BOARD of SUPERVISORS

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M E M O R A N D U M

TO: Patrick O'Riordan, Director, Department of Building Inspection
Sonya Harris, Secretary, Building Inspection Commission

FROM: John Carroll, Assistant Clerk
Land Use and Transportation Committee

DATE: July 3, 2025

SUBJECT: LEGISLATION INTRODUCED

The Board of Supervisors' Land Use and Transportation Committee has received the following legislation, introduced by Supervisor Mandelman on Jun 24, 2025:

File No. 250702

Ordinance amending the Building Code to require buildings undergoing major renovations to remain or convert to All-Electric Buildings with exceptions for physical and technical infeasibility, commercial food establishments, non-residential-to-residential conversions, buildings with recent major system replacements, and 100% Affordable Housing; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.

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: john.carroll@sfgov.org.

c:
Offices of Chair Melgar and Supervisor Mandelman
Tate Hanna, Department of Building Inspection
Patty Lee, Department of Building Inspection

[Building Code - All-Electric Major Renovations]

Ordinance amending the Building Code to require buildings undergoing major renovations to remain or convert to All-Electric Buildings with exceptions for physical and technical infeasibility, commercial food establishments, non-residential-to-residential conversions, buildings with recent major system replacements, and 100% Affordable Housing; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.

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

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

Section 1. General Findings.

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

(b) On _____, the Building Inspection Commission considered this ordinance at a duly noticed public hearing pursuant to Charter Section 4.121 and Building

Code Section 104A.2.11.1.1. A copy of a letter from the Secretary of the Building Inspection Commission regarding the Commission's recommendation is on file with the Clerk of the Board of Supervisors in File No. _____.

Section 2. Findings Regarding Local Conditions.

(a) California Health and Safety Code Sections 17958.7 and 18941.5 provide that local jurisdictions may enact more restrictive building standards than those contained in the California Building Code, provided that the local jurisdictions make express findings that each change or modification is reasonably necessary because of local climate, geologic, or topographical conditions and that the local jurisdictions file the local amendments and required findings with the California Building Standards Commission before the local changes or modifications can go into effect.

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

(1) The topography of San Francisco creates increased risk of fire due to high density of buildings on very small and steep lots with high population density. It is necessary and appropriate to limit reliance on natural gas infrastructure and impose safety measures on any natural gas infrastructure that would otherwise increase acute and cumulative fire risk across the City.

(2) San Francisco's geologic and topographic conditions produce increased risk for earthquake-induced failure, which can lead to fires due to local hazardous seismic microzones, slide areas, and local liquefaction hazards. Natural gas infrastructure may rupture, fail, and/or explode due to earthquake-induced structural failure. After seismic events, natural gas infrastructure will take significantly longer to resume service compared to

electrical infrastructure. It is necessary, appropriate, and cost effective to reduce fire risk and increase resiliency by reducing natural gas infrastructure when conducting major renovations, requiring essential building systems be Electric Ready to function on electricity during natural gas service disruptions, and imposing safety requirements for any new or remaining natural gas infrastructure.

(3) San Francisco's climate and topography create wind patterns and periodic seasonal high temperatures that produce smog and ozone that exacerbate the respiratory ailments of residents. Natural gas combustion is a major source of indoor air pollution that further exacerbates the effects of regional pollution for the City's residents and can be particularly acute given the City's dense population and smaller dwelling units. Studies have shown children living in homes with natural gas stoves have a 42% higher risk of experiencing asthma symptoms, and those impacts may be exacerbated in a compact city such as San Francisco where low-income households are more likely to have more people living in smaller spaces with poor ventilation. It is reasonable and appropriate to reduce pollution exposure and resulting human health impacts by utilizing All-Electric construction for major renovations, and ensuring proper ventilation for any remaining or new natural gas infrastructure.

Section 3. Chapters 1A and 2 of the Building Code are hereby amended by adding Section 106A.1.17.3 to Section 106A, and revising Section 202, to read as follows:

SECTION 106A – PERMITS

* * * *

106A.1.17.3 All-Electric Major Renovations. *After January 1, 2026, the Building Official shall not accept permit applications to conduct Major Renovations, as defined in Section 202 of this Code, of*

Mixed-Fuel Buildings. Permit applications for Major Renovations submitted to the Department after that date may only be accepted for work that retains or results in All-Electric Buildings or Projects.

EXCEPTIONS: The Building Official may accept an application and issue a permit for Major Renovation of a Mixed-Fuel Building that qualifies for one of the five exceptions outlined below. Any permit qualifying for one of the exceptions shall be Electric-Ready and shall provide equivalent health, safety, and fire-protection to a design with no gas piping systems. The Department of Building Inspection, in consultation with the Environment Department, shall publish Design Guidelines and Review Procedures for Public Safety and Electric-Ready Construction to facilitate implementation of this requirement.

(1) Upon the Building Official's finding that converting to an All-Electric Building or Project is physically or technically infeasible and that a modification pursuant to Section 104A.2.7 is warranted. Financial considerations shall not play any role in determining physical or technical infeasibility. Modifications shall only be issued under this exception if the Building Official finds: (a) sufficient evidence was submitted to substantiate the infeasibility of an All-Electric Building or Project design; (b) the installation of natural gas piping systems, fixtures, and/or infrastructure is strictly limited to the system and area of the building for which an All-Electric Building or Project design is infeasible; and (c) the project's modified design provides health, safety, and fire-protection equivalent to that of an All-Electric Building or Project design; or

(2) The Building Official may issue a permit for Major Renovation of a Mixed-Fuel Building that includes an area specifically designated for occupancy by a commercial food service establishment (A-2 Occupancy) that is a Mixed-Fuel Building solely because it retains gas piping systems, fixtures, and/or infrastructure exclusively for cooking equipment within the designated commercial food service area; or

(3) Major Renovation projects that consist of a change of use from non-residential to residential use shall be exempt from this Section 106A.1.17.3 through January 1, 2031 and are not required to be Electric Ready. After January 1, 2031, this exception expires.

(4) The Building Official may issue a permit for Major Renovation involving a Substantial Upgrade to Mechanical Systems if the following conditions are met: (a) The project installs either space heating or water heating systems that will serve at least 80% of the total conditioned floor area of the building; and (b) The project retains for ongoing use an existing water heating or space heating system that serves at least 80% of the total conditioned floor area, provided the equipment was installed within the last five years and complies with all applicable codes and safety standards.

(5) 100% Affordable Housing, as defined in Administrative Code Section 109.1, shall be exempt from this Section 106A.1.17.3 until January 1, 2027. From January 1, 2027 to January 1, 2028, 100% Affordable Housing projects that demonstrate the cost of converting to All-Electric conflicts with the projects' ability to meet their housing goals are exempt. After January 1, 2028, this exception expires.

* * * *

SECTION 202 – DEFINITIONS

ALL-ELECTRIC BUILDING OR PROJECT. A building or project that uses a permanent supply of electricity as the source of energy for all space conditioning (including heating and cooling), water heating (including pools and spas), cooking appliances, and clothes drying appliances. An All-Electric Building or Project may not install natural gas or propane piping systems, fixtures, or infrastructure for those purposes in or in connection with the building, structure, or within property lines of the premises, extending from the point of delivery at the gas meter. *An All-Electric Building or Project may contain natural gas infrastructure dedicated solely to serve appliances covered by the Federal Energy Policy and Conservation Act (42 U.S.C. §§ 6201 et seq.), provided that the building complies with Design Guidelines and Review*

Procedures for Public Safety and Electric-Ready Construction published by the Department of Building Inspection.

* * * *

MAJOR RENOVATION. *An alteration or addition to an existing building that includes Substantial Upgrade to Mechanical Systems, and one or more of the following:*

(1) a Non-structural Alteration that is substantial pursuant to Section 503.11.1 of the San Francisco Existing Building Code;

(2) a Substantial Structural Alteration as defined by Section 202 of the San Francisco Existing Building Code;

(3) an addition that is a Substantial Improvement as defined by Section 202 of this Code.

MAJOR SYSTEM. *A space heating or water heating system serving 80% or more of total conditioned floor area of the building.*

MIXED-FUEL BUILDING. A building that uses natural gas or propane as fuel for space heating or cooling, exterior heating, decorative uses and lighting, water heating (including pools and spas), cooking appliances or clothes drying appliances, onsite generation of electricity (except where primarily fueled by onsite digestion of organic material), or contains fixtures, piping systems, or infrastructure for natural gas or propane equipment for such uses.

* * * *

SUBSTANTIAL UPGRADE TO MECHANICAL SYSTEMS. *An alteration or addition to an existing building where the proposed project either:*

(1) Replaces space heating and hot water heating system for the entire building; or

(2) Installs space heating or water heating systems that will serve 80% or more of the total conditioned floor area of the building; or

(3) Installs space conditioning or water heating systems serving the area of addition.

Section 4. Effective Date. This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

Section 5. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal Code that are explicitly shown in this ordinance as additions, deletions, Board amendment additions, and Board amendment deletions in accordance with the "Note" that appears under the official title of the ordinance.

Section 6. Severability. If any section, subsection, sentence, clause, or phrase of this ordinance, or any application thereof, is held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions or applications of the ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance, and each section, subsection, sentence, clause, or phrase of this ordinance, irrespective of whether any one or more sections, subsections, sentences, clauses, or phrases of the ordinance, or applications thereof, be declared invalid.

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Section 7. Directions to Clerk. Upon enactment of this ordinance, the Clerk of the Board of Supervisors is hereby directed to transmit this ordinance to the California Building Standards Commission pursuant to the applicable provisions of State law.

APPROVED AS TO FORM:
DAVID CHIU, City Attorney

By: /s/ Robb Kapla
ROBB KAPLA
Deputy City Attorney

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FILE NO. 250702

LEGISLATIVE DIGEST

[Building Code - All-Electric Major Renovations]

Ordinance amending the Building Code to require buildings undergoing major renovations to remain or convert to All-Electric Buildings with exceptions for physical and technical infeasibility, commercial food establishments, non-residential-to-residential conversions, buildings with recent major system replacements, and 100% Affordable Housing; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.

Existing Law

The Building Code prohibits the Department of Building Inspection (DBI) from issuing building permits for construction of new mixed-fuel buildings, with certain exceptions for installation of cooking equipment in restaurants, or where all-electric design is physically or technically infeasible. The Building Code allows DBI to issue building permits for renovations of existing mixed-fuel buildings, but does not allow existing all-electric buildings to be converted to mixed-fuel buildings. The Building Code does not include a definition of major renovations.

Amendments to Current Law

The Proposed Legislation would define major renovations as substantial upgrades to a building's mechanical systems along with one or more "substantial improvements or upgrades" to the building as defined in the Existing Building Code. The Proposed Legislation would prohibit DBI from accepting or processing permits for major renovations of mixed-fuel buildings that are submitted after January 1, 2026. Applications submitted after that date for major renovations must result in (or retain) all-electric buildings. The Proposed Legislation amends the definition of all-electric buildings to include buildings that contain natural gas infrastructure solely dedicated to serve appliances covered by the Federal Energy Policy and Conservation Act (42 U.S.C. §§ 6201 et seq., "EPCA") and that comply with DBI's Design Guidelines for Electric-Ready Buildings. Those buildings would be considered all-electric and able to proceed with major renovations after enactment of the legislation.

The ordinance includes five exceptions that allow processing and issuing of permits for major renovations of mixed-fuel buildings: (1) where all-electric design is technically or physically infeasible; (2) to serve a restaurant; (3) conversion of non-residential use to residential use until the year 2031; (4) the building replaced or upgraded a major system fueled by natural gas within the last five years; and (5) buildings that provide 100% affordable housing shall not be subject to the full provisions of the legislation until 2031.

Background Information

Natural gas combustion, infrastructure, and transport create significant health, safety, and environmental risks for San Francisco. The City's unique topography, high population density, stock of older wooden structures, seismic activity, and wind patterns make the City vulnerable to fast spreading fires triggered or strengthened by gas leaks and explosions. Further, natural gas service takes significantly longer to resume after major disruptions than electrical service. Indoor use of natural gas is also a significant contributor to indoor air pollution, the health impacts of which are exacerbated in denser developments with smaller dwelling units that make up a significant portion of the City's housing stock. For these reasons, the City prohibited construction of new mixed-fuel buildings in 2021.

Major renovations, as defined in the proposed legislation, are tantamount to new construction. When conducting major renovations, it is more cost-effective and safer to utilize all-electric design to meet the building's energy needs than installing both gas and electrical infrastructure.

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Introduction Form

(by a Member of the Board of Supervisors or the Mayor)

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

- [x] 1. For reference to Committee (Ordinance, Resolution, Motion or Charter Amendment)
- [ ] 2. Request for next printed agenda (For Adoption Without Committee Reference)
  (Routine, non-controversial and/or commendatory matters only)
- [ ] 3. Request for Hearing on a subject matter at Committee
- [ ] 4. Request for Letter beginning with "Supervisor _____ inquires..."
- [ ] 5. City Attorney Request
- [ ] 6. Call File No. _____ from Committee.
- [ ] 7. Budget and Legislative Analyst Request (attached written Motion)
- [ ] 8. Substitute Legislation File No. _____
- [ ] 9. Reactivate File No. _____
- [ ] 10. Topic submitted for Mayoral Appearance before the Board on _____

The proposed legislation should be forwarded to the following (please check all appropriate boxes):

☐ Small Business Commission ☐ Youth Commission ☐ Ethics Commission

☐ Planning Commission ■ Building Inspection Commission ☐ Human Resources Department

General Plan Referral sent to the Planning Department (proposed legislation subject to Charter 4.105 & Admin 2A.53):

☐ Yes ■ No

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

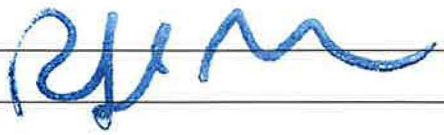
Sponsor(s):

Mandelman; Mahmood, Fielder, Melgar

Subject:

[Building Code - All-Electric Major Renovations]

Long Title or text listed:

Ordinance amending the Building Code to require buildings undergoing major renovations to remain or convert to All-Electric Buildings with exceptions for physical and technical infeasibility, commercial food establishments, non-residential-to-residential conversions, buildings with recent major system replacements, and 100% Affordable Housing; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this ordinance to the California Building Standards Commission upon final passage.

Signature of Sponsoring Supervisor: