

File No. 190974

Committee Item No. 6

Board Item No. 3

### COMMITTEE/BOARD OF SUPERVISORS

#### AGENDA PACKET CONTENTS LIST

Committee: Land Use and Transportation Committee Date December 9, 2019

Board of Supervisors Meeting

Date 1/7/2020

Cmte Board

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| <input type="checkbox"/>            | <input type="checkbox"/>            | Motion                                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Resolution                                   |
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| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Legislative Digest                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Budget and Legislative Analyst Report        |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Youth Commission Report                      |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Introduction Form                            |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/>            | <input type="checkbox"/>            | MOU  |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Information Form                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Budget                                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Subcontract Budget                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Contract/Agreement                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Form 126 – Ethics Commission                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Award Letter                                 |
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| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Referral CEQA 100219      |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Referral CEQA 101619      |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Referral BIC 101619       |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | BIC Response 101819       |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | CEQA Determination 101719 |
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Completed by: Erica Major Date December 6, 2019

Completed by: Erica Major Date December 17, 2019

1 [Green Building Code - Energy Performance in Newly Constructed Buildings]

2  
3 **Ordinance amending the Green Building Code to establish energy performance**  
4 **requirements for certain new building construction; adopting environmental findings,**  
5 **and findings of local conditions under the California Health and Safety Code and the**  
6 **California Public Resources Code; and directing the Clerk of the Board of Supervisors**  
7 **to forward the ordinance to state agencies as required by state law.**

8  
9 **NOTE:** **Unchanged Code text and uncodified text** are in plain Arial font.  
10 **Additions to Codes** are in *single-underline italics Times New Roman font*.  
11 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.  
12 **Board amendment additions** are in double-underlined Arial font.  
13 **Board amendment deletions** are in ~~strikethrough Arial font~~.  
14 **Asterisks (\* \* \* \*)** indicate the omission of unchanged Code  
15 subsections or parts of tables.

16 Be it ordained by the People of the City and County of San Francisco:

17 Section 1. Environmental Findings. The Planning Department has determined that the  
18 actions contemplated in this ordinance comply with the California Environmental Quality Act  
19 (California Public Resources Code Sections 21000 et seq.). Said determination is on file with  
20 the Clerk of the Board of Supervisors in File No. 190974 and is incorporated herein by  
21 reference. The Board affirms this determination.

22 Section 2. General Findings.

23 (a) The California Building Standards Code is contained in Title 24 of the California  
24 Code of Regulations, and consists of several parts that are based upon model codes with  
25 amendments made by various State agencies. The California Green Building Standards

1 Code, also known as the CALGreen Code, is Part 11 of Title 24 of the California Code of  
2 Regulations.

3 (b) Local jurisdictions are required to enforce the California Green Building  
4 Standards Code, but they may also enact more stringent standards when reasonably  
5 necessary because of local conditions caused by climate, geology, or topography.  
6 Historically, the City has enacted the San Francisco Green Building Code as amendments to  
7 the California Green Building Standards Code. This ordinance is such an ordinance.

8 (c) Pursuant to Charter Section D3.750-5, the Building Inspection Commission  
9 considered the applicable sections of this ordinance at a duly noticed public hearing on  
10 November 20, 2019.

11  
12 Section 3. Findings Regarding Local Conditions Required by the California Health and  
13 Safety Code.

14 (a) California Health & Safety Code Section 17958.7 provides that before making  
15 any changes or modifications to the California Green Building Standards Code and any other  
16 applicable provisions published by the State Building Standards Commission, the local  
17 governing body must make an express finding that each such change or modification is  
18 reasonably necessary because of specified local conditions, and the findings must be filed  
19 with the State Building Standards Commission before the local changes or modifications go  
20 into effect.

21 (b) The Board of Supervisors hereby finds and declares that the following  
22 amendments to the San Francisco Green Building Code are reasonably necessary because  
23 of local climatic, topological, and geological conditions as discussed below.

24 (1) Human activities releasing greenhouse gases into the atmosphere cause  
25 increases in worldwide average temperature, which contribute to melting of glaciers and

1 thermal expansion of ocean water. As a city located on the tip of a peninsula, surrounded on  
2 three sides by bodies of water, San Francisco is experiencing and will continue to experience  
3 the repercussions of climate change, with rising sea levels causing significant erosion,  
4 increasing impacts to infrastructure during extreme tides, and causing the City to expend  
5 funds to modify ~~the sewer system~~ its infrastructure.

6 (2) The effects of climate change on California include reduction in annual  
7 snow accumulation in the Sierra Nevada Mountains, which increases the frequency of  
8 drought, and increasing evapotranspiration from forests and rangelands, which increases  
9 vulnerability of fire. San Francisco has already experienced increased frequency of drought  
10 conditions, and harmful air quality due to wildland fires; and these problems are likely to  
11 persist for the foreseeable future.

12 (3) Some San Francisco residents, such as the elderly, are particularly  
13 vulnerable to increases in frequency, peak temperature, and extended duration of heat events  
14 resulting from climate changes, as well as being vulnerable to extreme concentrations of toxic  
15 air pollutants in the City due to fires in Northern California, such as occurred in 2017 and  
16 2018.

17 (4) The operation of buildings comprise a significant portion of the City's  
18 greenhouse gas emissions. In 2017, the operation of buildings was responsible for 43.7% of  
19 citywide greenhouse gas emissions. The City has grown considerably in recent years. For  
20 example, since 1990 the economy of the City grew 162% and population increased by 22%.  
21 This growth results in the new construction of buildings and significant rehabilitation of existing  
22 buildings.

23 (5) Strong energy efficiency standards reduce emissions by lowering overall  
24 energy use. The increased availability of renewable energy also reduces emissions  
25 associated with electricity usage. In 2017, 80% of emissions from the operation of buildings

1 citywide was due to consumption of natural gas or district steam produced via combustion of  
2 natural gas.

3 (6) Emissions from natural gas can be reduced by limiting consumption. The  
4 primary constituent of natural gas is methane, which is 86 times more potent of a greenhouse  
5 gas than carbon dioxide. In addition, more than 4% of methane leaks into the atmosphere  
6 prior to delivery.

7 (7) The City can help reduce emissions from electricity use through  
8 conservation, by increasing generation of renewable electricity to meet the California  
9 Renewable Portfolio Standards, and voluntary enhancement of clean generation resources by  
10 CleanPowerSF, the City's Community Choice Aggregation program. Emissions of carbon  
11 dioxide per megawatt hour of electricity delivered to the City have decreased by 78% since  
12 1990. The City has set the goal of ensuring that 100% of electricity usage citywide is  
13 generated via renewable, greenhouse gas-free sources by 2030.

14 (8) It is necessary and appropriate to require building owners in San  
15 Francisco to take steps to reduce the energy consumed by inefficient building operations  
16 when such operations utilize fossil fuels instead of low-carbon electricity, in order to reduce  
17 pollution, improve resilience to disruption of natural gas supplies in the event of disaster,  
18 reduce risk of fire due to leaks or ruptures, and reduce the global warming effects associated  
19 with the consumption of fossil fuels and natural gas.

20 (c) Recently, the California Energy Codes and Standards Program issued the 2019  
21 Nonresidential New Construction Reach Code Cost Effectiveness Study, and the 2019 Cost-  
22 effectiveness Study: Low Rise Residential New Construction. Both studies are on file with the  
23 Clerk of the Board of Supervisors in Board File No. 190964. Based on the studies, the Board  
24 of Supervisors finds that meeting the energy performance requirements established in this  
25

1 ordinance are cost-effective, and will use no more energy than the standards contained in the  
2 2019 California Energy Standards (CCR Title 24, Part 6).

3  
4 Section 4. Findings Required by California Public Resources Code and Title 24 of the  
5 California Code of Regulations.

6 (a) California Public Resources Code Section 25402.1(h)(2) and Section 10-106 of  
7 the California Code of Regulations, Title 24, Part 1, Locally Adopted Energy Standards,  
8 authorize a local jurisdiction to adopt and enforce more restrictive local energy standards,  
9 provided that the local jurisdiction makes a determination that the local standards are cost-  
10 effective and will save more energy than the current Statewide standards, and provided  
11 further that the local jurisdiction files an application for approval with the California Energy  
12 Commission together with documentation supporting the cost-effectiveness determination.  
13 Local energy standards may take effect only after the California Energy Commission has  
14 reviewed and formally approved them.

15 (b) Based upon the findings of a cost-effectiveness study performed on the more  
16 restrictive local standards contained in the City's proposed ordinance, the Board of  
17 Supervisors hereby determines that these local energy standards are cost-effective and will  
18 save more energy than the standards contained in the 2019 California Green Building  
19 Standards Code. A copy of the cost-effectiveness study is on file with the Clerk of the Board  
20 of Supervisors in File No. 190964.

21  
22 Section 5. The Green Building Code is hereby amended by revising Sections 202  
23 (definitions placed in alphabetical sequence), 4.201, and 5.201, to read as follows:

24 **SECTION 202 – DEFINITIONS**

25 \* \* \* \*

1           **ALL-ELECTRIC BUILDING OR PROJECT.** A building or project that uses a permanent  
2 supply of electricity as the source of energy for all space conditioning (including heating and cooling),  
3 water heating (including pools and spas), cooking appliances, and clothes drying appliances. An All-  
4 Electric Building or Project may include solar thermal collectors, but may not install natural gas or  
5 propane plumbing in or in connection with the building, structure, or within property lines of the  
6 premises, extending from the point of delivery at the gas meter.

7 \* \* \* \*

8           **MIXED-FUEL BUILDING.** A building that uses natural gas or propane as fuel for space  
9 heating, water heating (including pools and spas), cooking appliances or clothes drying appliances, or  
10 is plumbed for such equipment.

11 \* \* \* \*

12           **NATURAL GAS.** Shall have the same meaning as "Fuel Gas" as defined in California  
13 Plumbing Code and Mechanical Code.

14 \* \* \* \*

15           **TOTAL ENERGY DESIGN RATING.** A metric required by the California Energy  
16 Commission to be applied to low-rise residential construction in order to comply with California Title  
17 24 Part 6 Energy Standards. The Total Energy Design Rating has two components: (a) the Energy  
18 Efficiency Design Rating; and (b) the Solar Electric Generation and Demand Flexibility Design Rating.  
19 The Solar Electric Generation and Demand Flexibility Design Rating is subtracted from the Energy  
20 Efficiency Design Rating to determine the Total Energy Design Rating. California Energy Standards  
21 require that each building must separately comply with the Energy Efficiency Design Rating and the  
22 Total Energy Design Rating.

23 \* \* \* \*

24           **SECTION 4.201 – GENERAL**

25 \* \* \* \*

1                    4.201.3 Energy Performance.

2                    (a) All-electric buildings. *A newly constructed all-electric building shall be*  
3 *designed and constructed such that the Total Energy Design Rating and Energy Efficiency Design*  
4 *Rating for the proposed building are no greater than the corresponding Energy Design Ratings for*  
5 *a Standard Design Building compliant with California Title 24 Part 6 Energy Standards.*

6                    (b) Mixed-fuel low-rise residential buildings. *A newly constructed mixed-*  
7 *fuel low-rise residential building shall:*

8                    (1) Be designed and constructed such that the Energy Efficiency  
9 *Design Rating for the proposed building is no greater than the Energy Efficiency Design Rating for the*  
10 *Standard Design Building; and*

11                    (2) Be designed and constructed such that the Total Energy Design  
12 *Rating for the proposed building is 14 or less, as calculated by compliance software approved by the*  
13 *California Energy Commission.*

14                    Exception: *Mixed-fuel low-rise residential buildings with limited solar*  
15 *access are excepted if a photovoltaic (PV) system meeting the minimum requirements as specified in*  
16 *California Energy Standards Joint Appendix JA11 is installed on all available areas of 80 contiguous*  
17 *square feet or more with effective annual solar access. Effective annual solar access shall be 70% or*  
18 *greater of the output of an unshaded PV array on an annual basis, wherein shade is due to existing*  
19 *permanent natural or human-made barriers external to the dwelling, including but not limited to trees,*  
20 *hills, and adjacent structures.*

21                    (c) Mixed-fuel high-rise residential buildings. *A newly constructed mixed-*  
22 *fuel high-rise residential building shall be designed and constructed such that the Energy Budget for*  
23 *the proposed building is no greater than 90% of the Title 24 Part 6 Energy Budget for the Standard*  
24 *Design Building as calculated by compliance software approved by the California Energy Commission.*



1                   **SECTION 5.201 – GENERAL**

2                   \* \* \* \*

3                   5.201.1.1 Energy Performance. [Reserved]

4                               (a) All-electric buildings. A newly constructed all-electric non-residential  
5 building shall demonstrate the Energy Budget for the proposed building is no greater than the Energy  
6 Budget calculated for the Standard Design Building meeting California Title 24 Part 6 Energy  
7 Standards.

8                               (b) Mixed-fuel buildings. A newly constructed mixed-fuel non-residential  
9 building shall demonstrate the Energy Budget for the proposed building is no greater than 90% of the  
10 Title 24 Part 6 Energy Budget for the Standard Design Building meeting California Title 24 Part 6  
11 Energy Standards.

12                               Exception: Buildings consisting primarily of occupancy F, L, or H are exempt  
13 from this Section.

14                   Section 6. Effective and Operative Dates.

15                   (a) This ordinance shall become effective 30 days after enactment. Enactment  
16 occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or  
17 does not sign the ordinance within ten days of receiving it, or the Board of Supervisors  
18 overrides the Mayor's veto of the ordinance.

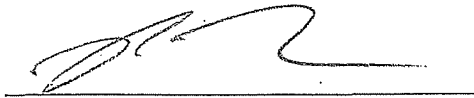
19                   (b) This ordinance shall be operative on and after either January 1, 2020 or its  
20 effective date as stated in subsection (a), whichever is later.  
21

22                   Section 7. Transmittal to State Officials. The Clerk of the Board of Supervisors is  
23 hereby directed to transmit this ordinance, upon enactment, to the California Building  
24  
25

1 Standards Commission for filing and to the California Energy Resources and Conservation  
2 Department for approval, pursuant to the applicable provisions of California law.

3 APPROVED AS TO FORM:

4  
5  
6 By:



ROBB KAPLA  
Deputy City Attorney

7  
8 n:\egana\as2019\2000081\01411809.docx

**REVISED LEGISLATIVE DIGEST**  
(Amended in Committee, 12/9/2019)

[Green Building Code - Energy Performance in Newly Constructed Buildings]

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the ordinance to state agencies as required by state law**

Existing Law

The Green Building Code currently does not provide definitions or energy performance standards for new all-electric buildings or mixed-fuel buildings.

Amendments to Current Law

The proposed legislation would define all-electric buildings as buildings relying solely on electricity for all uses and which do not contain any natural gas or propane plumbing or connections. The proposed legislation would define mixed-fuel buildings as buildings that include plumbing and connections for natural gas and/or propane. The legislation affirms existing California Energy Standards requirements that new all-electric buildings and mixed-fuel buildings achieve energy performance that equal or are better (lower) than the standard design building. The standard design building is the modeled energy design rating or energy budget that would be achieved by utilizing the prescriptive energy efficiency requirements of the California Energy Code.

This legislation would impose no new or additional requirements on all-electric buildings beyond the existing California Energy Standards.

This legislation would require new mixed-fuel low-rise residential buildings to establish that their energy efficiency design ratings are equal to or lower than the energy efficiency design rating of a standard design building, and that their total energy design rating is no greater than 14. New mixed-fuel high-rise residential buildings would need to establish that their energy budgets are 90% or less than a standard design building's energy budget. Similarly, new mixed-fuel non-residential buildings, regardless of height, would need to establish that their energy budgets are 90% or less than a standard design building's energy budget.

Background

California Code of Regulations Title 24 Part 6 allows all-electric and mixed-fuel buildings to forego prescriptive requirements and receive credit for solar energy generation and demand response, as long as the energy performance of these measures would be equal to or better than what would be achieved by the prescriptive requirements. The legislation defines a building's total energy design rating as the proposed building's energy efficiency design rating (the higher the less efficient) minus the proposed building's solar electric generation and demand flexibility design rating.

Under California law, a new building must establish that its total energy design rating equals or is lower than the standard design building, either by fulfilling all applicable prescriptive requirements, or by calculating a total energy design rating per the methods specified by the California Energy Commission.

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1 [Support of the Energy Performance in Newly Constructed Buildings Ordinance, File Number:  
2 190974]

3  
4 **Resolution urging the Board of Supervisors and the Mayor to adopt File Number**  
5 **190974, an ordinance amending the Green Building Code to require newly constructed**  
6 **buildings in San Francisco to either use electricity as the source of energy for all**  
7 **building systems and exclude natural gas; or to significantly improve energy**  
8 **performance if any systems utilize natural gas.**

9 WHEREAS, The City and County of San Francisco has a duty to protect the natural  
10 environment, the economy, and the health of its citizens; and,

11 WHEREAS, the San Francisco Commission on the Environment seeks to improve,  
12 enhance, and preserve the environment and to promote San Francisco's long-term  
13 environmental sustainability as set forth in Section 4.118 of the City Charter; and,

14 WHEREAS, climate change has already affected San Francisco to varying degrees  
15 including degraded air quality from wildfires, drought, flooding, and extreme heat and is  
16 projected to increase the number of extreme heat days, increase sea level rise and flooding,  
17 increase the frequency and severity of droughts and extreme storms, and worsen air quality;  
18 and,

19 WHEREAS, the elderly, the poor, young children, those with pre-existing medical  
20 conditions, and communities of color are the most likely to suffer the greatest health impacts  
21 from climate change; and

22 WHEREAS, San Francisco has established an ambitious goal of achieving net zero  
23 emissions by 2050 to reduce harmful greenhouse gas emissions in order to stabilize the  
24 planet and protect the health of our residents; and,

1           WHEREAS, at the Global Climate Action Summit in 2018, Mayor London Breed  
2 committed San Francisco to new building decarbonization goals, which require all new  
3 buildings to be net zero emissions no later than 2030 and all existing buildings to be net zero  
4 emissions by 2050; and,

5           WHEREAS, strong energy efficiency standards have reduced emissions by lowering  
6 overall energy use and the increased availability of renewable energy also has reduced  
7 emissions associated with electricity usage; and,

8           WHEREAS, in 2017, the operation of buildings was still responsible for 43.7% of  
9 Citywide greenhouse gas emissions; and,

10           WHEREAS, in 2017, 80% of emissions from the operation of buildings citywide was  
11 due to consumption of natural gas or district steam produced via combustion of natural gas;  
12 and,

13           WHEREAS, the primary constituent of natural gas is methane, which is 86 times more  
14 potent as a greenhouse gas than carbon dioxide; and

15           WHEREAS, more than 4% of methane leaks into the atmosphere prior to delivery; and,

16           WHEREAS, reducing reliance on natural gas as an energy source will decrease  
17 building emissions and benefit the health, safety, and welfare of San Francisco and its  
18 residents by improving indoor air quality and reducing harmful greenhouse gas emissions;  
19 and,


20           WHEREAS, requiring energy-efficient and all-electric systems in buildings at the time of  
21 new construction and major renovations is more cost-effective than replacing equipment in  
22 good working order, because workers are already on-site, permitting and administrative costs  
23 are lower, and standard construction financing can incorporate such systems; now, therefore,  
24 be it,

1 RESOLVED, That the Commission on the Environment urges the Board of Supervisors  
2 and the Mayor to adopt File Number 190974, an ordinance ensuring critical greenhouse gas  
3 reductions from the buildings sector; and, be it,

4 FURTHER RESOLVED, That the Commission on the Environment urges the Board of  
5 Supervisors and the Mayor to continue to support policies that help San Francisco reach its  
6 goal of achieving net zero emissions from new construction no later than 2030 and from all  
7 buildings by 2050.

8 I hereby certify that this Resolution was adopted at the Commission on the  
9 Environment's Meeting on November 25, 2019.

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~~Anthony Valdez, Commission Secretary~~  
*Chonel Sheehan, Policy and Public Affairs Manager*

Vote: 6-0 Approved  
Ayes: Commissioners Bermejo, Chu, Stephenson, Sullivan, Wan, and Wald  
Noes: None  
Absent: Commissioner Ahn

THE STATE OF TEXAS, COUNTY OF DALLAS.





## BUILDING INSPECTION COMMISSION (BIC)

Department of Building Inspection      Voice (415) 558-6164 - Fax (415) 558-6509  
1660 Mission Street, San Francisco, California 94103-2414

November 22, 2019

London N. Breed  
Mayor

### COMMISSION

Angus McCarthy  
President

Debra Walker  
Vice-President

Kevin Clinch  
John Konstin  
Frank Lee  
Sam Moss  
James Warshell

Sonya Harris  
Secretary

Shirley Wong  
Assistant  
Secretary

Tom C. Hui  
S.E.,  
C.B.O., Director

Ms. Angela Calvillo  
Clerk of the Board  
Board of Supervisors, City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco, CA 94102-4694

Dear Ms. Calvillo:

**RE: File No. 190974-2**

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the ordinance to state agencies as required by state law.**

This amendment was heard at the Code Advisory Committee (CAC) meeting on August 14, 2019. The CAC recommended the adoption of ordinance File No. 190974-2 as written with the following amendments:

- 1) Page 10 line 22 change the number 10 to 14.
- 2) Page 11 line 24 add "Exception: Buildings consisting primarily of occupancy F, L or H are exempt from this section."

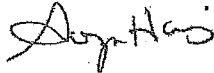
The Building Inspection Commission met and held a public hearing on November 20, 2019 regarding File No. 190974-2 on the proposed amendment to the Green Building Code referenced above. The Commissioners voted unanimously to **recommend approval** of the proposed Ordinance.

The Commissioners were in support of the Ordinance, but still had some concerns regarding actual implementation so President McCarthy confirmed that there would be a Task Force set up to deal with those issues in the near future.

President McCarthy	Yes	Vice-President Walker	Absent
Commissioner Clinch	Yes	Commissioner Konstin	Absent
Commissioner Lee	Yes	Commissioner Moss	Absent
Commissioner Warshell	Yes		

Should you have any questions, please do not hesitate to call me at 558-6164.

Sincerely,



Sonya Harris  
Commission Secretary

cc: Tom C. Hui, S.E., C.B.O., Director  
Mayor London N. Breed  
Supervisor Rafael Mandleman  
Board of Supervisors



## BUILDING INSPECTION COMMISSION (BIC)

Department of Building Inspection      Voice (415) 558-6164 - Fax (415) 558-6509  
1660 Mission Street, San Francisco, California 94103-2414

October 18, 2019

London N. Breed  
Mayor

### COMMISSION

Angus McCarthy  
President

Debra Walker  
Vice-President

Kevin Clinch  
John Konstin  
Frank Lee  
Sam Moss  
James Warshell

Sonya Harris  
Secretary

Shirley Wong  
Assistant  
Secretary

Tom C. Hui  
S.E.,  
C.B.O., Director

Ms. Angela Calvillo  
Clerk of the Board  
Board of Supervisors, City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco, CA 94102-4694

Dear Ms. Calvillo:

**RE: File No. 190974-2**

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This amendment was heard at the Code Advisory Committee (CAC) meeting on August 14, 2019. The CAC recommended the adoption of ordinance File No. 190974-2 as written with the following amendments:

- 1) Page 10 line 22 change the number 10 to 14.
- 2) Page 11 line 24 add "Exception: Buildings consisting primarily of occupancy F, L or H are exempt from this section."

The Building Inspection Commission met and held a public hearing on October 16, 2019 regarding File No. 190974-2 on the proposed amendment to the San Francisco Green Building Code referenced above. The Commissioners voted 4 to 1, with Commissioner Walker dissenting. The Commissioners **considered the Ordinance, but did not recommend approval as written.**

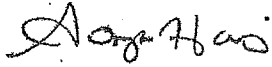
A few Commissioners also raised the following concerns:

- 1) The Commissioners supported the intent of the legislation, but were open to possibly including amendments.
- 2) There was concern about the unintended consequences of the Ordinance.

President McCarthy	Yes	Vice-President Walker	No
Commissioner Clinch	Yes	Commissioner Konstin	Excused
Commissioner Lee	Excused	Commissioner Moss	Yes
Commissioner Warshell	Yes		

Should you have any questions, please do not hesitate to call me at 558-6164.

Sincerely,



Sonya Harris  
Commission Secretary

cc: Tom C. Hui, S.E., C.B.O., Director  
Mayor London N. Breed  
Supervisor Rafael Mandleman  
Board of Supervisors

BOARD of SUPERVISORS



City Hall  
Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

October 2, 2019

File No. 190974

Lisa Gibson  
Environmental Review Officer  
Planning Department  
1650 Mission Street, Ste. 400  
San Francisco, CA 94103

Dear Ms. Gibson:

On September 24, 2019, Supervisor Mandelman submitted the proposed legislation:

**File No. 190974**

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the Ordinance to state agencies as required by state law.**

This legislation is being transmitted to you for environmental review.

Angela Calvillo, Clerk of the Board

A handwritten signature in cursive script, appearing to read "Erica Major".

By: Erica Major, Assistant Clerk  
Land Use and Transportation Committee

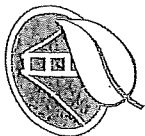
Attachment

c: Joy Navarrete, Environmental Planning  
Don Lewis, Environmental Planning

Not defined as a project under CEQA Guidelines Sections 15378 and 15060(c)(2) because it would not result in a direct or indirect physical change in the environment.

joy  
navarrete

Digitally signed by joy navarrete  
DN: dc=org, dc=sfgov, dc=cityplanning,  
ou=CityPlanning, ou=Environmental  
Planning, cn=joy navarrete,  
email=joy.navarrete@sfgov.org  
Date: 2019.10.17 17:04:27 -07'00'

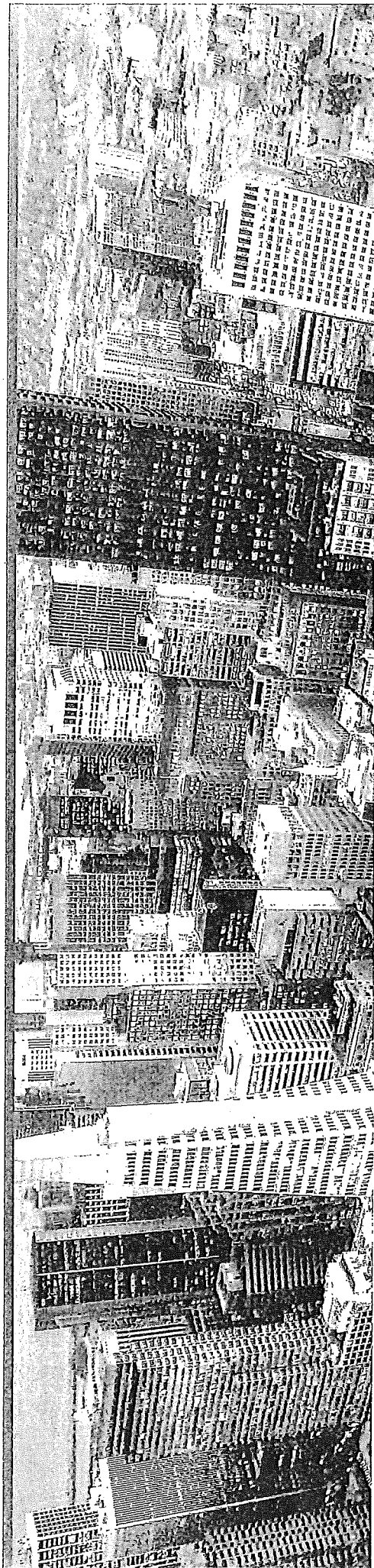


**SF Environment**

**Our home. Our city. Our planet.**

A Department of the City and County of San Francisco

# Reducing GHG Emissions Through Building Codes in San Francisco



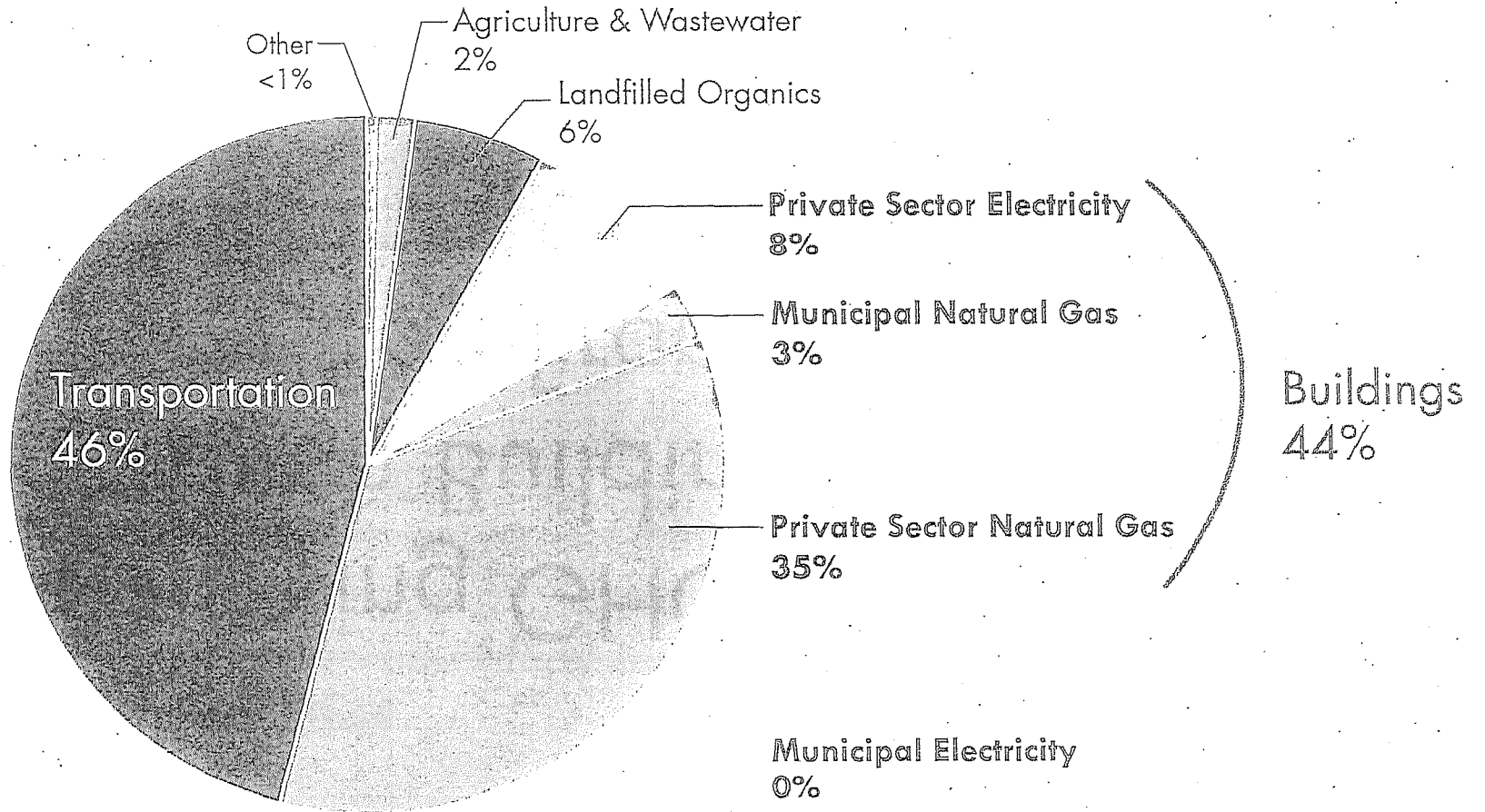
190972

190974

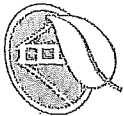
12/9/19

RECEIVED IN  
COMMITTEE

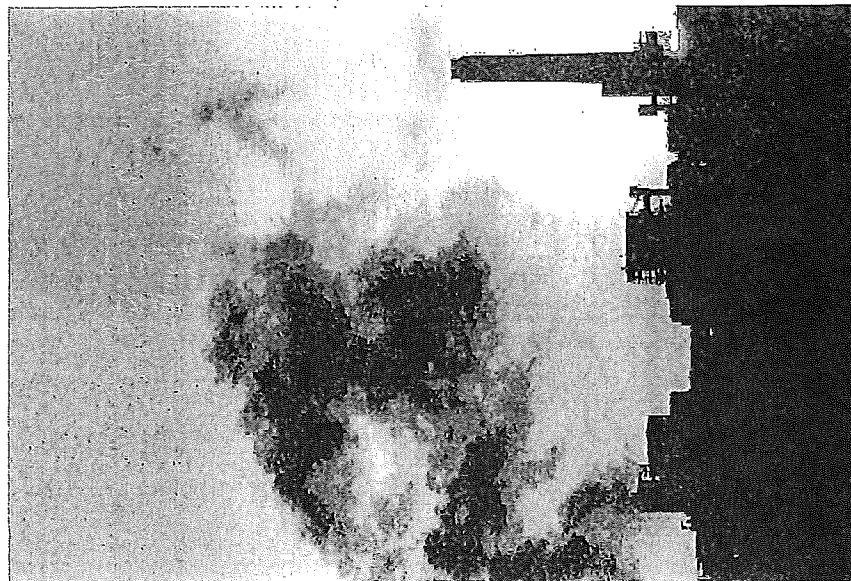
# San Francisco's Emissions Sources Today



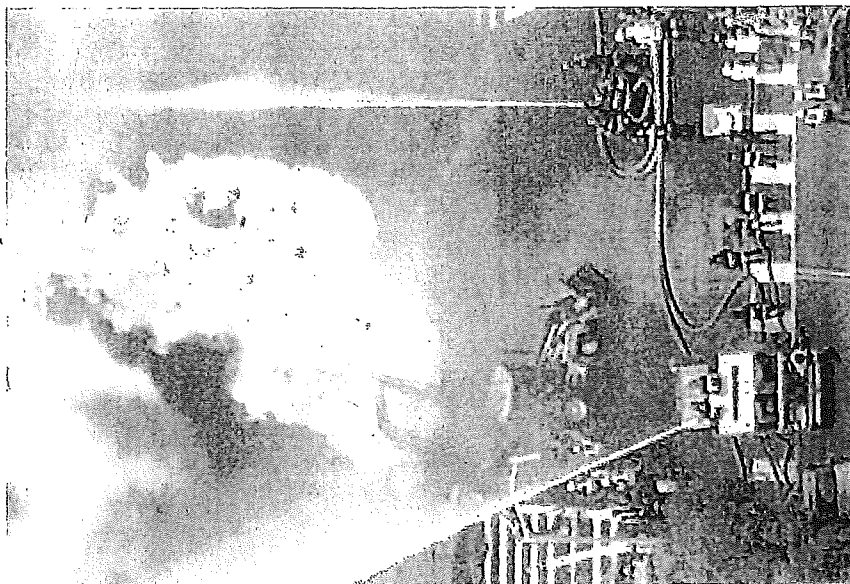
# Natural Gas Impacts . . .



Climate



Safety



Health







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# Today's Proposal – Building "Reach Code"

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A "Reach Code" is a local enhancement to state code adopted with the current building code cycle.

## **State Regulations for Private Buildings**

- ✓ Cost-effective, *and*
- ✓ Meets California Energy Standards, *and*
- ✓ Cannot require the use of more efficient appliances than federally mandated.

## **City's own facilities**

- ✓ Must meet California Energy Standards

*State Regulations are through the California Energy Commission*

# Policy for New Construction



888  
San Francisco  
Green Building Code



**Commercial**

**All-Electric**

**Natural Gas & Electricity**  
"Mixed-Fuel"



**Multifamily  $\geq 4$  floors**

**10% better than Code**  
CalGreen Tier 2



**Multifamily  $\leq 3$  floors**

**Meet Code**

**11% Better Than Code**  
CalGreen Tier 1



**Single Family**

**28% better than Code**  
CalGreen Tier 1

Env Code  
Ch 7



**Municipal**

(New construction and whole building major renovations)

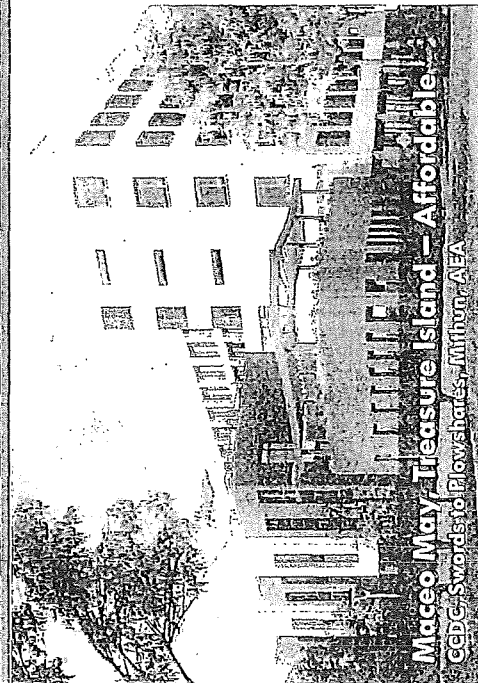
**Meet Code**

**No Natural Gas Allowed**  
Waiver process available

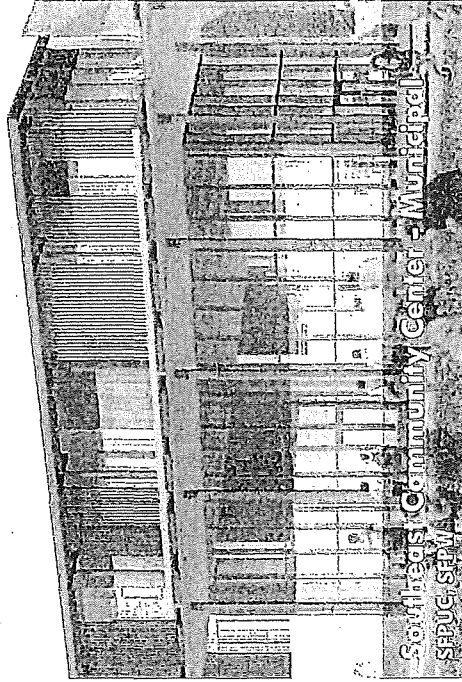




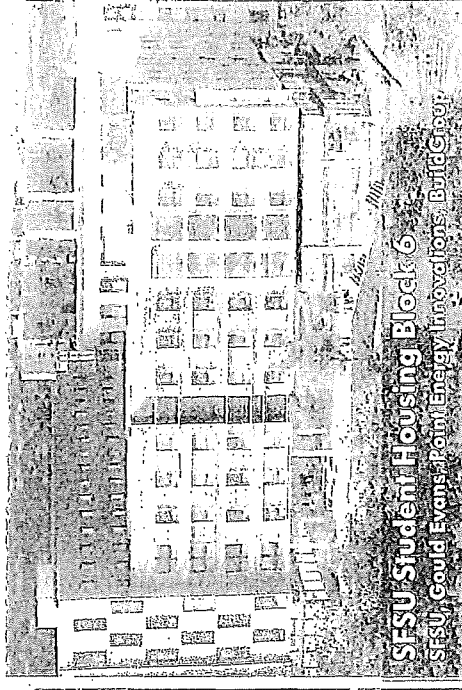
# Local Examples of All Electric Buildings



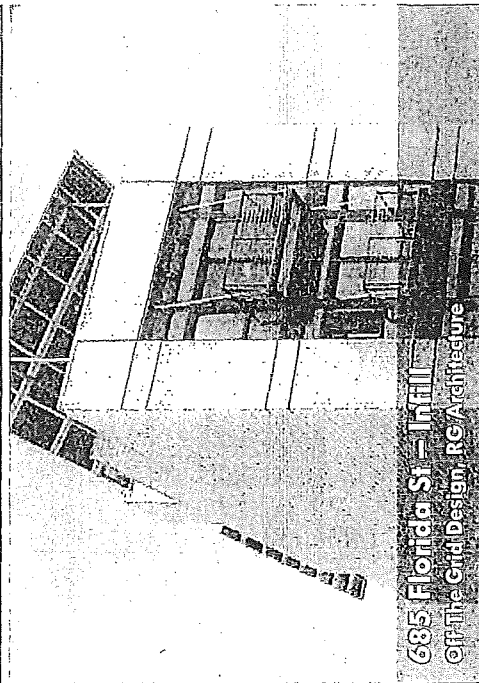
**Maceo May Treasure Island - Affordable**  
CEBC-Swords/Plewsharés-Mithun-AEA



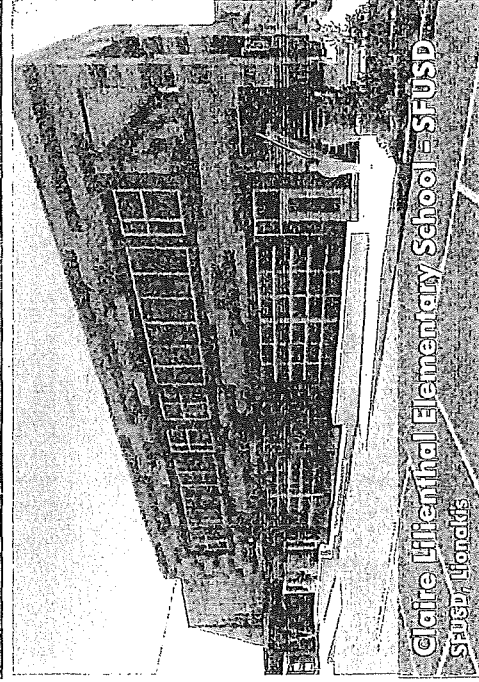
**Southside Community Center - Municipal**  
SFUC-SEW



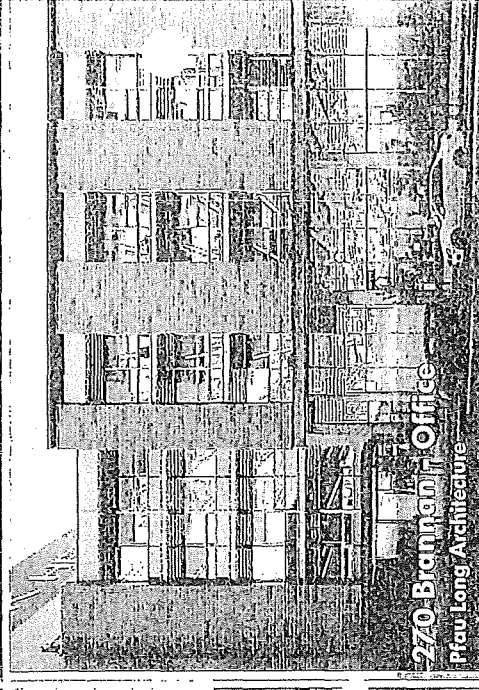
**SFSU Student Housing Block 6**  
SFSU-Could-Evans-PalmEnergy Innovations-BuildGreen



**685 Florida St - Infill**  
OT-The Grid Design-RC/Architecture



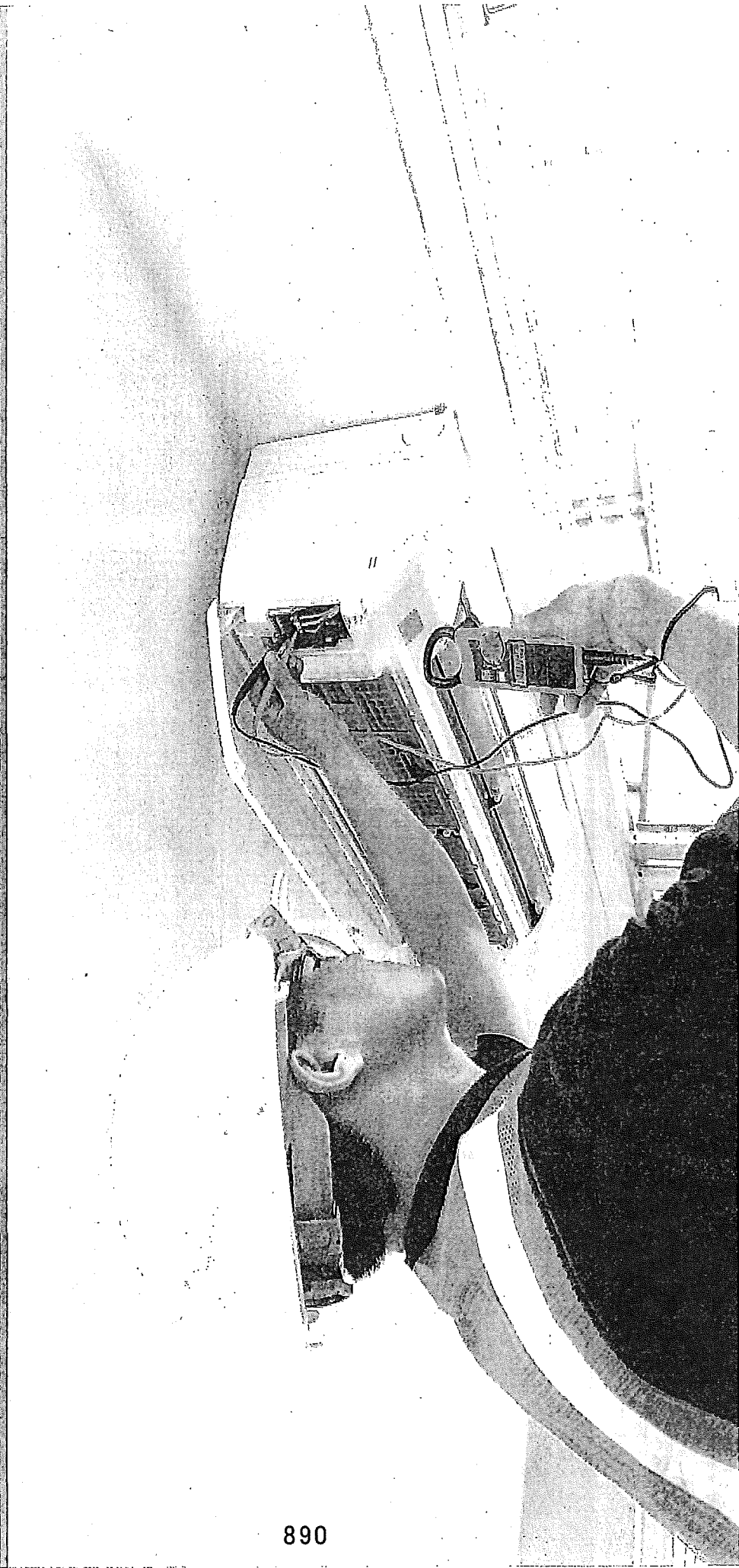
**Claire Liffenthal Elementary School - SFUSD**  
SFUSD-Lionakis



**270 Brannon Office**  
Pfeau-Long Architecture



# Next Steps – Delivering the Buildings of the Future



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Thank you for listening

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Debbie Raphael, Director  
San Francisco Department of the Environment

SUBMITTED IN COMMITTEE  
190974 J 12/9/19  
12/9/19

Testimony to Land Use and Transportation Committee of SF Board of Supervisors  
File # 190974  
December 9, 2019

Submitted by Robin Cooper, MD  
Co-Founder, Climate Psychiatry Alliance  
Member, California Climate Health Now  
Assistant Professor of Medicine, University of California, San Francisco

My name is Robin Cooper; I am a physician and psychiatrist in San Francisco and present a number of climate and health groups including but not limited to Physicians for Social Responsibility and Ca. Climate Health Now. I wear my white coat, the symbol of health providers, today with intent to visually demonstrate the intertwined and inseparable connection between the climate crisis and the health care **emergency** we now face. As a physician, I see the suffering of climate change up close; my patients are suffering. We are in a public health emergency because of the persistent dependency of fossil fuels.

Today we are discussing only one component of the contribution to greenhouse gas emissions; the impact of natural gas on building stock. Since methane and natural gas are major contributors to global warming and their use in our current building stock has a significant contribution to emissions, banning natural gas in buildings is one powerful way to improve and protect public health. These are preventive health actions.

In support of greater understanding of broad impacts of methane extraction and natural gas use on public health, I am submitting an article from the prestigious New England Journal of Medicine authored by highly regarded public health leaders just published last week (<https://www.nejm.org/doi/full/10.1056/NEJMp1913663>)

I call your attention to the chart outlining the significant and wide ranging negative health impacts of methane and specifically the extraction practice of fracking as the source of natural gas. This is highly relevant to the discussion of today. By reducing demand for natural gas, decarbonization of buildings can have an important role in improving health outcomes. Therefore, <sup>among these selections</sup> the authors specifically "recommend that new residential or commercial gas hookups not be permitted" (Pg. 3 highlighted) :

Despite the limited and weak current code modifications proposed today, it must pass as a step toward **decarbonization**. **Additional more stringent efforts to drive all electric construction, including an electric readiness requirements must be a step toward full ban of natural gas.** These are needed to achieve the emissions reductions that will keep us safer and meet target goals.

Emergency Means Urgent and Dramatic Action is needed.

For the sake of my patients, for the sake of your health, for the sake of our public health, pass this code adjustment and than **rapidly** move to greater efforts toward decarbonization of buildings.





## The False Promise of Natural Gas

Philip J. Landrigan, M.D., Howard Frumkin, M.D., Dr.P.H., and Brita E. Lundberg, M.D.

**P**roduction of natural gas has grown by nearly 400% in the United States since 1950, and gas is now the country's second-largest energy source. The main driver of this increase has been

the wide-scale adoption of hydraulic fracturing ("fracking"). During the fracking process, large volumes of water, sand, and chemicals are injected deep underground at high pressure to fracture shale deposits and sand and coal beds to release trapped gas. The world's largest gas-transmission network — with more than 300,000 miles of interstate and intrastate transmission pipelines, 2.1 million miles of local distribution lines, and more than 1000 compressor stations — brings this gas to the market. The ready availability of gas has reduced dependence on coal and oil, enables the United States to ship gas overseas, and will make the country a net energy exporter by 2020.<sup>1</sup> It has also made gas an important feedstock for the chemical, pesticide, and plastics-manufacturing industries.

Natural gas, composed principally of methane, has been hailed as a clean "transition" fuel — a bridge from the coal and oil of the past to the clean energy sources of the future. This claim is partially true. Gas combustion produces only negligible quantities of sulfur dioxide, mercury, and particulates. It is thus less polluting than combustion of coal or oil, and this benefits health.<sup>2</sup> Gas combustion also generates less carbon dioxide per unit of energy than combustion of coal or oil.

But beneath this rosy narrative lies a more complex story. Gas is associated with health and environmental hazards and reduced social welfare at every stage of its life cycle.<sup>2</sup> Fracking is linked to contamination of ground and surface water, air pollution, noise and light pollution, radiation releases,

ecosystem damage, and earthquakes (see table). Transmission and storage of gas result in fires and explosions. The pipeline network is aging, inadequately maintained, and infrequently inspected. One or more pipeline explosions occur every year in the United States. In September 2018, a series of pipeline explosions in the Merrimack Valley in Massachusetts caused more than 80 fires and explosions, damaged 131 homes, forced the evacuation of 30,000 people, injured 25 people, including two firefighters, and killed an 18-year-old boy. Gas compressor stations emit toxic and carcinogenic chemicals such as benzene, 1,3-butadiene, and formaldehyde. Wells, pipelines, and compressor stations are disproportionately located in low-income, minority, and marginalized communities, where they may leak gas, generate noise, endanger health, and contribute to environmental injustice while producing no local benefits. Gas combustion generates oxides of nitrogen that increase asthma risk

Health and Environmental Hazards of Natural Gas.*		
Category	Pathways and Mechanisms	Established and Potential Health Hazards
<b>Local hazards</b>		
Water contamination	Ground and surface water at gas wells is contaminated with fracking chemicals.	Many fracking chemicals are toxic: 25% are carcinogens; 75% are dermal, ocular, respiratory, and gastrointestinal toxins; 40 to 50% have toxic nervous, immune, cardiovascular, and renal effects; 30 to 40% are endocrine disrupters
Air pollution	Heavy trucks, construction equipment, and drill rigs emit diesel exhaust, oxides of nitrogen, and particulates; sand piles release silica dust; gas venting and flaring produce volatile organic compounds (benzene, 1,3-butadiene, and formaldehyde).	Exacerbation of asthma and COPD; increased risk of cardiovascular disease and diabetes; increased risk of prematurity and low birth weight; volatile organic compounds increase risk for leukemia and lymphoma
Noise pollution	Heavy equipment and gas flaring generate nearly continuous noise; sound levels can reach 70 A-weighted decibels, which exceeds EPA community guidelines.	Sleep disturbance; stress (associated with increased cardiovascular disease risk); cognitive deficits in children
Light pollution	High-intensity illumination and gas flaring generate bright light day and night	Sleep disturbance; stress
Radionuclide releases	Some shale formations contain naturally occurring radionuclides such as radon, principally in Pennsylvania and Texas.	Cancers, chiefly lung cancer
Earthquakes	Seismic activity is increased near fracking sites and up to 30 miles away.	Injuries; anxiety; loss of property value
Community disruption	Poor and minority communities are disproportionately exposed to noise, toxic chemicals, and explosion hazards.	Mental health problems; substance abuse; sexually transmitted diseases
<b>Regional hazards</b>		
Fires and explosions	Pipeline explosions occur every year in the United States and recently occurred in Armada Township, MI; Refugio, TX; Salem, PA; Watford City, ND; and Merrimack Valley, MA.	Injury; death
Air pollution from gas combustion	Gas combustion in stoves, boilers, and furnaces generates oxides of nitrogen.	Increased asthma risk; exacerbation of COPD and cardiovascular disease
<b>Global hazards</b>		
Contributions to climate change	Use of natural gas causes methane leakage and gas combustion generates carbon dioxide.	Heat waves; extreme weather events; droughts; floods; wildfires; expanded ranges of vectorborne diseases; compromised food supplies resulting in famine, migration, conflict, and mental distress

\* COPD denotes chronic obstructive pulmonary disease, and EPA Environmental Protection Agency. Sources of information are listed in the Supplementary Appendix, available at NEJM.org.

and aggravate chronic obstructive pulmonary disease.

Compounding these hazards are the grave dangers that gas extraction and use pose to the global climate.<sup>3</sup> Gas is a much more powerful driver of climate change than is generally recognized. As much as 4% of all gas produced by fracking is lost to

leakage, and these releases appear to have contributed to recent sharp increases in atmospheric methane.<sup>4</sup> Methane is a potent contributor to global warming, with a heat-trapping potential 30 times greater than that of carbon dioxide over a 100-year span and 85 times greater over a 20-year span. Gas burned in stoves and boilers ad-

ditionally contributes to global warming by generating carbon dioxide. Together, this evidence suggests that the purported advantage of gas over coal and oil has been greatly overstated.

Despite growing recognition of the dangers associated with gas and recent exponential increases in the production of electricity

from renewables, new gas wells continue to be drilled and new pipelines built. The U.S. Energy Information Administration projects that daily natural-gas production in the United States will increase by 10 billion cubic feet in the next year and that under current federal policy, more electricity will be generated from gas than from renewables each year from now through 2050.<sup>1</sup> This expansion of the gas infrastructure is supported by government subsidies and tax breaks that benefit the fossil-fuel industry and artificially depress gas prices. In 2016, federal subsidies for gas equaled \$32.6 billion, an amount 60 times greater than the \$533 million allocated to research and development related to solar energy.<sup>5</sup> State subsidies provide additional support for fossil fuels.

As physicians deeply concerned about climate change and pollution and their consequences, we consider expansion of the natural-gas infrastructure to be a grave hazard to human health. All reasonable analyses indicate that we must leave nearly all remaining fossil fuels in the ground if we are to hold the extent of global warming below 1.5°C, the target set by the Intergovernmental Panel on Climate Change, and thus mitigate the health and environmental consequences of climate change.

A further argument against investment in gas is that it is economically reckless. Such investment ignores the reality that the cost of producing electricity from renewables is falling rapidly and that energy prices are approaching a “tipping point” after which it will become cheaper to generate electricity from solar and wind sources than from gas. The Energy Information Administration

estimates that by 2023 it will cost \$36.60 per megawatt-hour to produce electricity from wind and \$37.60 to produce solar energy, versus \$40.20 to produce energy from gas. Any investment in gas is thus at risk of failing to yield an economic return and becoming a stranded asset. This risk could increase if federal subsidies for gas were to be cut.

We believe that investment in gas is also shortsighted. States that provide subsidies for gas and permit construction of new pipelines and compressor stations will lock in dependence on gas for years to come while missing opportunities to invest in renewables. The real problem with fracking, then, is that it perpetuates the carbon-based energy system and delays the transition to a carbon-free economy.

To address this problem, we recommend that state and federal subsidies for natural gas be reduced over the next 2 years and then eliminated. The International Monetary Fund has made similar recommendations. We also recommend that new residential or commercial gas hookups not be permitted, new gas appliances be removed from the market, further gas exploration on federal lands be banned, and all new or planned construction of gas infrastructure be halted. We believe an ill-conceived proposal announced recently by the Environmental Protection Agency to roll back limits on methane pollution needs to be blocked. At the same time, we call for the creation of new tax structures, subsidies, and incentives such as carbon pricing that favor wind, solar power, and other nonpolluting, renewable energy sources and policies that support energy conservation, clean vehi-

cles, and expansion of public transit.

Implementation of these recommendations will require courageous political leadership and face fierce resistance. But wide-scale transition to renewables would yield enormous benefit for the United States. It would reduce air pollution and therefore prevent disease, extend life expectancy, and reduce health care costs. It would free up the billions of public dollars now spent on fossil-fuel subsidies, and it would protect our planet.

Models exist for effective climate action. In July 2019, New York State enacted comprehensive energy and climate legislation and pledged to reduce greenhouse-gas emissions by 85% by 2050. To meet this target, New York is developing the country's largest wind farm and collaborating with Ireland and Denmark to improve its electric power grid. It has also created economic incentives for clean vehicles, including trucks and buses, and tax incentives for energy conservation. Idaho Power, the largest utility in a deeply conservative state, has pledged to produce 100% of its electricity from renewable sources by 2045. The United Kingdom has committed to net zero carbon emissions by 2050. New York, Idaho, and the United Kingdom are creating new, high-paying jobs in the wind and solar energy industries.

Natural gas has been portrayed as a bridge to the future. The data now show that it is only a tether to the past. We believe it's time to reject the false promise of gas.

Disclosure forms provided by the authors are available at NEJM.org.

From the Program in Global Public Health and the Common Good and the Global Ob-

servatory on Pollution and Health, Boston College, Chestnut Hill (P.J.L.) and Lundberg Health Advocates, Newton (B.E.L.) — both in Massachusetts; and the Wellcome Trust, London (H.F.).

This article was published on December 4, 2019, at NEJM.org.

1. Energy Information Administration. Annual energy outlook 2019: with projections to 2050. Washington, DC: Department of

Energy, January 2019 (<https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf>).

2. Saunders BJ, McCoy D, Goldstein R, Saunders AT, Munroe A. A review of the public health impacts of unconventional natural gas development. *Environ Geochem Health* 2018;40:1-57.

3. Intergovernmental Panel on Climate Change (IPCC). Global warming of 1.5°C: an IPCC special report. Geneva: World Meteorological Organization, 2018 (<https://www.ipcc.ch/sr15/>).

4. Howarth RW. Is shale gas a major driver of recent increase in global atmospheric methane? *Biogeosciences* 2019;16:3033-46.

5. Energy Information Administration. Direct federal financial interventions and subsidies in energy in fiscal year 2016. Washington, DC: Department of Energy, April 2018 (<https://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>).

DOI: 10.1056/NEJMp1913663

Copyright © 2019 Massachusetts Medical Society.

Hello, my name is Dr Margie Chen. I represent a consortium of doctors from Physicians for Social Responsibility and Ca Climate Health Now, because Climate change is a Health Emergency. I would like to address the often overlooked issue of indoor air pollution. All electric new construction would immediately improve indoor air quality for SF residents. On average, Californians spend 68% of their time inside their residence, making indoor air quality a key determinant of human health.

The combustion of gas inside our homes produces harmful indoor air pollution, specifically nitrogen ~~oxide~~, carbon monoxide, nitric oxide, formaldehyde, acetaldehyde, and ultra fine particles. These odorless and undetectable gas combustion pollutants can cause respiratory distress and other serious conditions, including death.

All electric new construction will also be key to mitigating outdoor air pollution in San Francisco. Hazardous air pollution is ~~A~~ particularly acute issue for low-income families and communities who are exposed to higher levels of particulate matter (PM 2.5) and other toxic pollutants.

While most think of cars, trucks, power plants and industry as the major culprits of outdoor air pollution, buildings are a major source of air pollution, particularly in the winter months from gas heating. Gas appliances produce nearly seven times more nitrogen oxide emissions than all of California's gas power plants.

As physicians deeply concerned about climate change, air pollution and their health consequences, all electric new construction will address a significant contributor of air pollution that is gravely affecting our health now. We urge you to vote Yes on all electric new construction. *and to be "electric ready"*

Testimony to Land Use and Transportation Committee of SF Board of Supervisors  
File # 190974

December 9, 2019

Submitted by Robin Cooper, MD

Co-Founder, Climate Psychiatry Alliance

Member, California Climate Health Now

Assistant Professor of Medicine, University of California, San Francisco

I come before you today as a physician and psychiatrist in San Francisco and as a member of several climate and health groups and coalitions. I wear my white coat, the symbol of being a physician, today with intent to visually demonstrate the intertwined and inseparable connection between the climate crisis and the health care emergency we now face. As a physician, I see the suffering of climate change up close; my patients are suffering. We are in a public health emergency because of the persistent dependency of fossil fuels.

As physicians we take an oath to not only treat illnesses and but to make efforts to prevent illness and suffering. So as we approach global warming, the biggest threat to public health of our generation, we must take every opportunity to reduce greenhouse gas emissions and curtail and stop the use of fossil fuels, the root underlying cause of global warming.

Today we are discussing only one component of the contribution to greenhouse gas emissions; the impact of natural gas on building stock

Since methane and natural gas are major contributors to global warming and natural gas use in our current building stock has a significant contribution to emissions, (In 2017, buildings accounted for 44% of citywide GHG emissions, with over 80% of building emissions coming from the use of natural gas) banning natural gas in buildings is one powerful way to improve and protect public health. These are pro-preventive health actions.

In support of greater understanding of broad impacts of methane extraction and natural gas use on public health, I am submitting a newly published paper in the prestigious New England Journal of Medicine authored by highly regarded public health leaders. (<https://www.nejm.org/doi/full/10.1056/NEJMp1913663>)

I call your attention to the chart outlining the range of negative health impacts specifically of fracking. Since fracking is the source of natural gas, this is highly relevant to the discussion of today. By reducing demand for natural gas, decarbonization of buildings can have an important role in improving health outcomes.

Despite this current code modification not being a perfect or far reaching enough code adjustment, it must pass as a step toward decarbonization. **Additional more stringent efforts to drive all electric construction, including an electric readiness requirement, should precede an eventual ban of natural gas.** These are needed to achieve the emissions reductions that will keep us safer and meet target goals.

For the sake of my patients, for the sake of your health, for the sake of our public health, pass this code adjustment and then rapidly move to greater efforts toward decarbonization of buildings.

## Major, Erica (BOS)

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**From:** Dave Rhody <dave@rhodyco.com>  
**Sent:** Friday, December 06, 2019 12:18 PM  
**To:** Major, Erica (BOS)  
**Subject:** 12/9/19 Land Use Meeting / Item #190974

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

Ms. Major -

Please convey the following message to Land Use & Transportation Committee members, Peskin, Ahsha Safai, and Matt Haney:

- Re: Agenda Item #190974 — It is imperative that San Francisco's new Green Building code include 'energy performance requirements' that all new buildings are 100% electric and eco-friendly. Without our commitment to clean, sustainable energy we will not solve the climate crisis. The most recent report from the COP25 in Madrid clearly states that we must diminish GHG emissions by 17% per year over the next decade or we will reach, as UN Secretary General Antonio Guterres said, 'a point of no return.'

Thank you,

Dave Rhody,  
Bay Area Climate Reality Leader  
San Francisco

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## Major, Erica (BOS)

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**From:** Kristin Tieche <kristin@selvavision.com>  
**Sent:** Saturday, December 07, 2019 9:21 AM  
**To:** Major, Erica (BOS)  
**Subject:** File #190974

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

I support Supervisor Mandleman's legislation amendment to incentivize all-electric buildings. Every new, non-electric building adds to our climate, equity, and public health problems, so I urge that the Board of Supervisors pass a natural gas ban in new construction as soon as possible.

Thank you!  
Kristin Tieche  
94117

--  
Kristin Tieche - Executive Producer & Creative Director <http://selvavision.com>  
t: 323.243.1585



## Major, Erica (BOS)

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**From:** Robin Cooper <robincooper50@gmail.com>  
**Sent:** Friday, December 06, 2019 4:30 PM  
**To:** Major, Erica (BOS)  
**Subject:** Testimony on File #190974 for Land Use and Transportation Committee  
**Attachments:** Testimony Land Use Com on Decarb Bldg 12-2019.docx; The False Promise of Natural Gas NEJM.webloc

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

### Testimony to Land Use and Transportation Committee of SF Board of Supervisors

File # 190974

December 9, 2019

Submitted by Robin Cooper, MD

Co-Founder, Climate Psychiatry Alliance

Member, California Climate Health Now

Assistant Professor of Medicine, University of California, San Francisco

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As physicians we take an oath to not only treat illnesses and but to make efforts to prevent illness and suffering. So as we approach global warming, the biggest threat to public health of our generation, we must take every opportunity to reduce greenhouse gas emissions and curtail and stop the use of fossil fuels, the root underlying cause of global warming.

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For the sake of my patients, for the sake of your health, for the sake of our public health, pass this code adjustment and then rapidly move to greater efforts toward decarbonization of buildings.

This is also attached full plus the Supporting journal article for submission.

Thank you,  
Robin Cooper, MD

190974

**From:** Aaron Goodman <amgodman@yahoo.com>  
**Sent:** Monday, October 21, 2019 10:03 AM  
**To:** Major, Erica (BOS); Peskin, Aaron (BOS); Haney, Matt (BOS); Safai, Ahsha (BOS); Board of Supervisors; (BOS)  
**Subject:** SFBOS Land-Use - Monday October 21st - Comment (A.GOODMAN) D11

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

**ATTN: SF BOS (Land-Use) Committee (cc: SFBOS)**

As I am unable to attend the mid-day meeting today, please accept this email as my public comment on the issues below. Will keep them brief as I can but you have a lot on the agenda today needing vetting.

**19054 - Jobs Housing Linkage**

**19089 - Jobs Housing Fit**

I support both items above, in determining the best strategy forward on the creation of affordable RENTAL housing for working communities and the need to determine how to build larger housing developments for 100% affordable units.

I would ask that you also consider in the two items the relation of mass transit and equity in relation to funding areas and districts since many areas seeing the largest developments in SF are also devoid of any serious transit projects that are shovel ready and supportive prior to the construction of mass housing developments.

**190971 - India Basin (Street Vacated)**

I would like to submit comments on the EQUITY concerns on lacking transit proposals to improve the T-Line and the linkage between numerous developments in D10. The Pier 70 / India Basin / Alice Griffith and Hunters View, BVHP, Candlestick areas all the way around to Sunnydale from Potrero require a more robust solution on public transit. Please look into this issue with the SFMTA and how they propose to amp up the mass-transit in D10 to equitably address mass transit needs and upcoming service issues during roadway construction at Cesar Chavez and Alemany on 101/280 already at serious congestion levels that impacts Bayshore, and the T-third. (I am in support of the India Basin project, but would like to see a more robust water-taxi, and trackless train system that loops around the BVHP and back up Geneva Harney to balboa park station to bring quickly new mass-transit solutions to these neighborhoods being developed.)

**190972 - Electrification of Municipal Facilities**

**190974 - Energy Performance in New Buildings**

I am in support of this proposal and would want to see more efforts on urban infrastructure and build out in addition to local property tax incentives to switch to solar. Costs are causing residential installers to balk at installations, especially smaller installs. Therefore it is critical to ensure smaller home-owners and businesses can switch to solar more readily.. On the energy efficiency issues LEED does not always take into account the issues of obsolescence and sound existing construction that should promote preservation and adaptive re-use. So key is to include measures that document the demolition of existing systems and buildings and their

replacement with new energy efficient systems. If we toss a recently installed roof for a new roof and solar, the carbon impacts must be addressed in the changes.

**191016 - Educator Housing**

Key is to determine the effects prior and loss of educator housing since 2001 (Purchase of Stonestown and portions of Parkmerced) that served as educator housing. SFSU-CSU was asked to consider staff/teacher housing at the UPS blocks. The SOTA switch downtown should be considered whether the site is for 100% future housing or an option to rebuild the school at its existing site and plan for the school SOTA to remain and the old educator building converted to shared housing co-op building downtown due to already overcongested streets in the Van Ness Market area. Which will be more dangerous for kids and teens if shifted in that area from the existing SOTA site. There is also the concerns about CCSF and teacher housing on Balboa Reservoir, and CCSF's future plans. All these sites MUST have new and adequate new transit serving the areas so please legislate to support more transit improvements in these areas.

**191018 - 770 Woolsley**

I am supportive of the landmarking in the hope to create a more adventurous solution with green-houses and landscaped courtyards for the future housing on this site. There is also the need for addressing overcrowded bus services on the 44 and 8/9 lines along with the 54 which serve the D10/D11 neighborhoods. Please look into the transit issues and equity for these proposals.

**191013- Mobility Permits**

**191033 - Office of Emerging Technology**

My concern is the lacking ADA compliance on many of these new technologies that service the seniors and disabled communities. Portland and Detroit have ADA bikes for bike-share, and currently with all the mobility push; we have yet to see it adequately addressed in the pods and systems being attached to bike racks and public infrastructure. These systems are parasitical and do not adequately address EQUITY in low cost options alone. Therefore a percentage should be done financially that re-invests in public mass-transit systems connections, loops and links in existing infrastructure.

**Thank you all for addressing these concerns in your discussion later today.**

Sincerely

Aaron Goodman D11  
amgodman@yahoo.com

Major, Erica (BOS)

190974

**From:** A Beck <almasoongi@gmail.com>  
**Sent:** Saturday, December 07, 2019 3:59 PM  
**To:** Major, Erica (BOS)  
**Cc:** Junior Claros  
**Subject:** Land Use Committee, Green Building Code Item 6

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

Dear Ms. Major,

Hello, we are a long-time residents of San Francisco, and we understand you're the person who is receiving public comments relating to the Green Building Code and Municipal Building proposals for the City and County Land Use and Transportation Committee on Monday, Dec. 9, 2019.

We are writing to urge the Committee to support any measures to eliminate natural gas from new and renovated buildings on the fastest timeline possible. The climate crisis is real, and according to the October 2018 IPCC (Intergovernmental Panel on Climate Change) report, as studied by dozens of scientists worldwide, the latest prediction is that we only have 8 1/2 years left to completely reverse the effects of global warming before temperature increases will literally be irreversible. Yes, the letter from various climate organizations say we have 11 years, but that was based on pre-2019 levels of emissions.... we exceeded predictions in 2019, and now current predictions are that we have only 8 1/2 years left. See [Greta Thunberg's speech at the 2019 U.N. Climate Summit.](#)

In any case, thank you and the Committee for your important leadership in this area. A decisive stance by the City and County of San Francisco that is practical and creates the proper economic incentives for new constructions and renovations will hopefully have an important and critical impact on the rest of California, the U.S., and hopefully around the world.

Very truly yours,  
Alma Soongi Beck  
Florence Claros  
7 Joost Avenue, #202  
San Francisco, CA 94131

190974

**From:** Barbara Jue <bjue@yahoo.com>  
**Sent:** Thursday, December 05, 2019 8:05 PM  
**To:** Major, Erica (BOS)  
**Subject:** File #190974

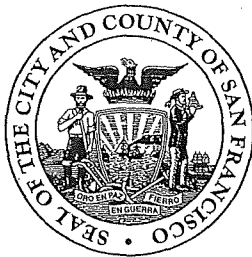
This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm a San Francisco resident and I'm writing to urge the Board of Supervisors to support the measure to ban natural gas in new construction within the City. This action would be aligned to the zero emissions goal that the Board is striving for and is in keeping with the Climate Emergency Resolution passed earlier this year. We know that natural gas is not as clean as the industry claims. Greater use of natural gas creates health issues, civic hazards, and harmful greenhouse gas emissions. Our City should not be exposed to these kinds of risks. The climate crisis is at a dire crossroad and massive action is required. Please work to get natural gas out of new construction and develop policies that alleviate any negative impacts to vulnerable communities.

Thank you for your attention.  
Barbara Jue  
81 Lansing Street, #411  
San Francisco 94105

Sent from my iPad

BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

## MEMORANDUM

TO: Tom Hui, Director, Department of Building Inspection  
Sonya Harris, Secretary, Building Inspection Commission

FROM: Erica Major, Assistant Clerk, Land Use and Transportation Committee

DATE: October 8, 2019

SUBJECT: LEGISLATION INTRODUCED

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The Board of Supervisors' Land Use and Transportation Committee has received the following proposed substitute legislation, introduced by Supervisor Mandelman on October 8, 2019:

**File No. 190974-2**

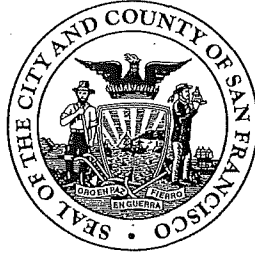
**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the Ordinance to state agencies as required by state law.**

The proposed ordinance is being transmitted pursuant to Charter, Section D3.750-5, for public hearing and recommendation. It is pending before the Land Use and Transportation Committee and will be scheduled for hearing upon receipt of your response.

Please forward me the Commission's recommendation and reports at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102 or by email at: [Erica.Major@sfgov.org](mailto:Erica.Major@sfgov.org).

cc: William Strawn, Department of Building Inspection  
Carolyn Jayin, Department of Building Inspection

BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
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TDD/TTY No. 554-5227

October 16, 2019

Planning Commission  
Attn: Jonas Ionin  
1650 Mission Street, Ste. 400  
San Francisco, CA 94103

Dear Commissioners:

On October 8, 2019, Supervisor Mandelman submitted the following proposed substitute legislation:

**File No. 190974-2**

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the Ordinance to state agencies as required by state law.**

The proposed ordinances are being transmitted pursuant to Planning Code, Section 302(b), for public hearing and recommendation. The ordinances are pending before the Land Use and Transportation Committee and will be scheduled for hearing upon receipt of your response.

Angela Calvillo, Clerk of the Board

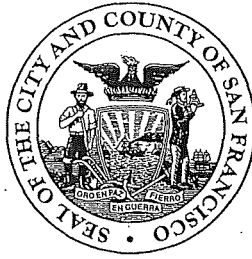
A handwritten signature in cursive script, appearing to read "Erica Major".

By: Erica Major, Assistant Clerk  
Land Use and Transportation Committee

- c: John Rahaim, Director
- Scott Sanchez, Acting Deputy Zoning Administrator
- Corey Teague, Zoning Administrator
- Lisa Gibson, Environmental Review Officer
- Devyani Jain, Deputy Environmental Review Officer
- AnMarie Rodgers, Director of Citywide Planning
- Dan Sider, Director of Executive Programs
- Aaron Starr, Manager of Legislative Affairs
- Joy Navarrete, Environmental Planning
- Don Lewis, Environmental Planning



BOARD of SUPERVISORS



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San Francisco 94102-4689  
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## MEMORANDUM

TO: Tom Hui, Director, Department of Building Inspection  
Sonya Harris, Secretary, Building Inspection Commission

FROM: Erica Major, Assistant Clerk, Land Use and Transportation Committee

DATE: October 2, 2019

SUBJECT: LEGISLATION INTRODUCED

---

The Board of Supervisors' Land Use and Transportation Committee has received the following legislation, introduced by Supervisor Mandelman on September 24, 2019:

**File No. 190974**

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the Ordinance to state agencies as required by state law.**

The proposed ordinance is being transmitted pursuant to Charter, Section D3.750-5, for public hearing and recommendation. It is pending before the Land Use and Transportation Committee and will be scheduled for hearing upon receipt of your response.

Please forward me the Commission's recommendation and reports at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102 or by email at: [Erica.Major@sfgov.org](mailto:Erica.Major@sfgov.org).

cc: William Strawn, Department of Building Inspection  
Carolyn Jayin, Department of Building Inspection

BOARD of SUPERVISORS



City Hall  
Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

October 2, 2019

File No. 190974

Lisa Gibson  
Environmental Review Officer  
Planning Department  
1650 Mission Street, Ste. 400  
San Francisco, CA 94103

Dear Ms. Gibson:

On September 24, 2019, Supervisor Mandelman submitted the proposed legislation:

**File No. 190974**

**Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the Ordinance to state agencies as required by state law.**

This legislation is being transmitted to you for environmental review.

Angela Calvillo, Clerk of the Board

A handwritten signature in cursive script, appearing to read "Erica Major".

By: Erica Major, Assistant Clerk  
Land Use and Transportation Committee

Attachment

c: Joy Navarrete, Environmental Planning  
Don Lewis, Environmental Planning

# Introduction Form

By a Member of the Board of Supervisors or Mayor

Time stamp  
or meeting date

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee. (An Ordinance, Resolution, Motion or Charter Amendment).
- 2. Request for next printed agenda Without Reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning : "Supervisor [ ] inquiries"
- 5. City Attorney Request.
- 6. Call File No. [ ] from Committee.
- 7. Budget Analyst request (attached written motion).
- 8. Substitute Legislation File No. [ 190974 ]
- 9. Reactivate File No. [ ]
- 10. Topic submitted for Mayoral Appearance before the BOS on [ ]

ease check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission
- Youth Commission
- Ethics Commission
- Planning Commission
- Building Inspection Commission

**Note: For the Imperative Agenda (a resolution not on the printed agenda), use the Imperative Form.**

Sponsor(s):


Supervisors Rafael Mandelman, Vallie Brown, Aaron Peskin

Subject:

Green Building Code - Energy Performance in Newly Constructed Buildings

The text is listed:

Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings, and findings of local conditions under the California Health and Safety Code and the California Public Resources Code; and directing the Clerk of the Board of Supervisors to forward the ordinance to state agencies as required by state law.

Signature of Sponsoring Supervisor: [  ]

r Clerk's Use Only

# Introduction Form

By a Member of the Board of Supervisors or Mayor

RECEIVED  
BOARD OF SUPERVISORS  
SAN FRANCISCO

2019 SEP 24 11:33 AM  
Time stamp  
or meeting date

BY JK

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee. (An Ordinance, Resolution, Motion or Charter Amendment).
- 2. Request for next printed agenda Without Reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning: "Supervisor [ ] inquiries"
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- 7. Budget Analyst request (attached written motion).
- 8. Substitute Legislation File No. [ ]
- 9. Reactivate File No. [ ]
- 10. Topic submitted for Mayoral Appearance before the BOS on [ ]

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission
- Youth Commission
- Ethics Commission
- Planning Commission
- Building Inspection Commission

**Note: For the Imperative Agenda (a resolution not on the printed agenda), use the Imperative Form.**

Sponsor(s):

Supervisor Rafael Mandelman

Subject:

Green Building Code - Energy Performance in Newly Constructed Buildings

The text is listed:

Ordinance amending the Green Building Code to establish energy performance requirements for certain new building construction; adopting environmental findings and findings of local conditions under the California Health and Safety Code; providing for an operative date of January 1, 2020; and directing the Clerk of the Board of Supervisors to forward the legislation to the California Building Standards Commission and the California Energy Resources and Conservation Department as required by State law.

Signature of Sponsoring Supervisor:

JK

For Clerk's Use Only