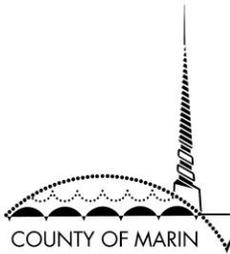


DOCKETED

Docket Number:	16-BSTD-07
Project Title:	Local Ordinance Applications - 2016 Standards
TN #:	223015-2
Document Title:	County of Marin Staff Report Outlining the Goals of the Updated Green Building Standards
Description:	Att. 2
Filer:	Ingrid Neumann
Organization:	County of Marin Community Development Agency Planning Division
Submitter Role:	Public Agency
Submission Date:	3/22/2018 12:43:29 PM
Docketed Date:	3/22/2018



COMMUNITY DEVELOPMENT AGENCY
PLANNING DIVISION

March 13, 2018

Brian C. Crawford
DIRECTOR

Thomas Lai
ASSISTANT DIRECTOR

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.

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

Dear Supervisors,

RECOMMENDATION:

1. Conduct public hearing.
2. Consider adopting proposed ordinance with an effective date of April 12, 2018.

SUMMARY: The County has been requiring residential projects to comply with increased green building and energy efficiency requirements since 2002. In 2010, the Board completed an overhaul of the Green Building Ordinance to expand the requirements to include residential new construction, additions, and renovations, and commercial and multifamily projects. However, best practices have evolved since the 2010 adoption and this update seeks to incorporate new policies to make buildings in Marin more energy efficient, comfortable, and affordable to operate. There are six primary changes in the amendments.

- **Energy efficiency measures separated from green building measures.** Green building standards currently require submittal of a Green Point Rated (residential) or Leadership in Energy and Environmental Design (commercial) checklist demonstrating that the project has achieved the number of points required of their project. Categories in the checklists range from community measures, such as street-facing porches and proximity to a transit stop, to building performance and renewable energy measures. By only requiring the achievement of a total number of points, the County's current code allows applicants to under-achieve on measures such as energy efficiency but make up the points in other areas. While the County wants to encourage broader green building measures, the reduction of energy use in buildings is a key part of making homes more comfortable, cost effective, and less carbon intensive. To address this ambiguity, the updated green building ordinance splits out green building and energy efficiency requirements. This clarifies the requirements for reducing energy use in new buildings.
- **Emphasis on performance vs prescriptive measures.** Stakeholders within local jurisdictions and the building community have emphasized the need for flexibility in green building requirements. Mandatory solar ordinances have grown in popularity across California jurisdictions in recent years. This is often referred to as a prescriptive requirement, because it outlines a specific measure the applicant would need to complete. This ordinance was developed with all of Marin County in mind, and many of our local geographies, such as shady valleys or large Redwood groves, are unsuitable

for onsite solar. To increase applicability of the ordinance for multiple jurisdictions and geographies, these standards include performance energy efficiency standards, which allow applicants to meet more stringent requirements in the most efficient way for their property. While applicants can still get credit for installing solar, other pathways are available for those that can't or don't want to produce energy on site. This saves time for both the jurisdiction and applicant, because less time is spent determining an appropriate alternative.

- **All electric building option for new construction.** As Marin County's sources of electricity generation grow increasingly cleaner, reducing remaining emissions from building energy use requires focus on natural gas. Because of the inherent emissions from natural gas burning, attention has increasingly turned to reducing the need for natural gas in the first place. However, as the state energy code currently stands, developing a compliant all-electric building is more difficult than developing a mixed-fuel building that uses both natural gas and electricity. Recognizing the regulatory challenges to building all-electric, and the importance of beginning to develop a built environment that depends less on natural gas, the County has included an option to build an all-electric new building that meets the state efficiency standards rather than having to exceed them.
- **Streamlined project tiers.** The existing Green Building Standards include five project size tiers identified by both square footage and project valuation. The inclusion of project valuation has led to confusion as projects of essentially the same scope can have widely varying valuations depending on design and materials selected. Additionally, the granularity of the tiers did not necessarily result in additional energy savings or green building measures but added to the complexities of the application process. To resolve these issues, the proposed Ordinance includes only two tiers in each building sector.
- **Additional energy efficiency requirements for homes over 4,000 square feet.** While the number of size-based tiers have been reduced in the updated ordinance to streamline the process, a new threshold has been introduced to preserve the intentions of the County's original 2002 Single Family Dwelling Energy Efficiency Ordinance (also known as the "Big & Tall" Ordinance). This requires that new homes greater than 4,000 square feet offset their total annual electricity use through efficiency measures and onsite renewables.
- **Electric Vehicle (EV) Charging Infrastructure.** Under the revised code, all new homes would be required to add additional capacity to the service panel to allow for at home Level 2 EV charging (240-volt, 40-amp minimum). This reduces barriers to EV purchasing by allowing charging at home without having to undergo a service panel upgrade after the house is built. This is also required for single family remodels where the service panel is being expanded.

For new multifamily and commercial projects, 10% of the parking spaces need to have everything but the charger installed (EV Ready), and the remaining spaces will have conduit laid and service panel capacity designated in anticipation of later EV installation (EV Capable). For multifamily and commercial remodels and additions, the requirements to add

service capacity and/or conduit is based on specific scope triggers to achieve project cost efficiencies. For projects where the electrical service panel is already being modified, capacity for future EV charging in 20% of parking spaces must be added. For projects that are modifying 25% or more of the parking lot surface, conduit for future EV charging must be run to all parking spaces, and where electrical service will not be upgraded in the original project scope, capacity must be designated to the maximum extent currently available. In Marin County, which has one of the highest EV purchase rates of any California County, it will be vitally important to build out local infrastructure to support greater EV adoption.

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 our climate zones. In other words, the additional cost of the proposed energy efficiency requirements will pay for themselves over the life of the project from reduced energy usage at the site.

These code updates will further the County’s sustainability and green building goals included in the Countywide Plan and supports the County’s efforts to reduce greenhouse gas emissions from the built environment as outlined in the Climate Action Plan 2015.

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 30 days from the date of final passage, 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:

<input type="checkbox"/> Department of Finance	<input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> County Counsel	<input type="checkbox"/> N/A
<input type="checkbox"/> Human Resources	<input checked="" type="checkbox"/> N/A

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. Communications Received