




Agenda Item 4.B

DATE: May 3, 2021

TO: Honorable Mayor and Members of the City Council through City Manager 

FROM: Kevin Colin, Senior Planner
Heather Hines, Planning Manager

SUBJECT: Introduction of an Ordinance amending the Petaluma Municipal Code to create a new Chapter 17.09 entitled All-Electric Construction in Newly Constructed Buildings, adopting new local amendments to the California Building Standards Code, and deleting existing all-electric incentive in Petaluma Municipal Code Section 17.04.010(J).

RECOMMENDATION

It is recommended that the City Council introduce an ordinance amending the Petaluma Municipal Code to create a new Chapter 17.09 entitled All-Electric Construction in Newly Constructed Buildings, adopting new local amendments to the California Building Standards Code, and deleting the existing all-electric incentive at Petaluma Municipal Code Section 17.04.010(J) (**Attachment 1**).

Additionally, the City Council may provide direction to staff for subsequent efforts toward decarbonization for the building and energy sectors consistent with the City's 2030 carbon neutrality goal.

BACKGROUND

Climate Emergency Declaration & Framework

On May 6, 2019, the City Council adopted Resolution No. 2019-055 (Resolution Declaring a Climate Emergency) and, in doing so, directed that staff give "precedence to climate mitigation and adaptation when evaluating policies." By Ordinance No. 2689 N.C.S., adopted August 5, 2019 and effective September 5, 2019, the City Council established the Climate Action Commission to engage with climate related matters, with enumerated responsibilities including suggesting climate change policies to be implemented by City staff.

With extensive discussion and community input, the Climate Action Commission prepared a Climate Emergency Framework to outline principles to guide the City's ongoing response to and discussion about the climate crisis and to guide and inform subsequent policies and implementation strategies. Subsequently, on January 11, 2021, the Commission presented the Climate Emergency

Framework for consideration, and the City Council unanimously approved the Framework pursuant to Resolution No. 2021-007 N.C.S., including a goal for Petaluma to achieve carbon neutrality by 2030.

When considering the Framework, the Council also received a list of Climate Action Commission recommended priority action items, including the following:

Adopt a natural gas ban for new construction and adopt a policy to phase in building energy retrofits for existing buildings to meet climate targets. Provide resources and programs to ensure retrofits are available and affordable to low-income residents and do not cause rent increases for tenants over and above monthly savings on utility bills from the upgrades and include tenant protections to avoid displacement and eviction.

These actions are related to the following Framework goal (Page 16) stating, “Eliminate emissions from the building sector through zero-emission new construction (emissions embedded in materials and those emitted during construction and operation), building retrofits, appliance replacements and use of renewably generated clean electricity.” (Climate Emergency Framework, p.6.)”.

California Building Standards Code

Every three years, the State of California adopts new building standards that are codified in Title 24 of the California Code of Regulations, referred to as the California Building Standards Code (“Building Code”). This regular update is referred to as a “code cycle.” The current code cycle is for the year 2019 and was adopted by Petaluma, with local amendments, via Ordinance No. 2708 N.C.S. on January 6, 2020. The next code cycle will be for the year 2022 and became effective statewide on January 1, 2023.

The local building code is an important tool by which cities may further local climate goals, including those set forth in Petaluma’s Climate Emergency Framework. In accordance with state law, each code cycle takes automatic effect in each local jurisdiction, even without action by the local agency. State law authorizes local agencies to enact local amendments to the Building Code based on findings supporting that the local amendments are reasonably necessary because of local climatic, geological, or topographical conditions (Health and Safety Code sections 18941.5 and 17958.7). As of October 30, 2020, at least 39 California jurisdictions (including the cities of Santa Rosa, Berkeley, Santa Cruz, San Jose, and San Francisco) have adopted ordinances to begin decarbonizing buildings in their boundaries, using an array of building code approaches. Fifteen (15) California cities have adopted “all-electric, whole-building” requirements.

The State Building Code does not dictate the type of energy to be used in buildings (as between such options as natural gas, propane, or electricity). Rather, the code applies prescriptive or performance-based standards to each individual building design submitted for review. The Building Code amendments recommended in the proposed ordinance removes natural gas as a possible energy source for new construction in Petaluma. It also requires that all new construction be designed and submitted for approval pursuant to the state Building Code minimum energy efficiency standards codified in the Energy Code at Part 6 (Energy Code) and (portions of) Part 11 (the California Green Building or “CALGreen” Standards Code) of Title 24 of the California Code

of Regulations.

Natural Gas

The primary component in natural gas is methane. Methane is a short-lived, pollutant whose contribution to climate change or (“global warming potential”) is, pound for pound, 25 times greater than carbon dioxide over a 100-year period. Methane pollution happens throughout the natural gas system, from leakages at the point of extraction and along the distribution system, to incidental leakage within homes and buildings. Additional methane pollution occurs when natural gas is burned in home and building appliances, including for cooking, clothes drying, water heating, and space heating. The Sonoma County Regional Climate Protection Authority estimates that, in 2018, 26% of Petaluma’s greenhouse gas emissions are attributable to building energy usage.

In addition to being a source of greenhouse gas emissions, natural gas has other attributes negatively affecting public health and safety. Indoor natural gas use, particularly for cooking, worsens indoor air quality, which disproportionately harms frontline communities, i.e., communities that experience the first and worst consequences of climate change. Children living in homes with gas cooking are 42 percent more likely to have asthma. Reducing a community’s reliance on the natural gas system improves its physical resilience, reduces fire risk, and simplifies building systems and maintenance. Ruptures in natural gas lines caused half of the fires in San Francisco after the 1989 Loma Prieta earthquake. Even today, the City/County of San Francisco estimates that, after a 7.9 magnitude earthquake, it would take six months to restore natural gas services citywide, while electricity could be restored in less than a week.

Electric appliances used in conjunction with battery storage technology and renewable energy generation, such as rooftop solar, can operate absent the grid’s electric supply chain. Moreover, newer gas appliances, such as stoves and water heaters, may require electricity to ignite. Thus, in times of power outages, gas appliances in new buildings may still be inoperable and not provide the resilience that many people desire.

Building Decarbonization

For purposes of this report, building decarbonization is defined as the removal of greenhouse gas emissions from the building’s energy use. The fundamental means of achieving this is to construct new or modify existing buildings to include design features and systems (e.g., building orientation, wiring, conduits, outlets, etc.) able to convey power from clean energy sources (e.g., solar photovoltaic on roof, grid electricity from renewable source). In turn, the building can accommodate appliances (e.g., heating furnace, water heater, cooking stove) not reliant upon fossil fuels (e.g., natural gas). In contrast, those dependent upon fossil fuels involve a carbon content and greenhouse emissions that are not expected to change over time due to new technology.

Building appliances able to be powered by clean energy exist today. For example, high efficiency electric heat pumps can provide clean space and water heating, induction ranges can provide a safe alternative to gas-powered appliances in the kitchen, and efficient electric clothes dryers can be used in place of gas-powered dryers. Although appliance choices are important for their ability to enable building decarbonization, it is important to note that state and local governments cannot

regulate their design nor mandate their purchase relative to energy use and efficiency standards.

The National Applicant Energy Conservation Act of 1975 provides the federal government exclusive rights to set national standards. One purpose of this federal preemption is to prevent a patchwork of applicant design standards. Thus, energy codes such as California's Title 24, Part 6 set standards for building design that include an assumed federal 'baseline' for energy use related to appliances. Although more efficient, clean energy dependent appliances exist in the marketplace, the energy code (including local ordinances) cannot prescribe standards requiring their use.

Cost Effectiveness

The California Energy Codes & Standards Program has now completed all necessary cost effectiveness studies to document the ability of new all-electric buildings to comply with Title 24, Part 6 (Energy Code) requirements (**Attachment 2**). This includes residential buildings (Low Rise (0 to 3 stories), Mid-Rise (4 to 7 stories), High-Rise (8 and more stories)) and non-residential buildings. Each study uses a Title 24, Part 6 baseline compliance threshold, applies prospective energy efficiency measures, and performs computer model runs to determine the projected site energy and compliance outcome. Each study uses two different metrics to assess cost effectiveness, as follows:

- Time Dependent Valuation (TDV): captures the "societal value or cost" of energy use including long-term projected costs, such as the cost of providing energy during peak periods of demand and other societal costs, such as projected costs for carbon emissions, as well as grid transmission and distribution impacts. This metric values energy use differently depending on the fuel source (gas, electricity, and propane), time of day, and season. Electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods.
- Utility Bill Impacts (On-Bill): is a customer-based lifecycle cost approach that values energy based upon estimated site energy usage and customer savings using electricity and natural gas utility rate schedules over a 30-year duration accounting for discount rate and energy cost inflation.

The main difference between the methodologies is the way they value energy and thus the cost savings of reduced or avoided energy use. TDV is the methodology used by the California Energy Commission in evaluating cost-effectiveness for efficiency measures in Title 24, Part 6 (Energy Code). Similarly, TDV is the metric used to assess local energy code amendments that impose more stringent standards (i.e., "Reach Code"). Each study documents that, based on TDV, all-electric buildings are cost-effective in Petaluma (Building Climate Zone 2). Under the On-Bill methodology, all buildings except for 'medium office' and 'small hotel' are cost effective in Petaluma; however, with use of on-site photovoltaic power and battery storage, the opposite is true.

Climate Action Commission & Planning Commission Feedback

Prior to City Council consideration, the draft ordinance was presented to the Climate Action

Commission (on April 8, 2021) and Planning Commission (on April 13, 2021). Both advisory bodies were supportive of the ordinance and future work to decarbonize existing buildings through education, financial incentives (e.g., through Sonoma Clean Power subsidies) and additional regulation. Where commission comments relate to specific ordinance provisions, the staff report addresses them in the discussion below.

DISCUSSION

All-Electric Construction in Newly Constructed Buildings

The proposed ordinance creates a new Municipal Code Chapter 17.09 titled “All-Electric Construction in Newly Constructed Buildings” (**Attachment 1**). The ordinance follows the requirements of Health & Safety Code Section 17958.7 and which pertain to local amendments to the California Building Standards Code.

A summary of key ordinance provisions is provided below. After each summary, staff’s rationale is explained to aid in understanding of the purpose and intent of each provision. Alternative approaches (e.g., from other jurisdictions) are also described should City Council wish to consider them.

1. **Section 17.09.010 (Applicability)**: The ordinance requires all “Newly Constructed Buildings,” as defined, and those that are existing and undergo a “Substantial Building Alteration,” as defined, to be powered by electricity. The use of natural gas and propane is prohibited. Compliance with the ordinance will be determined through the building permit application review process.

Rationale: The emphasis on all new buildings is to have an immediate effect, across the board, in preventing a net increase in greenhouse gas emissions from the building sector. Put differently, this provision prevents increasing greenhouse gas emissions as part of new construction. Staff estimates the ordinance will initially cause pending developments, including 1,873 residential dwellings and 419,925 square feet of non-residential buildings, to be all-electric rather than using natural gas as part of mixed fuel buildings.

In 2018, it was estimated that 26% of Petaluma’s overall greenhouse gas emissions were attributed to existing buildings in Petaluma. As discussed below, and in response to Climate Action Commission feedback, a new criterion of “Substantial Building Alteration” has been added to address transition of existing buildings to all electric when the scope of alteration of an existing building is essentially considered demolition and rebuild.

Commission Feedback: When presented to the Climate Action Commission (CAC) and Planning Commission, the ordinance expressly would not apply to either alterations or additions to existing buildings. The CAC urged staff to look at including a threshold for additions and/or alterations to trigger an all-electric requirement but which would not raise issues of equity related to the construction and housing costs (e.g., mandated all-electric requirements which are passed on to tenants of multi-family buildings).

In staff’s review of jurisdictions within California that have an all-electric requirement,

only a handful address existing buildings. In contrast, a more prevalent approach, and one that is gaining popularity as a means to decarbonize existing buildings and promote carbon neutrality, consists of financial incentives, including the education thereof, through local energy purveyors (e.g., PG&E, Sonoma Clean Power). For example, Sonoma Clean Power provides:

- Non-profit EV incentive: up to \$12,500 to nonprofits that purchase or lease an EV or a plug-in hybrid with a battery range of at least 25 miles.
- Energy Efficiency Financing: up to \$10,000 is available for residential customers for select energy efficiency technologies - payable through a utility bill and at a 0% interest rate.
- GridSavvy Community: this program provides financial subsidies for installing smart devices like smart thermostats, EV charging stations, and heat pump water heaters in homes. For EV charging equipment, all costs (excluding labor) for Level 2 chargers are reimbursed. Replacing an existing (gas powered) water heater with an (electricity powered) heat pump water heater qualifies for a \$1,700 to \$2,000 rebate.

These financial incentives complement the regulatory requirements of the proposed ordinance and offer a compelling pathway for decarbonization. However, unless a homeowner or contractor are aware of the latest incentives, an opportunity to incrementally facilitate building decarbonization may be lost. As a result, staff will continue to engage Sonoma Clean Power in dialogue and work to bridge information gaps between permit applicant and utility customer.

Although additional regulatory requirements for existing buildings are possible and may be worthy of consideration at a subsequent meeting, staff does not have adequate information and has not performed sufficient analysis to comprehensively address existing buildings at this time. However, staff has incorporated a modification to the draft ordinance to respond to the Climate Action Commission's feedback that should not result in adverse equity impacts. The proposed ordinance includes a new trigger for applicability to existing buildings under a "Substantial Building Alteration" definition as follows:

"Substantial Building Alteration" shall mean an alteration or addition to an existing building involving removal of more than 50% of the perimeter of the exterior walls of the existing building or the addition of more than 50% of the gross floor area to the existing building.

This language captures situations where existing building are, practically speaking, demolished and major buildings systems (e.g., space heating) are reevaluated and/or reconstructed. When that degree of change and commensurate project valuation is present, staff recommends that electrification be required. This threshold is sufficiently high to avoid situations like common housing improvements (e.g., water heater replacement) that could, in theory, trigger additional mandatory electrification upgrades that are passed onto tenants.

Alternate Approaches: Other jurisdictions in California have excluded certain building types and systems from their all-electric requirement. Examples of building types that other local agencies have excluded from the all-electric requirement include non-residential (e.g., commercial, industrial, public agency), mid-rise and/or high-rise residential. A few agencies have limited their ordinance to a building system component like space and/or water heating.

Staff's research shows that many of the less comprehensive approaches from other jurisdictions were established prior to all building types being studied and determined as cost effective with all-electric construction.¹ All electric construction is both technically feasible and, given recent studies completed by the California Energy Codes & Standards program, also demonstrated to be cost effective in Petaluma's climate zone. Given these facts, the draft ordinance capitalizes on these key prerequisites and prioritizes greenhouse gas emission reductions over other interests in furtherance of City Council Resolution No. 2019-055 N.C.S. (Climate Emergency Declaration).

At the opposite end of the regulatory spectrum, staff identified no local agencies that have adopted an all-electric requirement (i.e., complete retrofit to electric) for existing buildings. However, as discussed above, there is an emerging and growing multi-agency emphasis on facilitating an incremental increase in electrical appliances through education, financial incentives, and regulation.

2. **Section 17.09.040 (Exceptions)**: The ordinance includes the following exceptions to the all-electric requirement:
 - A. Additions and Alterations to existing buildings, except as provided in the definition of Newly Constructed Building; and
 - B. The use of portable propane appliances outside of the building envelope, such as for outdoor cooking and outdoor heating appliances; and
 - C. Essential Services Buildings that are Electric Ready; and
 - D. Back-up power facilities for Essential Services Buildings; and
 - E. Development projects that have obtained vested rights prior to the effective date of this chapter.

¹ The California Energy Codes & Standards program completed all necessary cost effectiveness studies between July 2019 and February 2021; see Attachment 2.

Since presenting the ordinance to the Climate Action Commission (CAC) and Planning Commission, staff has received verbal comments from two residential homebuilders with approved subdivisions (TriPointe Homes at Riverfront, KB Homes at Quarry Heights). Both have expressed concerns about the all-electric requirement since each project has already installed natural gas infrastructure. In the case of Quarry Heights, natural gas infrastructure has been installed and many units have been built or have issued building permits for construction. Approximately 90 units remain un-permitted but the hard costs associated with installing natural gas infrastructure has been expended. The 134 single family units that make up the Tripointe Homes component of the Riverfront project were divided into three phases, each with their own subdivision maps. All natural gas infrastructure has been installed for Phases 1 and 2, and 41 of the 91 homes in these phases have been issued building permits. Although public improvement plans have been approved for Phase 3, the natural gas infrastructure has not been issued for the final phase of the development and no building permits have been issued for the 43 homes in Phase 3.

The concerns expressed about the vested rights based on hard costs involved with installation of natural gas infrastructure for these subdivision projects are valid and make a legitimate argument about vested rights to continue with the use of natural gas since substantial work has occurred and each builder has incurred substantial liabilities in good faith reliance upon a permit validly issued. Therefore, the ordinance includes a revised vested rights exception (noted in underline), as follows:

- E. Development projects that have obtained vested rights prior to the effective date of this chapter pursuant to a preliminary affordable housing project application in accordance with Government Code Section 65589.5(o), a development agreement in accordance with Government Code Section 65866, a vesting tentative map in accordance with Government Code 66998.1, or pursuant to the ruling in *Avco Community Developers Inc. v. South Coast Regional Communication* (1976) 17 Cal. 3d 785, or pursuant to other applicable statutory or case law.

This provision will provide for each referenced subdivision to proceed with the use of natural gas. All other pending subdivisions (e.g., Scott Ranch) that have not satisfied all of the exceptions criteria at subsection “F,” prior to ordinance effective date, may not proceed with the use of natural gas.

Rationale: This list of proposed exceptions to the all-electric requirement is narrow, limited. The intent behind this approach is to maximize the ordinance’s ability to facilitate carbon neutrality by preventing a net increase in greenhouse emissions from the building sector.

Commission Feedback: Both the Planning Commission and Climate Action Commission were supportive of the ordinance’s approach to exceptions. Member Edminister of the Climate Action Commission recommended the natural gas back-up power exception for Essential Services Buildings be removed and suggested that electric battery power be considered instead.

Alternate Approaches: In staff’s review of other jurisdictions with an all-electric requirement, the number of exceptions to the requirement are generally greater in number. Examples of the

types of exceptions established by other jurisdictions (but not included in the draft ordinance) include:

- Cooking stoves (private residence and/or commercial business)
- Clothes dryers
- Pool and spa heating
- Fireplaces
- Outdoor heating (connected to gas plumbing)
- Manufacturing/hazardous materials buildings (those using process heat such as a glass foundry, ceramics foundry, crematorium, or metal/alloy fabricator)
- Life science buildings (F, H, L occupancy types where research, experiments and measurements in medical and life sciences are performed)
- Hospitals
- Projects with approved land use entitlements or a grace period for such projects to proceed with the use of natural gas (e.g., 12 months from ordinance effective date).

The ordinance omits these types of exceptions to prioritize greenhouse gas emission reductions over other interests in furtherance of City Council Resolution No. 2019-055 N.C.S. (Climate Emergency Declaration). In addition, rather than include blanket categories for types of exceptions, the ordinance includes a waiver process, as discussed below, to address potential unforeseen technological gaps in electrical appliance marketplace.

3. **Section 17.09.050 (Infeasibility Waiver)**: The ordinance includes an administrative process whereby the Chief Building Official may consider requests for new buildings to include the use of natural gas. The waiver criteria include the following:
 1. The proposed Newly-Constructed Building cannot satisfy All-Electric Building or All Electric Design prescriptive requirements based on the Newly Constructed Building's intended use(s) when compared to the same building and intended use(s) modeled with natural gas under the California Energy Code; or
 2. The proposed Newly-Constructed Building cannot satisfy All-Electric Building or All Electric Design performance requirements based on the Newly Constructed Building's intended use(s) when compared to the same building and intended uses modeled with natural gas using commercially available technology and an approved calculation method under the California Energy Code; and
 3. The installation of natural gas piping systems, fixtures and/or infrastructure in the proposed Newly Constructed Building is strictly limited to the system(s) and/or area(s) of the building regarding which the Chief Building Official has determined that meeting All-Electric Building and/or All Electric Design requirements is infeasible; and
 4. The proposed Newly Constructed Building is Electric-Ready.

All criteria must be satisfied for the Chief Building Official to grant approval. Decisions of the Chief Building Official are appealable to the Building Board of Appeals. Electric-Ready is defined, in part, as including “electrical systems and designs that provide capacity for a future retrofit of a Mixed-Fuel Building to an All-Electric Building.” Financial considerations are also specified as not a basis for determining that it is infeasible for a proposed newly building to meet the all-electric requirement.

Rationale: Consistent with the approach to exceptions noted above, the waiver process is also intended to maximize greenhouse gas reductions by limiting the basis for waivers to situations of infeasibility as determined by code compliance ability exclusively. Importantly, the “commercially available technology” provision is intended to address potential unforeseen technological gaps in electrical appliance marketplace. For example, if the marketplace has not yet developed an electric appliance to perform a particular building function, a natural gas appliance may be substituted.

Commission Feedback: Both the Planning Commission and Climate Action Commission were supportive of the ordinance’s approach to waivers, as proposed.

Alternate Approaches: In contrast to other jurisdictions with an all-electric requirement, the ordinance excludes consideration of situations unrelated to code compliance such as business-related reasons, promoting the public interest, or hardships related to economic rate of return.

In closing, there have been targeted edits made to the draft ordinance since presenting to the Climate Action Commission and Planning Commission to further refine. It is important to note that, except as explained above, none of the subsequent changes have modified the substantive provisions of the draft ordinance as shared with the Climate Action Commission or Planning Commission or changed the applicability or outcome of the ordinance.

Removal of All-Electric Incentive

Presently, the City of Petaluma has a local Building Code modification via Ordinance No. 2708 N.C.S. incentivizing all-electric construction by requiring Tier Two for all new construction unless a new building is all-electric for which only Tier One is required. The ordinance will, due to a mandate for all-electric, modify the text of Municipal Code Section 17.04.010(J) as follows (~~strikethrough~~ = deletion; underline = addition):

Part 11—2019 California Green Building Standards Code at the Mandatory Level for all Additions and Alterations and at the Tier ~~Two~~ One Level for all Wholly New Construction. ~~For new all-electric construction, Tier One is required,~~ with the exception of Appendix A4, Division A4.2 Energy Efficiency, and Appendix A5, Division A5.2 Energy Efficiency, both of which are not adopted;

The California Green Building Standards Code (“CALGreen”) is a component of the Building Code and includes three tiers: (1) mandatory measures apply statewide; (2) Tier 1 prerequisites set a higher baseline than mandatory measures; and (2) Tier 2 prerequisites include all of Tier 1 prerequisites plus some enhanced or additional measures. Imposing either tier is a voluntary and up to local jurisdictions. Measures at all levels are categorized into the following: (a) planning and

design; (b) energy efficiency; (c) water efficiency and conservation; (d) material conservation and resource efficiency; and (e) environmental quality. **Attachment 3** provides a summary of the difference between Tier 1 and 2 for residential uses.

Under the prior to the 2016 Building Code, the City of Petaluma adopted a Tier 1 California Green Building Standard for new buildings with the same energy efficiency exceptions (i.e., Division A4.2 (Residential) and A5.2 (Non-Residential)) which were not adopted. Building Division staff indicate that, since adopting the all-electric incentive during the 2019 Building Code update, most projects seek and obtain compliance with Tier 1 requirements rather than voluntarily meet those for Tier 2. Removing the all-electric incentive will result in all-electric buildings better able to support the City's goal of carbon neutrality by the year 2030. As discussed below, further work can be accomplished to enhance the carbon reducing benefits of the all-electric requirement, including through additional local amendments to CALGreen.

Future Work Towards Decarbonization

The Climate Emergency Framework identifies the following goal:

“Eliminate emissions from the building sector through zero-emission new construction (emissions embedded in materials and those emitted during construction and operation), building retrofits, appliance replacements and use of renewably generated clean electricity.”

The proposed ordinance will take an important first step in advancing this goal. The overall effect in reducing emissions from Petaluma's building sector will, however, be modest.

Each year less than 1 percent of California's building stock is new construction, which means that most of the buildings that will be standing in 2030 have already been built. Staff observes that changes to Petaluma's building stock will be comparable (i.e., future new all-electric buildings vs. existing buildings using natural gas). As mentioned, the Sonoma County Regional Climate Protection Authority estimates that, in 2018, 26% of Petaluma's greenhouse gas emissions are attributable to building energy. The proposed ordinance will have no regulatory effect in lowering that percentage since it applies to new buildings rather than the existing building stock. Reducing greenhouse gas emissions from existing buildings will require a host of additional actions.

Staff presented the following broad menu of additional actions to both Climate Action Commission and Planning Commission.

- Education leading to consumer choice(s).
- Incentives to encourage consumer choice(s) such as those offered by Sonoma Clean Power and the Pacific Gas & Electric Company.
- Regulatory changes such as:
 - Incentives and/or requirements for energy efficiency upgrades when building(s) modified; and
 - Local energy efficiency ordinance (i.e., “Reach Code”) exceeding minimum standards of Title 24, Part 6 (Energy Code); and
 - Modified CALGreen building standards (e.g., to increase EV parking).

The Petaluma Climate Emergency Framework also has goals and strategies related to the building and energy sector. Also, when transmitting the Framework to the City Council, the Climate Action Commission recommended a list of priority action items related to reducing emissions from Petaluma’s existing buildings. All of these are compiled at **Attachment 4**.

Both commissions expressed support for each approach (i.e., education, incentives, regulations), generally. Staff concurs that efforts to address existing buildings are vital yet cautions committing to additional regulation at this time until a better understanding is gained of state mandated changes coming in the next code cycle. The 2021 Building Code is being written now. Code advisory committees are meeting to discuss proposed changes submitted by state agencies. After a period of public comment, State adoption will occur July 2022. Local adoption (with amendments) typically occurs in December.

Staff welcomes direction from the Council on next actions and recommends attention be focused on education and incentives until the 2021 Building Code is approved by the State Building Standards Commission. Then, as staff evaluates the code for potential local amendments, a specific emphasis will be placed on decarbonization of existing buildings. The results of that review will be conveyed in a separate report to Council, including potential review by the Climate Action Commission, as appropriate.

ENVIRONMENTAL COMPLIANCE

In accordance with the California Environmental Quality Act (CEQA), the proposed ordinance is categorically exempt under CEQA Guidelines Section 15378 (Not a Project), Section 15061(b)(3) (General Rule), Section 15307 (Class 7: Maintenance, Restoration, or Enhancement), and Section 15308 (Class 8: Actions to Protect the Environment). A detailed explanation is provided in the draft ordinance (**Attachment 1**).

CITYWIDE GOALS AND PRIORITIES

The proposed ordinance is in alignment with the following 2019-2021 City Council goal under “Our Environmental Legacy,” and which states, “Preserve and protect Petaluma’s environment for future generations and become a municipal leader in sustainability by protecting our river and open space; reducing and drawing down greenhouse gas emissions; and encouraging sustainable development.” The prohibition of natural gas in new buildings will prevent future increased in the emissions from buildings which, in the year 2018, were estimated to be 26% of all emissions.

CLIMATE EMERGENCY

As referenced in the background discussion above, the ordinance is a priority action item recommended by the Climate Action Commission. Specifically, the recommendation is that Petaluma,

“Adopt a natural gas ban for new construction and adopt a policy to phase in building energy retrofits for existing buildings to meet climate targets. Provide resources and programs to ensure retrofits are available and affordable to low-income residents and do

not cause rent increases for tenants over and above monthly savings on utility bills from the upgrades and include tenant protections to avoid displacement and eviction.”

The ordinance is also recommended by a Climate Action Framework goal (Page 16) stating, “Eliminate emissions from the building sector through zero-emission new construction (emissions embedded in materials and those emitted during construction and operation), building retrofits, appliance replacements and use of renewably generated clean electricity.” (Climate Emergency Framework, p.6.)”.

PUBLIC OUTREACH

The subject to the proposed ordinance was first elevated for public discussion at the City through the preparation and adoption of the Climate Emergency Framework. The Climate Emergency Framework was discussed at each Climate Action Commission meeting since February 2020, and both content and feedback were sought through community participation at Commission meetings, through numerous Commission ad hoc subcommittee meetings, and through a bilingual Climate Action Survey.

Public comment on the proposed ordinance was sought at the Climate Action Commission meeting of April 8, 2021 and the Planning Commission meeting on April 13, 2021. One person spoke in support of the ordinance at the Climate Action Commission meeting. One letter was provided to the Planning Commission by the Pool & Hot Tub Alliance/California Pool & Spa Association and which requested an exemption (for pools and hot tubs) from the ordinance (Attachment 5).

As discussed earlier in the report, there has also been targeted discussion with developers for approved vesting tentative maps under construction, including Tripointe and KB Homes. The primary concern expressed by these developers relates to vested rights based on hard cost and work already completed onsite.

In the event of ordinance adoption, staff will broadcast the regulatory change through a variety of means including, but not limited to, the city website and social media, local building trades meetings (e.g., Redwood Empire Association of Code Officials, North Coast Builders Exchange), and each Development Review Committee meeting discussing prospective projects. Additionally, in partnership with the Climate Action Commission, staff will coordinate with Sonoma Clean Power on the best means of sharing information about building decarbonization incentives in relation to the City’s building permit review process.

FINANCIAL IMPACTS

The ordinance is a city initiative with all staff costs charged under existing contract terms for planning services. There is no cost recovery account associated with the processing of the ordinance.

ATTACHMENTS

1. Draft All-Electric Ordinance
2. Cost Effectiveness Studies

3. CALGreen Tier 1 vs. 2 Comparison (Residential Occupancies)
4. Climate Emergency Framework & Priority Actions (Building & Energy Sector)
5. Pool & Hot Tub Alliance/California Pool & Spa Association Letter