



Kate Harrison
Councilmember District 4

RECEIVED AT
COUNCIL MEETING OF:

JUL 16 2019

OFFICE OF THE CITY CLERK
CITY OF BERKELEY

SUPPLEMENTAL AGENDA MATERIAL

Meeting Date: July 16th, 2019

Item Number: C

Item Description: Adopt an Ordinance adding a new Chapter 12.80 to the Berkeley Municipal Code Prohibiting Natural Gas Infrastructure in New Buildings

Supplemental/Revision Submitted By: Councilmember Harrison

“Good of the City” Analysis:

The analysis below must demonstrate how accepting this supplement/revision is for the “good of the City” and outweighs the lack of time for citizen review or evaluation by the Council.

Incorporates comments made by Planning staff and the City Attorney.

Consideration of supplemental or revised agenda material is subject to approval by a two-thirds vote of the City Council. (BMC 2.06.070)

A minimum of **42 copies** must be submitted to the City Clerk for distribution at the Council meeting. This completed cover page must accompany every copy.

Copies of the supplemental/revised agenda material may be delivered to the City Clerk Department by 12:00 p.m. the day of the meeting. Copies that are ready after 12:00 p.m. must be delivered directly to the City Clerk at Council Chambers prior to the start of the meeting.

Supplements or Revisions submitted pursuant to BMC § 2.06.070 may only be revisions of the original report included in the Agenda Packet.

ORDINANCE NO. --N.S.

ADDING A NEW CHAPTER 12.80 TO THE BERKELEY MUNICIPAL CODE PROHIBITING
NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS EFFECTIVE JANUARY 1, 2020

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Chapter 12.80 of the Berkeley Municipal Code is added to read as follows:

Chapter 12.80

PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS

Sections:

12.80.010 Findings and Purpose.

12.80.020 Applicability.

12.80.030 Definitions.

12.80.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

~~12.80.050 Exception.~~

12.80.0560 Public Interest Exemption.

12.80.0670 Annual Periodic Review of the Ordinance.

12.80.0780 Severability.

12.80.0890 Effective Date.

12.80.010 Findings and Purpose.

In addition to the findings set forth in Resolution No. 67,736-N.S., the Council finds and expressly declares as follows:

- A. Scientific evidence has established that natural gas combustion, procurement and transportation produce significant greenhouse gas emissions that contribute to global warming and climate change.
- B. The following addition to the Berkeley Municipal Code is reasonably necessary because of local climatic, geologic and ~~health and safety~~ topographical conditions as listed below:
 - (1) As a coastal city located on the San Francisco Bay, Berkeley is vulnerable to sea level rise, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, which contribute to melting of glaciers and thermal expansion of ocean water—~~resulting in rising sea levels.~~
 - (2) Berkeley is already experiencing the repercussions of excessive greenhouse gas emissions as rising sea levels threaten the City's shoreline and infrastructure, have caused significant erosion, have increased impacts to infrastructure during extreme tides, and have caused the City to expend funds to modify the sewer system.
 - (3) Berkeley is situated along a wildland-urban interface and is extremely vulnerable to wildfires and firestorms, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, drought conditions, vegetative fuel, and length of fire seasons—~~all of which contribute to the likelihood and consequences of fire.~~
 - (4) Structures in Berkeley's natural gas building infrastructure, a potentially significant source of fire during earthquakes and other fire events, is precariously situated ~~are located~~ along or near the Hayward fault, which is likely to produce a large earthquake in the Bay Area.
 - ~~(5) Some subpopulations of Berkeley residents are especially vulnerable to heat events.~~
 - ~~(6) Berkeley residents suffer from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of natural gas.~~
- C. The following addition to the Berkeley Municipal Code is also reasonably necessary because of health and safety concerns as Berkeley residents suffer from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of natural gas.
- ~~C.D.~~ The people of Berkeley, as codified through Measure G (Resolution No. 63,518-N.S.), the City of Berkeley Climate Action Plan (Resolution No. 64,480-N.S.), and Berkeley Climate Emergency Declaration (Resolution No. 68,486-N.S.) all recognize that rapid, far-reaching and unprecedented changes in all aspects of society are required to limit global warming and the resulting environmental threat posed by climate change, including the prompt phasing out of natural gas as a fuel for heating and cooling infrastructure in new buildings.
- ~~D.E.~~ Substitute electric heating and cooling infrastructure in new buildings fueled by less greenhouse gas intensive electricity is linked to significantly lower greenhouse gas emissions and is cost competitive because of the cost savings associated with all-electric designs that avoid new gas infrastructure.
- ~~E.F.~~ All-electric building design benefits the health, welfare, and resiliency of Berkeley and its residents.
- ~~F.G.~~ The most cost-effective time to integrate electrical infrastructure is in the design phase of a building project because building systems and spaces can be designed to optimize the performance of electrical systems and the project can take full advantage of avoided costs and space requirements from the elimination of natural gas piping and venting for combustion air safety.

Formatted: Font: 11 pt

Formatted: Font: 11 pt

G.H. It is the intent of the council to eliminate obsolete natural gas infrastructure and associated greenhouse gas emissions in new buildings where all-electric infrastructure can be most practicably integrated, thereby reducing the environmental and health hazards produced by the consumption and transportation of natural gas.

12.80.020 Applicability.

- A. The requirements of this Chapter shall apply to the entitlement of or the processing of Use Permit or Zoning Certificate applications submitted on or after the effective date of this Chapter development applications for all Newly Constructed Buildings proposed to be located in whole or in part within the City.
- B. The requirements of this Chapter shall not apply to the use of portable propane appliances for outdoor cooking and heating.
- C. This chapter shall in no way be construed as amending California Energy Code requirements under California Code of Regulations, Title 24, Part 6 or Part 1, nor as requiring the use or installation of any specific appliance or system as a condition of approval.
- D. The requirements of this Chapter shall be incorporated into conditions of approval for applications for Use Permits or Zoning Certificates under BMC Chapter 23.B.

12.80.030 Definitions.

- ~~“Accessory Dwelling Unit” shall have the same meaning as specified in Section 65852.2 of the Government Code Section 23F.04.010.~~
- A. “Applicant” shall mean an applicant for a Use Permit or Zoning Certification under Title Chapter 23B.
- A.B. “Energy Code” shall mean the California Energy Code as amended and adopted in BMC Chapter 19.36.
- B.C. “Greenhouse Gas Emissions” mean gases that trap heat in the atmosphere.
- C.D. “Natural Gas” shall have the same meaning as “Fuel Gas” as defined in California Plumbing Code and Mechanical Code.
- D.E. “Natural Gas Infrastructure” shall be defined as fuel gas piping, other than service pipe, in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter as specified in the California Mechanical Code and Plumbing Code.
- E.F. “Newly Constructed Building” shall be defined as a building with a valid Use Permit or Zoning Certificate application approved on or after the effective date of this Chapter that has never before been used or occupied for any purpose and has submitted with a Use Permit or Zoning Certificate application submitted on or after the effective date of this Chapter.
- F.G. “Use Permit” shall have the same meaning as specified in Chapter 23B.32.
- G.H. “Zoning Certificate” shall have the same meaning as specified in Chapter 23B.1223B.20.

12.80.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

- A. Natural Gas Infrastructure shall be prohibited in Newly Constructed Buildings.
 - 1. ~~Exception: Notwithstanding BMC 12.80.040.A, Natural Gas Infrastructure may be permitted in a Newly Constructed Building if the applicant for a Use Permit or Zoning Certificate Applicant required to construct the building establishes that it is not physically feasible to construct the building without Natural Gas Infrastructure.~~
For purposes of this section exception, “physically feasible” to construct the building” means either an all-electric prescriptive compliance approach is available for the

Formatted: Font: 11 pt

building under ~~BMC Chapter 19.36~~ the California Energy Code, or that the building is able to achieve the performance compliance standards under the Energy Code for newly constructed buildings under ~~BMC Chapter 19.36~~ using commercially available technology and an approved calculation method.

Formatted: Font: 11 pt

- B. ~~To the extent that Natural Gas Infrastructure is permitted, Natural Gas Infrastructure~~ it shall ~~not be permitted to~~ extended to any system, ~~or device, or appliance~~ within a building for which an equivalent all-electric system or design is not available.
- C. ~~To the extent that a public interest exemption and installation of Natural Gas Infrastructure is granted, Newly Constructed Buildings shall nonetheless be required at a minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.~~
- D. The requirements of this section shall be deemed objective planning standards under Government Code section 65913.4 and objective development standards under Government Code section 65589.5.

12.80.060 Exception for Attached Accessory Dwelling Units.

~~The requirements of this Chapter shall not apply to attached Accessory Dwelling Units.~~

12.80.060 Public Interest Exemption.

A. ~~Notwithstanding the requirements of this Chapter and the Greenhouse Gas Emissions and other public health and safety hazards associated with Natural Gas Infrastructure, minimally necessary and specifically tailored Natural Gas Infrastructure may be allowed in a Newly Constructed Building provided that the entity responsible for entitling the project~~ entitling body establishes that the use serves the public interest. In determining whether the construction of Natural Gas Infrastructure is in the public interest, the City may consider:

1. The availability of alternative technologies or systems that do not use natural gas;
2. Any other impacts that the decision to allow Natural Gas Infrastructure may have on the health, safety, or welfare of the public.

~~B. To the extent that stand-alone delivery systems are available, the exemption shall require that the entity responsible for entitling the project consider whether a stand-alone delivery system is physically feasible before granting an exemption.~~

~~C. B. If the~~ To the extent that a public interest exemption and installation of Natural Gas Infrastructure is granted under a public interest exemption, the Newly Constructed Buildings shall nonetheless be required at the minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.

12.80.0670 Periodic Annual Review of Ordinance.

The City shall review annually the requirements of this ordinance every 18 months for ongoing consistency with the California Energy Commission regulations under Title 24, Part 6 Code and the Energy Commission's mid-cycle amendments and triennial code adoption cycle as applicable.

12.80.0780 Severability.

If any word, phrase, sentence, part, section, subsection, or other portion of this Chapter, or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Chapter, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City Council hereby declares that it would have passed this title, and each section, subsection, sentence, clause and phrase of this Chapter,

irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases is declared invalid or unconstitutional.

12.80.0890 Effective dateDate.

The provisions of this chapter shall become effective on January 1, 2020.

Section 2. This Ordinance shall be submitted to the California Building Standards Commission following adoption as consistent with state law.

Section 3. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

ORDINANCE NO. –N.S.

ADDING A NEW CHAPTER 12.80 TO THE BERKELEY MUNICIPAL CODE PROHIBITING
NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS EFFECTIVE JANUARY 1, 2020

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Chapter 12.80 of the Berkeley Municipal Code is added to read as follows:

Chapter 12.80

PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS

Sections:

12.80.010 Findings and Purpose.

12.80.020 Applicability.

12.80.030 Definitions.

12.80.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

12.80.050 Public Interest Exemption.

12.80.060 Periodic Review of the Ordinance.

12.80.070 Severability.

12.80.080 Effective Date.

12.80.010 Findings and Purpose.

In addition to the findings set forth in Resolution No. 67,736-N.S., the Council finds and expressly declares as follows:

- A. Scientific evidence has established that natural gas combustion, procurement and transportation produce significant greenhouse gas emissions that contribute to global warming and climate change.
- B. The following addition to the Berkeley Municipal Code is reasonably necessary because of local climatic, geologic and topographical conditions as listed below:
 - (1) As a coastal city located on the San Francisco Bay, Berkeley is vulnerable to sea level rise, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, which contribute to melting of glaciers and thermal expansion of ocean water—resulting in rising sea levels.
 - (2) Berkeley is already experiencing the repercussions of excessive greenhouse gas emissions as rising sea levels threaten the City's shoreline and infrastructure, have caused significant erosion, have increased impacts to infrastructure during extreme tides, and have caused the City to expend funds to modify the sewer system.
 - (3) Berkeley is situated along a wildland-urban interface and is extremely vulnerable to wildfires and firestorms, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, drought conditions, vegetative fuel, and length of fire seasons.
 - (4) Structures in Berkeley are located along or near the Hayward fault, which is likely to produce a large earthquake in the Bay Area.
- C. The following addition to the Berkeley Municipal Code is also reasonably necessary because of health and safety concerns as Berkeley residents suffer from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of natural gas.
- D. The people of Berkeley, as codified through Measure G (Resolution No. 63,518-N.S.), the City of Berkeley Climate Action Plan (Resolution No. 64,480-N.S.), and Berkeley Climate Emergency Declaration (Resolution No. 68,486-N.S.) all recognize that rapid, far-reaching and unprecedented changes in all aspects of society are required to limit global warming and the resulting environmental threat posed by climate change, including the prompt phasing out of natural gas as a fuel for heating and cooling infrastructure in new buildings.
- E. Substitute electric heating and cooling infrastructure in new buildings fueled by less greenhouse gas intensive electricity is linked to significantly lower greenhouse gas emissions and is cost competitive because of the cost savings associated with all-electric designs that avoid new gas infrastructure.
- F. All-electric building design benefits the health, welfare, and resiliency of Berkeley and its residents.
- G. The most cost-effective time to integrate electrical infrastructure is in the design phase of a building project because building systems and spaces can be designed to optimize the performance of electrical systems and the project can take full advantage of avoided costs and space requirements from the elimination of natural gas piping and venting for combustion air safety.
- H. It is the intent of the council to eliminate obsolete natural gas infrastructure and associated greenhouse gas emissions in new buildings where all-electric infrastructure can be most practicably integrated, thereby reducing the environmental and health hazards produced by the consumption and transportation of natural gas.

12.80.020 Applicability.

- A. The requirements of this Chapter shall apply to Use Permit or Zoning Certificate applications submitted on or after the effective date of this Chapter for all Newly Constructed Buildings proposed to be located in whole or in part within the City.
- B. The requirements of this Chapter shall not apply to the use of portable propane appliances for outdoor cooking and heating.
- C. This chapter shall in no way be construed as amending California Energy Code requirements under California Code of Regulations, Title 24, Part 6, nor as requiring the use or installation of any specific appliance or system as a condition of approval.
- D. The requirements of this Chapter shall be incorporated into conditions of approval for Use Permits or Zoning Certificates under BMC Chapter 23.B.

12.80.030 Definitions.

- A. "Applicant" shall mean an applicant for a Use Permit or Zoning Certification under Chapter 23B,
- B. "Energy Code" shall mean the California Energy Code as amended and adopted in BMC Chapter 19.36.
- C. "Greenhouse Gas Emissions" mean gases that trap heat in the atmosphere.
- D. "Natural Gas" shall have the same meaning as "Fuel Gas" as defined in California Plumbing Code and Mechanical Code.
- E. "Natural Gas Infrastructure" shall be defined as fuel gas piping, other than service pipe, in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter as specified in the California Mechanical Code and Plumbing Code.
- F. "Newly Constructed Building" shall be defined as a building that has never before been used or occupied for any purpose.
- G. "Use Permit" shall have the same meaning as specified in Chapter 23B.32.
- H. "Zoning Certificate" shall have the same meaning as specified in Chapter 23B.20.

12.80.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

- A. Natural Gas Infrastructure shall be prohibited in Newly Constructed Buildings.
 - 1. Exception: Natural Gas Infrastructure may be permitted in a Newly Constructed Building if the Applicant establishes that it is not physically feasible to construct the building without Natural Gas Infrastructure. For purposes of this exception, "physically feasible" to construct the building means either an all-electric prescriptive compliance approach is available for the building under the Energy Code or the building is able to achieve the performance compliance standards under the Energy Code using commercially available technology and an approved calculation method.
- B. To the extent that Natural Gas Infrastructure is permitted, it shall be permitted to extend to any system, device, or appliance within a building for which an equivalent all-electric system or design is not available.
- C. Newly Constructed Buildings shall nonetheless be required at a minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.
- D. The requirements of this section shall be deemed objective planning standards under Government Code section 65913.4 and objective development standards under Government Code section 65589.5.

12.80.050 Public Interest Exemption.

- A. Notwithstanding the requirements of this Chapter and the Greenhouse Gas Emissions and other public health and safety hazards associated with Natural Gas Infrastructure, minimally necessary and specifically tailored Natural Gas Infrastructure may be allowed in a Newly Constructed Building provided that the entitling body establishes that the use serves the

public interest. In determining whether the construction of Natural Gas Infrastructure is in the public interest, the City may consider:

1. The availability of alternative technologies or systems that do not use natural gas;
 2. Any other impacts that the decision to allow Natural Gas Infrastructure may have on the health, safety, or welfare of the public.
- B. If the installation of Natural Gas Infrastructure is granted under a public interest exemption, the Newly Constructed Buildings shall nonetheless be required at the minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.

12.80.060 Periodic Review of Ordinance.

The City shall review the requirements of this ordinance every 18 months for consistency with the California Energy Code and the Energy Commission's mid-cycle amendments and triennial code adoption cycle as applicable.

12.80.070 Severability.

If any word, phrase, sentence, part, section, subsection, or other portion of this Chapter, or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Chapter, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City Council hereby declares that it would have passed this title, and each section, subsection, sentence, clause and phrase of this Chapter, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases is declared invalid or unconstitutional.

12.80.080 Effective Date.

The provisions of this chapter shall become effective on January 1, 2020.

Section 2. This Ordinance shall be submitted to the California Building Standards Commission following adoption as consistent with state law.

Section 3. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.