

EFFECTIVE DATE  
OF ORDINANCE  
  
Month Day, Year

ORDINANCE NO. \_\_\_\_ N.C.S.

Introduced by: \_\_\_\_ Seconded by: \_\_\_\_

**ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PETALUMA AMENDING THE PETALUMA MUNICIPAL CODE TO ADD A NEW CHAPTER 17.09 ENTITLED "ALL-ELECTRIC CONSTRUCTION IN NEWLY CONSTRUCTED BUILDINGS" TO TITLE 17 ENTITLED "BUILDING AND CONSTRUCTION" AND AMENDING MUNICIPAL CODE SECTION 17.04.010(J) TO REMOVE THE 2019 CALIFORNIA GREEN BUILDING STANDARDS TIER 1 INCENTIVE FOR ALL-ELECTRIC CONSTRUCTION**

**WHEREAS**, the 2019 Edition of the California Building Standards Code (CBSC) took effect throughout California on January 1, 2020 and provides standards for both the use of natural gas and electricity for substantially the same purposes, such as heating buildings, cooking food, etc.; and

**WHEREAS**, Health and Safety Code Sections 17958.5 and 18941.5 authorizes local agencies to establish more restrictive building standards than those specified in the CBSC, including, but not limited to, green building standards, that are reasonably necessary because of local climatic, geological, or topographical conditions based on and in accordance with the findings required by Health and Safety Code Section 17958.7 and the other requirements imposed by Section 17958.7; and

**WHEREAS**, on December 16, 2019 the Petaluma City Council adopted Urgency Ordinance No. 2705 N.C.S to adopt by reference the 2019 California Buildings Standards Code, including amendments reasonably necessary because of local climatic, topographic, and geologic conditions, specifying an effective date for Urgency Ordinance 2705 N.C.S. of January 1, 2020; and

**WHEREAS**, also on December 16, 2019 the City Council introduced Ordinance No. 2708 N.C.S., a regular ordinance to adopt by reference the 2019 California Buildings Standards Code, including local amendments reasonably necessary because of local climatic, topographic, and geologic conditions; and

**WHEREAS**, Urgency Ordinance No. 2705 N.C.S. provided that it would automatically expire and be repealed upon Ordinance No. 2708 N.C.S. taking effect, and on January 6, 2020, the Petaluma City Council adopted Ordinance No. 2708 N.C.S. and, in doing so, adopted by reference the 2019 California Buildings Standards Code including local amendments reasonably necessary because of local climatic, topographic, and geologic conditions, and Ordinance 2708 N.C.S. took effect on February 6, 2020, thirty days after its adoption, at which time Urgency Ordinance No. 2705 N.C.S. expired and was repealed, with Ordinance No. 2708 N.C.S remaining in effect; and

**WHEREAS**, on May 6, 2019, the City Council adopted Resolution No. 2019-055 N.C.S. declaring a climate emergency and elevating climate issues to the highest priority in its goal setting; and

1           **WHEREAS**, on January 11, 2021, the City Council adopted a Climate Emergency  
2 Framework to guide the City in developing and implementing further climate change response  
3 efforts including, among other things, setting a goal for Petaluma to achieve carbon neutrality by  
4 2030; and

5           **WHEREAS**, the Climate Emergency Framework identifies, “Electrification – to eliminate  
6 fossil fuel use in buildings (i.e., switch end uses from natural gas or propane to electricity)” as a  
7 strategy and action to help achieve the City’s carbon neutrality goal; and

8           **WHEREAS**, human activities, such as burning natural gas to heat buildings or cook food,  
9 releases greenhouse gases into the atmosphere and contributes to an overall increase in global  
10 average temperature, and increases in global average temperatures cause more extreme and frequent  
11 weather events; and

12           **WHEREAS**, greenhouse gas emissions from natural gas are a significant contributor to  
13 climate change, and omitting natural gas fueled appliances in new buildings will reduce the amount  
14 of natural gas that is burned, thus reducing the amount of greenhouse gases emitted into the  
15 atmosphere and helping to avoid further global average temperature increase and resulting more  
16 extreme and frequent weather events; and

17           **WHEREAS**, California Health and Safety Code Section 17958.7 provides that before  
18 making any changes or modifications to the CBSC pursuant to Section 17958.7, the governing body  
19 must make an express finding that such modifications or changes are reasonably necessary because  
20 of local climatic, geological or topographical conditions, that such findings must be available as a  
21 public record, that a copy of the findings together with the modifications or changes expressly  
22 marked and identified to which each finding refers, must be filed with the State Building Standards  
23 Commission, and that no modification or change shall become effective or operative for any purpose  
24 until the findings and the modifications or changes have been filed with the Commission, and that  
25 the Commission may reject a modification or change if no finding was submitted; and

26           **WHEREAS**, the Petaluma City Council now desires to adopt further local amendments to  
27 the 2019 CBSC, including green building standards, that are reasonably necessary because of local  
28 climatic, topographic, and geologic conditions in accordance with findings included in this  
29 ordinance in accordance with the requirements of Health & Safety Code Section 17958.7, which  
30 findings are a public record; and

31           **WHEREAS**, nothing in this ordinance is intended to amend California Energy Code  
32 requirements in Part 6 of Title 24 of the California Code of Regulations; and

33           **WHEREAS**, nothing in this ordinance is intended to amend or conflict with any provisions  
34 of the National Appliance Energy Conservation Act of 1975 or to impose requirements to use or  
35 install any particular appliance or appliance system; and

36           **WHEREAS**, this ordinance enacts regulations constituting a project under the California  
37 Environmental Quality Act (CEQA) in accordance with Section 15378, subdivisions (a) and (b) of  
38 the CEQA Guidelines, because, although, as a regulatory action, the ordinance will result in no direct  
39 physical change in the environment, the ordinance has a potential for resulting in reasonably  
40 foreseeable indirect physical change in the environment related to new building construction by  
41 imposing requirements that new buildings use electricity for energy use rather than natural gas, and  
42 because the ordinance is subject to discretionary approval by the City Council; and

1           **WHEREAS**, notwithstanding the potential of this ordinance to result in reasonably  
2 foreseeable indirect physical change in the environment through its regulation of new building  
3 construction, this ordinance is exempt from the requirements of CEQA, pursuant to CEQA  
4 Guidelines Section 15061(b)(3), covered by the commonsense exemption that CEQA applies only  
5 to projects which have the potential for causing a significant effect on the environment, and in  
6 accordance with the findings and analysis in Section 2, it can be seen with certainty that there is no  
7 possibility that this ordinance will have a significant effect on the environment; and

8           **WHEREAS**, this ordinance is exempt from the requirements of CEQA pursuant to CEQA  
9 Guidelines Section 15307 as an action taken by the City as authorized by state law to assure the  
10 maintenance, restoration, or enhancement of a natural resource where the regulatory process  
11 involves procedures for protection of the environment, in accordance with the findings and analysis  
12 in Section 2; and

13           **WHEREAS**, this ordinance is exempt from the requirements of CEQA pursuant to CEQA  
14 Guidelines Section 15308 as an action taken by the City as authorized by state law to assure the  
15 maintenance, restoration, enhancement, or protection of the environment where the regulatory  
16 process involves procedures for protection of the environment, in accordance with the findings and  
17 analysis in Section 2; and

18           **WHEREAS**, the ordinance will prohibit natural gas in newly constructed buildings and,  
19 thereby, in accordance with the findings and analysis in Section 2, result in cumulative  
20 improvements in indoor air quality by requiring the use of indoor cooking appliances powered by  
21 electricity the use of which causes no air emissions, and in a cumulative reduction in greenhouse gas  
22 emissions that are a significant contributor to climate change; and

23           **WHEREAS**, this ordinance's requiring the use of electrical power in newly constructed  
24 buildings will not result in cumulative adverse effects on air quality and greenhouse gas emissions  
25 related to existing and potential future new sources of electrical power generation, in accordance  
26 with the findings and analysis in Section 2; and

27           **WHEREAS**, this ordinance's requiring the use of electrical power may result in relatively  
28 small, incremental increases in electricity demand; however, such increases would not result in  
29 adverse effects which are cumulatively considerable, in accordance with the findings and analysis  
30 in Section 2; and

31           **WHEREAS**, pursuant to CEQA Guidelines Section 15300.2, subdivision (c), there is no  
32 reasonable possibility that this ordinance will have a significant effect on the environment due to  
33 unusual circumstances, in accordance with the findings and analysis in Section 2; and

34           **WHEREAS**, each of the CEQA exemptions summarized in the foregoing and that apply to  
35 this ordinance in accordance with the findings and analysis in Section 2 provides a separate and  
36 independent basis finding this ordinance to be exempt from the requirements of CEQA; and

37           **WHEREAS**, prior to adopting this ordinance, the City Council reviewed the environmental  
38 analysis prepared in accordance with CEQA and which is contained in Section 2 of this ordinance,  
39 and received and considered all written and oral comments on potential environmental effects of the  
40 ordinance which were submitted up to and at the time of the public hearing; and

41           **NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF**  
42 **PETALUMA AS FOLLOWS:**

1 **SECTION 1. RECITALS INCORPORATED AS FINDINGS.** The City Council hereby finds  
2 and determines the foregoing recitals to be true and correct and hereby incorporates them into this  
3 ordinance as findings and determinations of the City Council.

4 **SECTION 2. CALIFORNIA ENVIRONMENTAL QUALITY ACT ANALYSIS AND**  
5 **FINDINGS.** This ordinance is exempt from the requirements of the CEQA in accordance with the  
6 following discussion and analysis. Each of the CEQA exemptions discussed below provides a  
7 separate and independent basis for finding this ordinance exempt from CEQA.

8 A. **CEQA Project.** This ordinance enacts regulations constituting a project under the CEQA  
9 in accordance with Section 15378, subdivisions (a) and (b) of the CEQA Guidelines,  
10 because, although, as a regulatory action, the ordinance will result in no direct physical  
11 change in the environment, the ordinance has a potential for resulting in reasonably  
12 foreseeable indirect physical change in the environment related to new building construction  
13 by imposing requirements that new buildings use electricity for energy use rather than natural  
14 gas, and because the ordinance is subject to discretionary approval by the City Council.

15 B. **Common Sense Exemption.** Notwithstanding the potential of this ordinance to result in  
16 reasonably foreseeable indirect physical change in the environment through its regulation of  
17 new building construction, this ordinance is exempt from the requirements of CEQA  
18 pursuant to the commonsense exemption in CEQA Guidelines Section 15061(b)(3) that  
19 CEQA applies only to projects that have the potential for causing a significant effect on the  
20 environment, and in accordance with the findings and analysis in this section it can be seen  
21 with certainty that there is no possibility that this ordinance will have a significant effect on  
22 the environment. This ordinance would impose regulatory standard (e.g., prohibition of  
23 natural gas in new buildings) that is more stringent than that set forth in the CBSC.  
24 Application of the more stringent standard through subsequent new building construction  
25 plan review will result in new buildings with better indoor air quality, fewer emissions  
26 adversely affecting outdoor air quality, and fewer greenhouse gas emissions which have  
27 deleterious effects on numerous aspects of the environment.

28 C. **§15307 Exemption for Maintenance, Restoration, or Enhancement.** This ordinance is  
29 exempt from CEQA pursuant to CEQA Guidelines Section 15307 as an action taken by the  
30 City of Petaluma to assure the maintenance, restoration, or enhancement of a natural resource  
31 where the regulatory process involves procedures for protection of the environment. This  
32 ordinance would impose a regulatory standard (e.g., prohibition of natural gas in new  
33 buildings) that is more stringent than that set forth in the CBSC. Application of the more  
34 stringent standard through subsequent construction plan review will result in new buildings  
35 with improved indoor air quality, fewer emissions adversely effecting outdoor air quality,  
36 and fewer greenhouse gas emissions which have deleterious effects on numerous aspects of  
37 the environment.

38 D. **§15308 Exemption for Maintenance Restoration, Enhancement or Protection.** This  
39 ordinance is exempt from CEQA pursuant to CEQA Guidelines Section 15308 as an action  
40 taken by the City of Petaluma to assure the maintenance, restoration, enhancement, or  
41 protection of the environment where the regulatory process involves procedures for  
42 protection of the environment. This ordinance would impose a regulatory standard (e.g.,  
43 prohibition of natural gas in new buildings) that is more stringent than that set forth in the  
44 CBSC. Application of the more stringent standard through subsequent construction plan

1 review will result in new buildings with better indoor air quality, fewer emissions adversely  
 2 effecting outdoor air quality, and fewer greenhouse gas emissions which have deleterious  
 3 effects on numerous aspects of the environment.

4 **E. Cumulative Improvement in Air Quality.** By requiring the use of indoor appliances  
 5 powered by electricity that have no emissions this ordinance will result in cumulative  
 6 improvements in indoor air quality. The combustion of natural gas within buildings, such as  
 7 for cooking food, produces indoor and outdoor air pollution.<sup>1</sup> Burning natural gas creates air  
 8 pollutants including fine particulate matter, otherwise known as PM2.5, including  
 9 constituents such as carbon monoxide, formaldehyde, and nitrogen dioxide, all of which  
 10 contribute to respiratory ailments.<sup>2</sup> Children living in homes with gas cooking are 42 percent  
 11 more likely to have asthma.<sup>3</sup>

12 **F. Cumulative Reduction in Greenhouse Gas Emissions.** This ordinance prohibits natural  
 13 gas in newly constructed buildings and thereby results in cumulative reductions in  
 14 greenhouse gas emissions that are a significant contributor to climate change.

15 1. Natural gas is a fossil fuel energy source that is formed deep beneath the earth's surface.<sup>4</sup>  
 16 Natural gas contains many different compounds. The largest component of natural gas is  
 17 methane, a compound with one carbon atom and four hydrogen atoms (CH<sub>4</sub>). Natural  
 18 gas also contains smaller amounts of natural gas liquids (NGL, which are also  
 19 hydrocarbon gas liquids), and nonhydrocarbon gases, such as carbon dioxide and water  
 20 vapor.

21 2. The primary component of natural gas is methane, a short-lived pollutant whose  
 22 contribution to climate change or “global warming potential” is, pound for pound, 25  
 23 times greater than carbon dioxide over a 100-year period.<sup>5</sup>

24 3. Methane pollution occurs throughout the natural gas system, from leakages at the point  
 25 of extraction and along the distribution system, to incidental leakage within homes and  
 26 buildings.<sup>6</sup> Additional methane pollution occurs when natural gas is burned in home and  
 27 building appliances, including for cooking, clothes drying, water heating, and space  
 28 heating.

29 4. According to the Federal Environmental Protection Agency, the largest source of  
 30 greenhouse gas emissions from human activities in the United States is from burning  
 31 fossil fuels for electricity, heat, and transportation.<sup>7</sup> According to the Bay Area Air

---

<sup>1</sup> Weiwei Lin, Bert Brunekreef and Ulrike Gehring, “Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children”, *International Journal of Epidemiology*, no. 42 (2013); pp. 1724–1737.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> United States government, ‘Natural Gas Explained’, the U.S. Energy Information Administration, <https://www.eia.gov/energyexplained/natural-gas/>, (accessed 1 April 2021).

<sup>5</sup> United States government, ‘Overview of Greenhouse Gases’, the United States Environmental Protection Agency, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane>, (accessed 13 February 2021).

<sup>6</sup> Alvarez *et al.*, “Assessment of methane emissions from the U.S. oil and gas supply chain”, *Science Magazine* Vol. 361 (Issue 6398), pp. 186-188.

<sup>7</sup> United States government, ‘Overview of Greenhouse Gases’, the United States Environmental Protection Agency, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane>, (accessed 13 February 2021).

1           Quality Management Agency’s, natural gas combustion, distribution, and usage in  
2           buildings accounted in 2015 for 17 percent of all greenhouse gas emissions in the Bay  
3           Area.<sup>8</sup>

4           **G. No Cumulative Adverse Effects.** The ordinance requirement limiting newly constructed  
5           buildings to electrical power will not result in cumulative adverse effects to air quality or  
6           greenhouse gas emissions related to existing and potential future new sources of electrical  
7           power generation. The 100 Percent Clean Energy Act of 2018 (Senate Bill 100) requires  
8           California utilities to provide carbon neutral electricity by 2045. The Act will achieve this  
9           through electricity generated from renewable energy resources and which brings unique  
10          benefits to California, including, for example, displaced fossil consumption, reduced air  
11          pollution, particularly criteria pollutant emissions and toxic air contaminants, and reduced  
12          emissions of greenhouse gases associated with electrical generation. Senate Bill 100 also  
13          increases the state’s Renewables Portfolio Standard to 60 percent of retail sales by December  
14          31, 2030 and requires all state agencies to incorporate these targets into their relevant  
15          planning.

- 16          1. Electricity supply in Sonoma County, including that to be provided to new buildings  
17          subject to this ordinance, is provided by Pacific Gas & Electric (PG&E) or, through a  
18          community choice program, Sonoma Clean Power. In 2019, PG&E provided electricity  
19          statewide that is 29 percent from renewable sources (i.e., not fossil fuels) but which,  
20          under Senate Bill 100, will increase to a minimum of 60% by 2030 and 100% by 2045.  
21          In 2018, Sonoma Clean Power provided electricity to Sonoma County that is between 97  
22          and 100 percent from renewable sources. Since 2014, Sonoma Clean Power has provided  
23          an ‘Evergreen’ electricity service that is 100% from renewable sources.
- 24          2. The carbon content and greenhouse gas emissions from the combustion of natural gas in  
25          gas burning appliances is not expected to change over time. This ordinance will result in  
26          new buildings utilizing electricity rather than natural gas and, therefore, reduce carbon  
27          emissions in Petaluma as result of the reduced GHG emissions from generation and use  
28          of electricity, especially generation of electricity from renewable sources.
- 29          3. This ordinance’s substitution of electricity for natural gas in newly constructed buildings  
30          will result in a reduction of greenhouse gas emissions and, in doing so, directly support  
31          attainment of the carbon neutrality goal of the 100 Percent Clean Energy Act of 2018 and  
32          the carbon neutrality goal of the Climate Emergency Framework.

33           **H. No Cumulatively Considerable Adverse Effects from Electricity Demand.** The electric  
34           energy use requirement for newly constructed buildings pursuant to this ordinance may result  
35           in incremental increases in electricity demand. However, such increases would not result in  
36           adverse effects which are cumulatively considerable.

- 37          1. Within Petaluma, electricity infrastructure, including transmission lines, substations, etc.  
38          are provided by PG&E. PG&E’s service area encompasses approximately 70,000 square  
39          miles in Northern and Central California, with a service area population of nearly 16  
40          million people.<sup>9</sup> Within its service area, PG&E has 5.3 million electric distribution

---

<sup>8</sup> Bay Area Air Quality Management District, ‘Final 2017 Clean Air Plan’, Table 3-2 (2015 GHG Emissions (in 100-yr GWP CO<sub>2</sub> Equivalent Metric Tons per Year).

<sup>9</sup> Pacific, Gas & Electric Company, ‘Company Profile,’ the Pacific, Gas and Electric Company, [https://www.pge.com/en\\_US/about-pge/company-information/profile/profile.page](https://www.pge.com/en_US/about-pge/company-information/profile/profile.page), (accessed 13 February 2021).

- 1 accounts, 4.6 million of which are for residential customers.<sup>10</sup> This ordinance would  
2 apply to all newly constructed buildings within Petaluma’s incorporated limits. Petaluma  
3 is approximately 14 square miles in size and, as of January 1, 2020, had a population of  
4 61,873.<sup>11</sup> The size of Petaluma represents approximately 0.02 percent of PG&E’s service  
5 area.
- 6 2. The Petaluma General Plan 2025 anticipates a total population of 72,707 persons. Based  
7 on the 2020 population, a total of 10,834 additional persons are anticipated to reside in  
8 Petaluma and to occupy and work in newly constructed buildings subject to this  
9 ordinance. However, population data indicates the General Plan population estimate may  
10 not be achieved by 2025. According to the California Department of Finance, between  
11 2019 and 2020, Petaluma experienced a population decline of 322 persons or 0.5 percent.
- 12 3. New development within Petaluma that would be subject to this ordinance is anticipated  
13 to occur in urbanized areas where electrical service currently exists, including “in-fill”  
14 properties within incorporated city limits and unincorporated areas within Petaluma’s  
15 Urban Growth Boundary that are located at the edge of town adjacent to developed areas.  
16 “Sprawl” or “leap-frog” development necessitating the extension of major electrical  
17 transmission or distribution lines to areas currently without services is not permitted  
18 under the existing, voter-approved Urban Growth Boundary that is incorporated into the  
19 Petaluma General Plan 2025 and is also generally prohibited under policies of the  
20 Sonoma County Local Agency Formation Commission regarding outside area services.  
21 Therefore, this ordinance will not result in the need for construction of new major  
22 transmission or distribution facilities or require substantial alteration of existing  
23 transmission or distribution facilities to meet resulting energy demands.
- 24 4. In a letter from PG&E to the Town of Windsor dated August 21, 2019, PG&E stated its  
25 “support for the Town’s efforts to promote efficient all-electric construction...” and that  
26 it “welcomes the opportunity to avoid investments in new gas assets that might later  
27 prove underutilized as local governments and the state work together to realize long-term  
28 decarbonization objectives.” In a follow up letter dated October 9, 2019, PG&E stated  
29 that it is continually forecasting needs and performing upgrades to its grid to meet  
30 forecasted needs, including shifts in demand resulting from the State’s interest in moving  
31 toward electrification. As a result of these efforts PG&E indicates it fully expects to meet  
32 the electricity demands of all-electric buildings. These communications indicate that  
33 PG&E anticipates reductions in gas infrastructure requirements as result of increased  
34 electrification such as that that will result from this ordinance, and also that PG&E  
35 anticipates being able to meet increased electricity demand due to electrification without  
36 major new electrical infrastructure.
- 37 5. The Environmental Impact Report for the Petaluma General Plan 2025 identifies that  
38 anticipated growth and development could require that natural gas and electricity  
39 purveyors expand existing facilities to serve new development within the City, and  
40 concludes a less than significant effect would result. The same conclusion applies to the  
41 decreased gas use and increased electricity use anticipated to result from this ordinance,

---

<sup>10</sup> Ibid.

<sup>11</sup> State of California, ‘Population Estimates for Cities, Counties, and the State, January 1, 2019 and 2020’, California Department of Finance, <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>, (accessed 14 February 2021).

1 particularly in view of the potential over-estimate of Petaluma population growth under  
2 the General Plan 2025.

- 3 6. Even if new transmission or distribution facilities become necessary due to increased  
4 electrification, and the need for such facilities could be attributed to this ordinance,  
5 environmental review to assess the potential environmental impacts of such facilities  
6 would be speculative at this time, and therefore meaningful environmental review of such  
7 future facilities (if any) is not possible. In addition, the regulatory approval of such  
8 infrastructure generally lies outside the jurisdiction of the City of Petaluma and requires  
9 regulatory approvals from other agencies such as the California Public Utilities  
10 Commission, the Federal Energy Regulatory Commission, the California Energy  
11 Commission, and the California Air Resources Board. All such infrastructure that  
12 requires discretionary entitlement approvals would necessarily be subject to project-level  
13 CEQA review. As a result, the potential environmental impacts of electrical  
14 infrastructure that may be needed in the future as result of electrification such as that  
15 pursuant to this ordinance, which infrastructure needs are themselves speculative, are  
16 also speculative.

17 I. **No Significant Impact from Unusual Circumstances.** Pursuant to CEQA Guidelines  
18 Section 15300.2, no unusual circumstances prevent a determination that this ordinance  
19 is exempt from CEQA.

- 20 1. Pursuant to CEQA Guidelines 15300.2(a), this ordinance will result in indirect  
21 physical effects due to electrification requirements for newly constructed buildings,  
22 and such indirect effects are not reasonably foreseeable in terms of precise location.  
23 Therefore, the insignificant, indirect effects of this ordinance cannot be tied to a  
24 particularly sensitive environment that is designated, mapped, or officially adopted  
25 pursuant to law by federal, state, or local agencies.
- 26 2. Pursuant to CEQA Guidelines 15300.2(b), this ordinance would result in beneficial  
27 rather than adverse cumulative impacts through newly constructed buildings with  
28 better indoor air quality, reduced emissions that adversely affect outdoor air quality,  
29 and fewer greenhouse gas emissions that have deleterious effects on numerous  
30 aspects of the environment.

31 This ordinance will also result in beneficial rather than adverse cumulative impacts  
32 through reduced fire risk. Natural gas plumbing in buildings poses fire, explosion,  
33 and public safety risks. On average in the United States, a natural gas or oil pipeline  
34 catches fire every four days, results in an injury every five days, explodes every 11  
35 days, and leads to a fatality every 26 days.<sup>12</sup> In 2010, the explosion of a natural gas  
36 pipeline in San Bruno resulted in eight fatalities and destroyed an entire  
37 neighborhood.

- 38 3. Pursuant to CEQA Guidelines 15300.2(c), there is no reasonable possibility this  
39 ordinance will have a significant effect on the environment due to unusual  
40 circumstances. This ordinance would apply to require the use of electricity as an  
41 energy source in newly constructed buildings. Electricity is a widespread,  
42 commonplace, readily available energy source in Petaluma. Many existing buildings

---

<sup>12</sup> Matt Kelso, 'Pipeline Incidents Continue to Impact Residents,' the Frackracker Alliance,  
<https://www.frackracker.org/2018/12/pipeline-incidents-impact-residents/>, (accessed 1 April 2021).



1 in Petaluma utilize both natural gas and electricity. The omission of natural gas from  
 2 newly constructed buildings will result in substantially similar buildings in terms of  
 3 construction methods and materials, and their environmental impacts, and the  
 4 infrastructure and appliances connecting to and installed within such newly  
 5 constructed buildings, and their environmental impacts.

6 There is also no reasonable possibility this ordinance will result in a significant effect  
 7 related to seismic or fire events insofar they may be construed as an unusual  
 8 circumstance. The Petaluma General Plan 2025 and its Environmental Impact Report  
 9 analyzed the potential effects of both future seismic and fire events in the city and  
 10 concluded less than significant effects would result from new construction  
 11 anticipated in the General Plan.<sup>13</sup>

- 12 4. Pursuant to CEQA Guidelines 15300.2(d), this ordinance will not result in damage  
 13 to scenic resources, including but not limited to, trees, historic buildings, rock  
 14 outcroppings, or similar resources, within a highway officially designated as a state  
 15 scenic highway. This ordinance concerns an element of building construction that is  
 16 generally not visible from the exterior. Additionally, electricity infrastructure  
 17 extending to/from buildings is, must be placed underground pursuant to Petaluma  
 18 Municipal Code Section 20.36.140. Accordingly, such infrastructure will have no  
 19 view impacts.
- 20 5. Pursuant to CEQA Guidelines 15300.2(e), this ordinance will apply generally to  
 21 newly constructed buildings throughout the City of Petaluma. It is not reasonably  
 22 foreseeable that this ordinance would impact a site that is included on any list of  
 23 hazardous waste sites compiled pursuant to Section 65962.5 of the Government  
 24 Code.
- 25 6. Pursuant to CEQA Guidelines 15300.2(f), this ordinance will apply generally to  
 26 newly constructed buildings and will not apply to existing buildings. Therefore, this  
 27 ordinance will not cause a substantial adverse change in the significance of a  
 28 historical resource which is, by definition, an existing feature.

29 **SECTION 3. CALIFORNIA HEALTH & SAFETY CODE SECTION 17958.7 FINDINGS.**

- 30 A. The City Council finds in accordance with the requirements of Health and Safety Code  
 31 Section 17958.7 that the local amendments to the California Building Standards Code  
 32 (CBSC) adopted pursuant to this ordinance are reasonably necessary because of the  
 33 following local climatic, geological, and topographical conditions that affect the city:
  - 34 1. Wildfire Hazards: The City of Petaluma is prone to drought conditions in which  
 35 extended periods of time with little to no precipitation has led to decline in available  
 36 water supplies. Drought conditions have caused Petaluma to pass mandatory water  
 37 conservation measures (e.g., Resolution 2015-075 N.C.S. concerning Stage 2 of a  
 38 Water Shortage Contingency Plan). Droughts may dry out wildland vegetation,  
 39 potentially increasing the risk of wildfire. These climatic conditions manifest during  
 40 the late summer and fall to create severe fire hazards that threaten the public health

---

<sup>13</sup> Petaluma General Plan Environmental Impact Report

1 and welfare in the City.

2 Hot, dry weather is potentially dangerous to the foothill areas south of Downtown  
3 Petaluma and at the city's northern limits. The Petaluma Fire Department identifies  
4 the area south of Downtown as a Very High Fire Hazard Severity Zone (pursuant to  
5 Municipal Code Section 17.20.040). Cal Fire identifies the adjacent area beyond the  
6 City's jurisdiction as a Moderate Fire Hazard Severity Zone. The foothill area along  
7 the city's northern limits is designated by Cal Fire as a Moderate and High Fire  
8 Hazard Area.

9 The climatic conditions concerning drought, when combined with the geological  
10 characteristics of the hills to the south and north of the City, create hazardous  
11 conditions. The use of electricity rather than natural gas in newly constructed  
12 buildings will reduce greenhouse gas emissions contributing to the effects of global  
13 warming. Increased wildfire risk in both severity and frequency has been  
14 scientifically linked to global warming. Accordingly, the local amendments to the  
15 CBSC establishing electrification requirements for newly constructed buildings  
16 pursuant to this ordinance are reasonably necessary to achieve greenhouse gas  
17 emission reductions and avoid wildfire risk from global warming, and to avoid  
18 wildfire hazards from drought, hot weather, and fire hazard severity zones conditions  
19 that exist in the city.

20 2. Seismicity: The City of Petaluma is located within an active seismic area and includes  
21 known fault traces of the Rodgers Creek segment of the Hayward-Rodgers Fault  
22 Zone. Ground shaking intensity maps for Petaluma illustrate that ground shaking  
23 intensities in different parts of the city can be light, moderate, strong, or very strong.  
24 The resulting vibration may cause damage to buildings and infrastructure (primary  
25 effects) and ground failures in loose alluvium, landslide deposits, Bay Mud, or poorly  
26 compacted fill (secondary effects). The elimination of natural gas appliances in newly  
27 constructed buildings would reduce the hazards associated with gas leaks during  
28 seismic events and establish criteria for rebuilding of damaged properties following  
29 a local seismic emergency. Accordingly, the local amendments to the CBSC  
30 establishing electrification requirements for newly constructed buildings pursuant to  
31 this ordinance are reasonably necessary to achieve greenhouse gas emission  
32 reductions and avoid risk from gas leaks and fires caused by vibration and ground  
33 failure risks from seismic conditions that exist in the city.

34 3. Flooding/Sea Level Rise: Substantial flooding has historically occurred in Petaluma  
35 when a series of closely spaced storms move through the watershed, maintaining  
36 saturated soils and prolonged high flows in the tributary creeks. Recent large floods  
37 have occurred in 1982, 1986, 1995, 1998, and 2005. The largest flood on record in  
38 the City of Petaluma occurred from January 3 through 5, 1982. A significant flood  
39 event occurred on December 30-31, 2005, overtaxing both piped and open channel  
40 drainage systems.

41 Extreme weather conditions resulting from climate change may result in sudden,  
42 prolonged rainfall leading to further flooding events. The mean sea level along the  
43 California coast will rise from 1.0 to 1.4 meters (m) by the year 2100. The area near  
44 the Petaluma Harbor will experience sea level rise of 1.4 meters (i.e., 55 inches);

1           thereby, putting it at greater risk of flooding.<sup>14</sup>

2           Requiring the use of electric rather than natural gas energy in newly constructed  
 3           buildings in the city will reduce GHG emissions that contribute to the effects of  
 4           global warming, including those related to extreme weather conditions that may  
 5           cause flooding and sea level rise that may increase the severity and frequency of  
 6           flooding. Accordingly, the local amendments to the CBSC establishing electrification  
 7           requirements for newly constructed buildings pursuant to this ordinance are  
 8           reasonably necessary to achieve greenhouse gas emission reductions and avoid risk  
 9           due to severe weather events and sea level rise caused by global warming and  
 10          heightened risk of flooding from flooding conditions that exist in the city.

- 11          B. In accordance with California Health & Safety Code Section 17958.7, the above-  
 12          described local conditions support the need for local amendments to the 2019 CBSC.
- 13          C. The proposed local amendments to the CBSC establishing electrification requirements  
 14          for newly constructed buildings pursuant to this ordinance are reasonably necessary due  
 15          to the local conditions described above to achieve specific and greater protections for  
 16          Petaluma’s public health, safety and welfare than are afforded by the 2019 CBSC.
- 17          D. Local amendments to the CBSC pursuant to this ordinance, prohibit natural gas  
 18          infrastructure and equipment in newly constructed buildings, and thus are more stringent  
 19          than the most current CBSC requirements which otherwise permits such infrastructure  
 20          and equipment.
- 21          E. The findings in this section are a public record in accordance with the requirements of  
 22          Health & Safety Code Section 17958.7.

23          **SECTION 4. DELETION OF ALL-ELECTRIC INCENTIVE.** Petaluma Municipal Code  
 24          Section 17.04.010(J) is hereby revised (~~strikethrough~~ = deletion; underline = addition) to read as  
 25          follows:

26          Part 11—2019 California Green Building Standards Code at the Mandatory Level for all Additions  
 27          and Alterations and at the Tier ~~Two~~ One Level for all Wholly New Construction. ~~For new all-electric~~  
 28          ~~construction, Tier One is required, with the exception of for~~ Appendix A4, Division A4.2 Energy  
 29          Efficiency, and Appendix A5, Division A5.2 Energy Efficiency, ~~both~~ neither of which are ~~not~~  
 30          adopted;

31          **SECTION 5. ADDITION OF CHAPTER 17.09 OF THE PETALUMA MUNICIPAL CODE.**  
 32          A new Petaluma Municipal Code Chapter 17.09 entitled “All Electric Construction in Newly-  
 33          Constructed Buildings” is hereby added to read as follows:

34  
 35          **Chapter 17.09**

36          **ALL-ELECTRIC CONSTRUCTION IN NEWLY CONSTRUCTED BUILDINGS**

37          **17.09.010 Applicability.**

---

<sup>14</sup> California Flood Risk: Sea Level Rise Petaluma River Quadrangle, Pacific Institute, 2009.

1 The requirements of this chapter shall apply to all Newly Constructed Buildings and Substantial  
2 Building Alterations as defined in Section 17.36.020 at the time the city receives the building permit  
3 application for a Newly Constructed Building or Substantial Building Alteration, except as otherwise  
4 provided in this chapter.

5 **17.09.020 Definitions.**

- 6 A. "Accessory Dwelling Unit" shall have the same meaning as specified in Section 65852.2 of the  
7 California Government Code, as amended from time to time.
- 8 B. "All-Electric Building" is a building that uses a permanent supply of electricity as the source of  
9 energy for all space heating, water heating (including pools and spas), cooking appliances, and  
10 clothes drying appliances, and has no natural gas or propane plumbing installed in the building.
- 11 C. "All-Electric Design" means a plan or plans for a building or portion thereof that uses a  
12 permanent supply of electricity as the source of energy for all space heating, water heating  
13 (including pools and spas), cooking appliances, and clothes drying appliances, and has no natural  
14 gas or propane plumbing installed in the building.
- 15 D. "Building" shall have the same meaning as "Building" as specified in the California Building  
16 Standards Code at Title 24, Part 2, of the California Code of Regulations as amended from time  
17 to time.
- 18 E. "Electric-Ready" is a building or portion thereof that contains electrical systems and designs that  
19 provide capacity for a future retrofit of a Mixed-Fuel Building to an All-Electric Building. To  
20 qualify as Electric-Ready, buildings and portions of buildings must include sufficient space,  
21 drainage, electrical conductors or raceways, bus bar capacity, and overcurrent protective devices  
22 to provide capacity for a future retrofit to an All-Electric Building.
- 23 F. "Essential Services Buildings" shall have the same meaning as "Essential Services Buildings,"  
24 as defined by Health and Safety Code Section 16007, as amended from time to time. For  
25 purposes of this chapter, Essential Services Buildings are publicly owned and/or publicly  
26 operated buildings whose purpose is to safeguard the public health and safety. Essential Services  
27 Buildings generally exclude privately-owned residences and/or commercial buildings; except  
28 that, privately-owned commercial buildings may qualify as Essential Services Buildings to the  
29 extent they are publicly operated to safeguard the public health and safety.
- 30 G. "Junior Accessory Dwelling Unit" shall have the same meaning as specified in Section 65852.22  
31 of the California Government Code, as amended from time to time.
- 32 H. "Mixed-Fuel Building" means a building that uses natural gas or propane as fuel for space  
33 heating or cooling, exterior heating, decorative uses, lighting, water heating (including pools and  
34 spas), cooking appliances or clothes drying appliances, onsite generation of electricity (except  
35 where primarily fueled by onsite, digestion of organic material), or contains fixtures, piping  
36 systems, or infrastructure for natural gas or propane equipment for such uses.
- 37 I. "Natural Gas" shall have the same meaning as "Fuel Gas" as specified in Section 208.0 of the  
38 California Plumbing Code and Section 208.0 of the California Mechanical Code, as amended  
39 from time to time.

- 1 J. “Newly Constructed Building” shall mean any building that: (1) is proposed to be located in  
2 whole or in part within the city; (2) is not an alteration or addition to or repair of an existing  
3 building; (3) is subject to the city’s regulatory authority pursuant to the city’s General Plan,  
4 Implementing Zoning Ordinance, SmartCode and/or any adopted Specific Plan or other city  
5 land use regulation, regardless of whether a discretionary permit is required or not; and (4) has  
6 not been granted and/or is not subject to a valid building permit that remains in effect.
- 7 K. “Substantial Building Alteration” shall mean an alteration or addition to an existing building  
8 involving removal of more than 50% of the perimeter of the exterior walls of the existing  
9 building or the addition of more than 50% of the gross floor area to the existing building.

10 **17.09.030 Requirement for All-Electric Construction in Newly Constructed Buildings.**

- 11 A. Newly Constructed Buildings and Substantial Building Alterations must satisfy the definition of  
12 an All-Electric Building and/or have an All-Electric Design, except as otherwise provided in this  
13 chapter.
- 14 B. As of the effective date of this chapter, applicants are ineligible to apply for and the Building  
15 Official may not grant permits that would convert an All-Electric Building to a Mixed-Fuel  
16 Building where the application was submitted on or after the effective date of this Chapter.
- 17 C. The requirements of this Section are and shall be deemed objective planning standards for  
18 purposes of Government Code section 65913.4 and objective development standards for  
19 purposes of Government Code section 65589.5, as those sections may be amended from time to  
20 time.

21 **17.09.040 Exceptions.**

22 The requirements of this Chapter shall not apply to:

- 23 A. Additions and Alterations to existing buildings, except for Substantial Building Alterations; and
- 24 B. The use of portable propane appliances outside of the building envelope, such as for outdoor  
25 cooking and outdoor heating appliances; and
- 26 C. Essential Services Buildings that are Electric Ready; and
- 27 D. Back-up power facilities for Essential Services Buildings; and
- 28 E. Development projects that have obtained vested rights prior to the effective date of this chapter  
29 pursuant to a preliminary affordable housing project application in accordance with Government  
30 Code Section 65589.5(o), a development agreement in accordance with Government Code  
31 Section 65866, a vesting tentative map in accordance with Government Code 66998.1, or  
32 pursuant to the ruling in *Avco Community Developers Inc. v. South Coast Regional*  
33 *Communication* (1976) 17 Cal. 3d 785, or pursuant to other applicable statutory or case law..

34 **17.09.050 Infeasibility Waiver.**

- 35 A. Grant of Waiver and Waiver Criteria. The Chief Building Official may grant a permit in response  
36 to an application to construct of a new Mixed-Fuel Building notwithstanding the requirements

1 of Section 17.09.030, if the Chief Building Official, in his or her sole discretion, determines in  
2 writing, based on sufficient information submitted by the permit applicant, that the application  
3 qualifies for a waiver in accordance with this section, because it is infeasible for the proposed  
4 Newly Constructed Building to be an All Electric Building and/or to have an All Electric Design,  
5 in accordance with the following:

- 6 1. The proposed Newly-Constructed Building cannot satisfy All-Electric Building or All  
7 Electric Design prescriptive requirements based on the Newly Constructed Building's  
8 intended use(s) when compared to the same building and intended use(s) modeled with  
9 natural gas under the California Energy Code; or
- 10 2. The proposed Newly-Constructed Building cannot satisfy All-Electric Building or All  
11 Electric Design performance requirements based on the Newly Constructed Building's  
12 intended use(s) when compared to the same building and intended uses modeled with natural  
13 gas using commercially available technology and an approved calculation method under the  
14 California Energy Code; and
- 15 3. The installation of natural gas piping systems, fixtures and/or infrastructure in the proposed  
16 Newly Constructed Building is strictly limited to the system(s) and/or area(s) of the building  
17 regarding which the Chief Building Official has determined that meeting All-Electric  
18 Building and/or All Electric Design requirements is infeasible; and
- 19 4. The proposed Newly Constructed Building is Electric-Ready.

20 B. Cost Not a Factor. Financial considerations are not a basis for determining that it is infeasible  
21 for a proposed Newly Constructed Building to meet All Electric Building and/or All Electric  
22 Design requirements.

23 C. Appeals.

- 24 1. Any aggrieved applicant may appeal the determination of the Chief Building Official  
25 regarding the granting or denial of a waiver pursuant to this section.
- 26 2. Appeals must be filed in writing with the Building Official not later than fourteen (14) days  
27 after the date of the Building Official's written determination regarding the waiver  
28 application.
- 29 3. Appeals must clearly state the basis for the appeal and provide adequate documentation of  
30 the basis for the appeal.
- 31 4. Appeals shall be decided by the Building Board of Appeals at a public hearing in accordance  
32 with Chapter 17.08 of this code.

33 **17.09.060 Violations.**

34 Violations of the requirements of this chapter shall be subject to enforcement and imposition of the  
35 civil and administrative remedies in Chapters 1.10, 1.11, 1.13, 1.14, 1.15 and 1.16 of this code.

36 **17.09.070 Periodic Review and Administrative Regulations.**

37 The Building Official shall periodically review the requirements of this chapter for ongoing

1 consistency with California Building Standards Code codified in Title 24 of the California Code of  
2 Regulations, pursuant to the triennial code adoption cycle and the local amendments in this code and  
3 is authorized to promulgate administrative regulations implementing requirements of this chapter.

4 **17.09.080 Energy Code Not Amended.**

5 Nothing in this chapter is intended to amend and nothing in this chapter shall be construed so as to  
6 amend California Energy Code requirements in Part 6 of Title 24 of the California Code of  
7 Regulations.

8 **17.09.090 No Appliance or Appliance System Requirement.**

9 Nothing in this chapter is intended to amend or conflict with and nothing in this chapter shall be  
10 construed so as to amend or conflict with any provisions of the National Appliance Energy  
11 Conservation Act of 1975, and nothing in this chapter is intended to impose and nothing in this  
12 chapter shall be construed so as to impose a requirement to use or install any particular appliance or  
13 appliance system.

14 **SECTION 6: SEVERABILITY** If any part of this ordinance is for any reason held to be  
15 unconstitutional, unlawful, or otherwise invalid by a court of competent jurisdiction, such decision  
16 will not affect the validity of the remaining parts of this ordinance. The City Council of the City of  
17 Petaluma hereby declares that it would have passed and adopted this ordinance and each of its  
18 provisions irrespective of any part being held invalid.

19 **SECTION 7: EFFECTIVE DATE** This ordinance shall become effective thirty (30) days after the  
20 date of its adoption by the Petaluma City Council and filing of this ordinance with the California  
21 Building Standards Commission with the requirements of Health & Safety Code Section 17958.7.

22 **SECTION 8: POSTING/PUBLISHING OF NOTICE** The City Clerk is hereby directed to post  
23 and/or publish this ordinance or a synopsis of it for the period and in the manner required by the  
24 City Charter. The City Clerk is also hereby directed to file a Notice of Exemption concerning this  
25 ordinance with the Office of the Sonoma County Clerk in accordance with Section 15062 of the  
26 CEQA Guidelines.

27 **INTRODUCED** and ordered published and posted this 7<sup>th</sup> day of December 2020.  
28

29 **ADOPTED** this \_\_ day of [month] [year] by the following vote:  
30

- 31 Ayes:
- 32 Noes:
- 33 Abstain:
- 34 Absent:

35  
36  
37  
38  
39  
40  
41  
42

\_\_\_\_\_  
Teresa Barrett, Mayor

ATTEST:

APPROVED AS TO FORM: