MEETING DATE: August 22, 2023

AGENDA TITLE: Introduce an Ordinance Amending the Town's Green

Building Regulations

FROM: Sean Youra, Climate Action Coordinator

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Item #: 3.3

RECOMMENDATION:

An ordinance of the Town repealing and replacing San Anselmo municipal code title 9 (building regulations) chapter 19 (green building requirements) to adopt amendments to the California green building standards code to reflect local conditions.

BACKGROUND

On February 14, 2023, staff presented the background and details of the County's green building model reach code to the Town Council. The model reach code was developed in collaboration with local jurisdiction staff and stakeholders including community-based organizations, the building community, utilities, Town/City commissions, Town/City councilmembers, and residents.

On June 27, 2023, staff presented recommendations for adoption of the requirements in the model reach code including the following recommended revisions:

- Not including the all-electric requirements for new construction.
- Not including separate EV charging infrastructure requirements for hotels and motels.
- Add a requirement for new multifamily construction to install long-term bike parking per CALGreen Section A4.106.9.2.

The Town Council directed staff to bring back an ordinance for first reading that incorporates the model reach code requirements with staff recommended revisions. However, the Council also directed staff to bring back examples of projects that would have to comply with the electric-readiness requirements as covered in Table 3 of the model reach code. Additionally, the Council directed staff to evaluate whether any CALGreen Tier 2 requirements should be considered for adoption rather than just

CALGreen Tier 1 requirements as covered in Section 19.04.135 and Table 1 of the model reach code.

DISCUSSION/ANALYSIS

The proposed Ordinance incorporates the model reach code requirements with staff recommended revisions (Attachment 1). Staff has also analyzed the electric-readiness requirements and CALGreen requirements further, which are discussed in the following sections and include staff recommendations for these specific requirements that are already incorporated in the proposed Ordinance.

Electric-Readiness Requirements and Costs

The electric-readiness requirements and exemptions in the model reach code that apply to single-family additions and alterations affecting 750 or more square feet are summarized below based on whether the project includes a laundry room remodel, a kitchen remodel, and/or an electrical panel upgrade. Electric-readiness means that wiring, outlets, and sufficient electrical capacity are provided for the future installation of electric appliances. Importantly, none of the projects covered in the table require all appliances in the home to be electric-ready. Rather, the specific electric-readiness requirements are dependent on the type of project (e.g., an applicable laundry room remodel would require the clothes dryer to be electric-ready). These requirements are further detailed in Table 3, Measure ER2 of the model reach code.

Type of Project	Requirements	Exemptions
Laundry Room Remodel	Electric Clothes Dryer Ready Upgrade main panel to 200 A unless electrical load calculations indicate future connection of electric appliances can be served with 100 A	 Any buildings besides single-family buildings as defined in the code If the entire remodel project (including the laundry room remodel) is less than 750 sq. ft. If an electrical permit is not required for the remodel project other than compliance with this requirement Hardship/infeasibility (e.g., compliance cost disproportionate to overall project cost) New attached ADUs or JADUs Mobile homes, manufactured housing, or factory-built housing Income qualified homeowners based on eligibility for California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs
Kitchen Remodel	 Electric Cooktop Ready Upgrade main panel to 200 A unless electrical load calculations 	Any buildings besides single- family buildings as defined in the code

Type of Project	Requirements	Exemptions
	indicate future connection of electric appliances can be served with 100 A	 If the entire remodel project (including the kitchen remodel) is less than 750 sq. ft. If an electrical permit is not required for the remodel project other than compliance with this requirement Hardship/infeasibility (e.g., compliance cost disproportionate to overall project cost) New attached ADUs or JADUs Mobile homes, manufactured housing, or factory-built housing Income qualified homeowners based on eligibility for California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs
Electrical Panel Upgrade (as part of a remodel project)	Install any two electric readiness measures along with the panel upgrade (e.g., heat pump water heater ready, electric cooktop ready, EV charger ready)	 Any buildings besides single-family buildings as defined in the code If the panel will not be upgraded as part of the remodel project Hardship/infeasibility (e.g., compliance cost disproportionate to overall project cost) New attached ADUs or JADUs Mobile homes, manufactured housing, or factory-built housing Income qualified homeowners based on eligibility for California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs

It is generally difficult to estimate costs with these types of projects due to the number of different factors that can influence the total cost. However, based on a cost analysis previously presented to the Town Council at the June 27th meeting, the average cost for an electrical panel upgrade is approximately \$6,750 before incentives. This is slightly higher than the County's estimated cost range of \$4,000 - \$6,000 for an electrical panel upgrade. With Electrify Marin rebates and the Inflation Reduction Act (IRA) tax credit, this cost can be reduced to \$5,650 or \$5,150 (for low-income qualified homeowners). Future IRA rebates that are expected to be available by the end of the year will cover up to \$4,000 of the panel upgrade cost for low- and moderate-income households. A \$2,000 rebate for electrical panel upgrades will also be available to homeowners that also install a heat pump water heater (HPWH) as part of the TECH Self-Generation Incentive Program (SGIP) program that will be available in Q3 2023. As stated in the requirements in the table above, the electrical panel does not need to be upgraded to

200 A for kitchen and laundry remodels if it can be shown through load calculations that 100 A would provide sufficient capacity for future installation of electric appliances. Estimated wiring costs specific to kitchen or laundry remodels could not be determined, but wiring for 240 V circuits for applicable electric appliances in a home is estimated to be around \$2,000 - \$2,500. Costs can be significantly reduced or eliminated if 240 V circuits aren't required and the existing 120 V circuits can be used. Additionally, up to \$2,500 in IRA rebates will be available to low- and moderate-income households to cover electrical wiring costs associated with installing electric appliances.

Based on the analysis discussed above, staff still recommends that the electric-readiness requirements be included in the adoption of the proposed Ordinance. It is important for single-family homes, which make up the majority of the building stock in San Anselmo, to start planning for the future electrification of appliances if the Town is to achieve its greenhouse gas (GHG) emissions reduction goals by 2030 and to reduce the negative public health impacts associated with the use of gas appliances that were discussed with the Council at the February 14th meeting. The costs associated with the electric-readiness requirements can be avoided through careful planning in many cases or can be significantly reduced by applying for applicable rebates and tax credits.

CALGreen Tier 1 vs. Tier 2 Requirements

Part 11 of the California Building Standards Code includes green building standards referred to as CALGreen. These green building standards were developed in an effort to meet the GHG emissions reduction goals codified in AB 32. The main intent of CALGreen is to ensure sustainable construction practices for both new buildings and applicable additions and alterations. CALGreen includes five main divisions:

- 1. Planning and Design (includes EV charging infrastructure requirements)
- 2. Energy Efficiency
- 3. Water Efficiency and Conservation
- 4. Material Conservation and Resource Efficiency
- 5. Environmental Quality

Separate mandatory requirements for each division are included for both residential (Chapter 4) and nonresidential (Chapter 5) buildings. Additional voluntary standards for residential (Appendix A4) and nonresidential (Appendix A5) buildings are also included in CALGreen, which are referred to as CALGreen Tier 1 and Tier 2. Local jurisdictions have the authority to adopt these more stringent voluntary standards rather than the minimum mandatory standards to further minimize the building's impact on the environment and promote more sustainable design. CALGreen Tier 1 requirements are more stringent than the mandatory requirements while CALGreen Tier 2 requirements are more stringent than both Tier 1 and the mandatory requirements. CALGreen Tier 2 also requires more elective measures from some of the divisions (i.e., Planning and Design, Water Efficiency and Conservation, and Material Conservation and Resource Efficiency) to be implemented compared to Tier 1. A summary of the differences between CALGreen Tier 1 and Tier 2 for residential and nonresidential buildings is provided in Attachment 2. Any text in red denotes new requirements in the 2022 version of CALGreen compared to the previous 2019 version.

As summarized in Table 1 of the proposed Ordinance, CALGreen Tier 1 requirements would apply in the following scenarios:

- New construction (applies to any building type)
- Single-family additions/alterations affecting 750 sq. ft. or greater
- Multifamily additions/alterations affecting 750 sq. ft. or greater
- Nonresidential additions/alterations

This is similar to San Anselmo's current green building code, but instead of requiring CALGreen Tier 1 for single-family or multifamily additions/alterations affecting 1,200 or more sq. ft., the proposed Ordinance lowers the threshold to 750 sq. ft. The proposed Ordinance also uses a three-year period instead of a one-year period for determining whether the cumulative project size of the additions/alterations within that period are subject to the CALGreen Tier 1 requirements.

Based on a review of the CALGreen Tier 1 and Tier 2 requirements, staff recommends only requiring CALGreen Tier 1 for the scenarios discussed above for the following reasons:

- San Anselmo has historically adopted CALGreen Tier 1 including for the current 2022 code cycle that remains in effect until 2025.
- No other Marin jurisdictions have adopted CALGreen Tier 2 and very few jurisdictions across the State have adopted Tier 2.
- The CALGreen code cautions jurisdictions that may be considering adopting CALGreen Tier 2 stating, "The measures necessary to achieve Tier 2 status are very stringent. Cities, counties, and cities and counties considering adoption of Tier 2 as mandatory should carefully consider the stringency of each measure and ensure that the measures are achievable in their location." It is difficult to ascertain whether the more stringent CALGreen Tier 2 measures are achievable for projects in San Anselmo.
- It is unlikely that adopting CALGreen Tier 2 requirements will lead to substantial GHG emissions reductions or other environmental benefits compared to Tier 1 requirements, but will likely add additional costs for projects to comply. Furthermore, it's expected that lowering the requirement threshold from 1,200 to 750 sq. ft. for single-family and multifamily additions/alterations that have to comply with CALGreen Tier 1 will have a significantly greater effect on emissions reductions than adopting Tier 2 instead of Tier 1 requirements.
- The proposed Ordinance already exceeds both CALGreen Tier 1 and Tier 2 for the EV charging infrastructure requirements, specifically for new multifamily construction and additions/alterations of single-family, multifamily, and nonresidential buildings.

Requiring a mix of CALGreen Tier 1 and Tier 2 requirements would complicate
the code making it more difficult for project applicants to understand and more
difficult for building department staff to enforce. Additionally, one of the original
goals of developing a model reach code was to have more consistency in green
building requirements across all Marin jurisdictions. If requirements become too
complicated or burdensome, this can lead to permit avoidance.

FISCAL IMPACT

There is no fiscal impact to the Town to adopt the proposed Ordinance. However, staff time will be required to implement the Ordinance including developing green building checklists and other materials to assist in compliance.

GENERAL PLAN CONSISTENCY

The proposed Ordinance is consistent with the Town's General Plan including the conservation goals in the Conservation Element.

CEQA AND CLIMATE ACTION PLAN CONSISTENCY

Adoption of this Ordinance does not require review under the California Environmental Quality Act (CEQA) because it does not constitute a "project" pursuant to California Public Resources Code section 21065 and CEQA Guidelines section 15378, as its adoption does not involve an activity that has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment.

The proposed Ordinance is consistent with the following measures in the Town's Climate Action Plan including:

- E-4: Green Building Reach Code: Investigate adopting a green building ordinance for new and remodeled commercial and residential projects that requires green building methods and energy efficiency savings above the State building and energy codes. Consider utilizing the County's green building ordinance as a model and including the use of photovoltaic systems and allelectric building systems as options to achieve compliance.
- R-3: Building and Appliance Electrification: Promote electrification of building systems and appliances that currently use natural gas, including heating systems, hot water heaters, stoves, and clothes dryers.

CONCLUSION

Staff respectfully requests Council's introduction of the proposed Ordinance.

ATTACHMENTS

Attachment 1 – Proposed Ordinance Attachment 2 – CALGreen Tier 1 and Tier 2 Comparison