilled when you passed a strong reach code and historic gas ban last year, AND when you declared a climate emergency. I hope you will move forward on November 17th to approve the expanded gas ban ordinance to cover virtually all new buildings.

It has come to the attention of Mothers Out Front and our many partners that Bloom Energy has requested an exemption from the proposed Gas Prohibition to continue burning significant amounts of fracked, fossil gas in Bloom Box fuel cell generators. **We are strongly opposed to any exemptions allowing significant continuous fossil gas use in place of clean energy 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.

I urge you to reject the supplemental memo. The proposed exemption in item 4 would be going in the exactly the wrong direction, increasing San Jose's emissions. **Please pass the ordinance as originally proposed, rejecting the supplemental memo**.

One of the most important pieces of this ordinance is the requirement that businesses seeking an exemption MUST apply

for it, rather than being granted one automatically. **Fracking** often takes place in close proximity to the most disenfranchised: low-income neighborhoods and communities of color, releasing methane which is a greenhouse gas far more potent than CO2, as well as many other chemicals hazardous to human health. Please honor the declaration of the **climate emergency**. This essential requirement will reduce climate-destabilizing methane emissions, improve air quality and health, increase safety, lower construction costs, and protect residents from expected increases in the cost of fossil gas. You will also be blazing a climate-smart trail for cities around the nation to follow. Please Reach for the Future and vote to keep gas out of our new buildings. Any business requesting an exemption has the option to switch to clean energy. They will also benefit from increasing savings from clean energy, and potentially also increasing their independence from the grid.

This is our chance to invest in our young people's future, so they don't have to clean up generations of our mess, leaving them to pay for expensive retrofits of relatively new buildings to meet California's legislated 2045 climate goals. Our young people will have to pay for this and many other costly climate mitigations, efforts to REMOVE emissions from the atmosphere, and restore our climate - so they and their children can live.

We must do all we can. NOW.

Thank you.

Hoai-An Truong  
Leadership Team, Mothers Out Front Silicon Valley  
Member, Turnout4Transit

Sent by carrier pigeon

\*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\*

#### **ALL HANDS ON DECK!**

**Climate Action: Do it for everyone you LOVE!**

**Food as Climate Action:** Changing how we eat, how we farm, and reducing food waste are some of the FASTEST and easiest ways to REVERSE climate change.

#WeCanSolveThis (playlist - fun & interesting videos!):  
[The diet that helps fight climate change](#) and more

Now on Netflix! [KISS THE GROUND](#) - movie based on the bestseller.  
A climate solution full of hope!

Support [AB 310](#) (coming this Spring 2021!) for a [State Public Bank](#) to bring our money back into our communities: pandemic relief & recovery AND climate solutions. And DEFUND the fossil fuel industry!

\*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\* 350ppm \*\*\*

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# Updated Natural Gas Infrastructure Prohibition Ordinance

Brenda Y. Rodriguez [REDACTED]

Mon 11/16/2020 11:06 PM

To: Liccardo, Sam <sam.liccardo@sanjoseca.gov>; Davis, Dev <dev.davis@sanjoseca.gov>; Peralez, Raul <Raul.Peralez@sanjoseca.gov>; Diep, Lan <lan.diep@sanjoseca.gov>; Arenas, Sylvia <sylvia.arenas@sanjoseca.gov>; Esparza, Maya <Maya.Esparza@sanjoseca.gov>; Jones, Chappie <Chappie.Jones@sanjoseca.gov>; Jimenez, Sergio <sergio.jimenez@sanjoseca.gov>; Carrasco, Magdalena <Magdalena.Carrasco@sanjoseca.gov>; Foley, Pam <Pam.Foley@sanjoseca.gov>; Khamis, Johnny <johnny.khamis@sanjoseca.gov>;  
Cc: Agendadesk <Agendadesk@sanjoseca.gov>; City Clerk <city.clerk@sanjoseca.gov>;

[External Email]

Dear Mayor Liccardo, Vice Mayor Jones, and Council Members Jimenez, Peralez, Diep, Carrasco, Davis, Esparza, Arenas, Foley, and Khamis,

As a San Jose resident living in District 3 and as a member of **Mothers Out Front Silicon Valley**, I would like you to vote in favor of the **Updated Natural Gas Infrastructure Prohibition Ordinance**. Tomorrow, November 17th is the day in which you can make a difference in San Jose residents' lives and assure the expanded gas ban takes effect in the buildings us residents live and work in. Please do the right thing!

Thank you!

--

Brenda Y. Rodriguez  
[REDACTED]

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