DOCKETED	
Docket Number:	19-BSTD-06
Project Title:	Local Ordinances Exceeding the 2019 Energy Code
TN #:	230096-3
Document Title:	Marin County 2019 - Att 2 - Final Staff Report
Description:	N/A
Filer:	Gabriel Taylor
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	10/9/2019 2:46:30 PM
Docketed Date:	10/9/2019



PLANNING DIVISION

Brian C. Crawford

Thomas Lai
ASSISTANT DIRECTOR

Marin County Civic Center 3501 Civic Center Drive Suite 308 San Rafael, CA 94903 415 473 6269 T 415 473 7880 F 415 473 2255 TTY www.marincounty.org/plan October 8, 2019

Marin County Board of Supervisors 3501 Civic Center Drive San Rafael, CA 94903

SUBJECT: Proposed Ordinance to amend portions of the Marin County Code Title 19 (Building Code) and adopt updated Green Building standards.

Dear Supervisors,

RECOMMENDATION: Consider amending the Building Code updating the County's green building requirements by taking the following actions:

- 1. Conduct public hearing
- 2. Consider adopting proposed ordinance with an effective date of January 1, 2020

SUMMARY: On September 24, 2019, your Board conducted a first reading of the attached ordinance and scheduled a public hearing for October 8, 2019.

The County has required construction in the unincorporated area to comply with a range of green building and energy efficiency requirements since 2002. In March 2018, the Board adopted an overhaul of the Green Building Ordinance to update legacy requirements and incorporate new standards for buildings in Marin to be more energy efficient, comfortable, and affordable to operate. In the intervening 16 months, the framework adopted by the County in 2018 has rippled outward through the Bay Area and is under consideration by multiple jurisdictions across the region.

Title 24 of the California Code of Regulations contains the California Building Standards Code, which governs the design and construction of buildings, associated facilities, and equipment in the state. California updates these requirements every three years with the next iteration, the 2019 Title 24 code cycle, going into effect on January 1, 2020. The state's modifications to green building and energy efficiency standards for 2019 notably include mandatory solar for all new homes and multifamily developments three stories or less. This ordinance proposes to adapt the current County standards for compliance with the 2019 Title 24 code cycle, and to make targeted updates to the current policies to better achieve the County's environmental goals and ensure that requirements are easy to understand and implement.

The proposed standards support the County's sustainability goals by:

• Recognizing the greenhouse gas (GHG) emission disparities between buildings fueled by electricity and buildings fueled by natural gas. This is a result of renewable and GHG-free electricity serving the County, and the high emissions associated with natural gas extraction, distribution, and combustion. The green building standards support local GHG reduction goals by encouraging all-electric buildings and requiring additional energy efficiency for buildings that use natural gas. All of the additional energy-efficiency standards have been demonstrated to be cost-effective in state studies (Attachment 4 to this staff report).

- Highlighting electric vehicle (EV) charging readiness requirements, and exceeding standards set by the state for multifamily and commercial properties, a continuation of the policies adopted with the 2018 Green Building Ordinance.
- Requiring "Tier 1" level of green building compliance, following the state's
 recommendations for enhanced green building requirements within the CALGreen
 checklist. For applicable projects, Tier 1 requires additional mandatory and elective
 measures in the areas of planning and design, energy efficiency, water efficiency
 and conservation, material conservation and resource efficiency, and
 environmental quality.

The proposed standards seek to improve user-friendliness of the standards by:

- Seeking to align with policies being considered by multiple other jurisdictions in Marin County. The proposed codes were developed through a process that included building department and sustainability staff from multiple Marin County jurisdictions. County staff are supporting adoption in other cities and towns. This is a frequent request from Marin's building community.
- Continuing to offer flexible pathways for compliance with energy efficiency and electrification requirements.
- Using lessons learned from implementation of the standards adopted in 2018 to improve resources aimed at helping applicants and building department staff understand and comply with requirements.

Notable changes from the current green building requirements include:

• Updated energy pathways for new construction (19.04.140, Standards for Compliance). The 2019 Title 24 state standards include a requirement for installed solar photovoltaic (PV) on all new homes and low-rise multifamily developments. Previously, one of the County's pathways for new homes to comply with the local energy ordinance was a photovoltaic compliance credit. Because of the now mandatory nature of solar PV for new homes, this credit is no longer available. In response, the County has updated the options for compliance for projects to align with the new state standards and continue to support local GHG reduction goals.

The County's 2018 Green Building Ordinance update included for the first time an "electric favored" pathway, which required additional energy efficiency for buildings that use natural gas and allowed "all-electric" buildings to comply without achieving energy efficiency beyond what is required by the state. In the implementation of the 2018 Green Building Ordinance, staff heard multiple times that applicants chose not to select the all-electric pathway because they were not willing to give up gas cooking and/or a gas fireplace indoors. Because these end uses are not large users of natural gas when compared to space and water heating, the proposed code introduces a "limited mixed-fuel" pathway that allows applicants to install natural gas appliances for cooking or fireplaces along with some additional energy efficiency measures. A home that uses natural gas for cooking and/or fireplaces, as well as space- and water-heating appliances ("mixed-fuel") will be required to achieve a higher level of energy savings, attainable through additional energy efficiency measures, and solar PV, and storage. This approach supports GHG reduction goals while providing opportunities for flexibility and education as the County works to highlight the climate and health reasons for electrifying buildings.

The 2018 Green Building Ordinance included two pathways for nonresidential new construction, following the "electric favored" pathway detailed above. Those

pathways have been carried forward in this proposal. The proposed "limited mixed-fuel" pathway has also been added for nonresidential properties.

The California Public Resource Code states that a local jurisdiction may adopt more restrictive energy standards when they are cost-effective and approved by the California Energy Commission (CEC). The proposed Ordinance's energy efficiency requirements have all been determined to be cost effective via third party analysis for projects in Marin's climate zones (two and three). In other words, the additional cost of the proposed energy efficiency requirements will pay for themselves over the life of the project from energy cost savings.

Updates to electric vehicle charging readiness (19.04.140, Standards for Compliance). The proposed standards include requirements for multifamily and commercial properties to provide EV readiness infrastructure that will limit costs of development while still providing support necessary future installation of EV chargers. "Readiness" in this context means that the supporting infrastructure, such as electric service capacity, conduit, and wiring are in place to reduce project costs and complexity at the time of EV charger installation.

The proposed standards for single and two family residential remain the same - all new homes continue to be required to add additional capacity to the service panel to allow for at home Level 2 EV charging (240 volt), as is required by CALGreen Tier 1. For multifamily properties, the proposal is for one EV Ready space per dwelling unit, which reduces infrastructure costs compared to the 2018 Green Building Ordinance while providing adequate and equitable capacity for multifamily tenants. For commercial properties, the current standard for 100% EV Capable spaces is maintained as an option but is supplemented by a second pathway that would allow 20% of spaces to be fully EV Ready with EV chargers installed in 5% of those spaces. This provides an option for developers to install an amenity for the property, rather than installing capacity that may or may not be used in the future.

The County will continue to work with local partners to develop resources that would support installation of EV charging stations for multifamily and commercial properties. These resources will be updated with best practices and available funding sources throughout the code cycle without requiring modifications to EV readiness requirements in the code.

- Streamlined requirements for new single-family residential construction (19.04.140, Standards for Compliance). The proposed ordinance eliminates tiered requirements for new homes. Historically, the County's "big and tall" requirements established more intense energy standards for large homes. In the 2018 Green Building Ordinance, this requirement was for homes greater than or equal to 4,000 square feet. However, increasing efficiency in the baseline state standards, paired with State cost-effectiveness requirements (as outlined in Public Resources Code Section 25402.1(h)2), have limited the capacity of the County to enact meaningfully different policies for larger homes. The focus of the proposed ordinance is now on encouraging all-electric buildings, and has a single, streamlined set of requirements for all new homes, regardless of size.
- CALGreen as the default green building standard (Deletions in 19.04.130, Definitions). As the state's green building standards have evolved, they are now on par with (and in some instances exceed) third-party private rating systems such

as LEED and Green Point Rating (GPR). Historically, the County used these third-party systems as the basis for local green building standards, but with the evolution of CALGreen, this now adds complexity to the process for applicants. Third-party systems will still be allowed, but only by submitting a petition to the building official and demonstrating at least an equivalent level of compliance with the County's green building standards. Energy efficiency and EV readiness requirements will remain the same regardless of whether an exemption to use a different green building rating system is provided.

Revised residential remodel threshold for ADUs (19.04.140, Standards for Compliance). Currently the County's threshold for requiring residential remodels and additions to submit a CALGreen Tier 1 checklist is 750 square feet. This threshold has been increased to 1,200 square feet to reduce the burden on a majority of ADU projects.

The proposed policies seek to achieve progress towards Countywide Plan and Climate Action Plan goals while also recognizing the importance of developing policies that are clear, consistent, and achievable. All additional energy efficiency requirements apply to new buildings and tear down/rebuilds under the County's policy, but staff understand that these standards alone will not achieve necessary GHG emission reductions in the built environment due to the fact that most communities in Marin are built out. The proposed ordinance sets a progressive standard for new homes but is paired with ongoing work by the Sustainability Team to promote and provide financial incentives to property owners for energy efficiency and electrification in retrofits and remodels, such as through BayREN's Single Family and Commercial programs and Electrify Marin. Together with the green building ordinance, these programs provide opportunities for all buildings to reduce their carbon footprint, save money, and support a healthier built environment across Marin County.

The proposed Ordinance repeals and replaces chapter 19.04 (Green Building Requirements) of the Marin County Code Title 19 Building Code and sets the effective date as January 1, 2020, provided that the additional energy efficiency requirements of the Ordinance cannot be enforced by the County until it has further been approved by the California Energy Commission.

FISCAL/STAFFING IMPACT: This action does not impact the General Fund.

REVIEWED BY:	
Department of Finance	[X] N/A
X] County Counsel	[] N/A
Human Resources	[X] N/A

PG. 5 OF 5

SIGNATURE:

Approved by:

Alice Zanmiller

Planner

Brian C. Crawford

Director

William Kelley (Deputy Director

Attachments:

- 1. Ordinance Adopting Amendments to Marin County Code Title 19 (Building Code)
- 2. Proposed Text Amendments with Track Changes
- 3. Marin County Green Building Requirement Checklists
- 4. Energy Cost-Effectiveness Studies
- 5. Communications Received

,			