



Contra  
Costa  
County

To: Board of Supervisors  
From: AD HOC COMMITTEE ON SUSTAINABILITY, Supervisors John Gioia  
& Federal D. Glover  
Date: August 3, 2021

Subject: Building Electrification Ordinance for New Construction

### **RECOMMENDATION(S):**

AUTHORIZE the Conservation and Development Director, or designee, to develop an ordinance amending the County building code to require electricity as the sole source of power, and to prohibit the installation of natural gas piping, for all newly constructed residential and non-residential building types where the California Energy Commission (CEC) has accepted studies demonstrating the cost effectiveness of such requirement(s) for all climate zones in Contra Costa County; and

REFER to the Sustainability Committee on whether newly constructed restaurants and industrial buildings, such as life sciences and manufacturing, should be required to be all-electric in a future amendment to the County building code.

### **FISCAL IMPACT:**

This activity could be accomplished with existing staff. Technical assistance for the development of the ordinance is provided through funding from the Bay Area Regional Energy Network. There is no direct cost to the County if the Board chooses to use existing cost-effectiveness studies, which are used to demonstrate

☒ APPROVE

☐ OTHER

☒ RECOMMENDATION OF CNTY

☐ RECOMMENDATION OF BOARD

ADMINISTRATOR

COMMITTEE

Action of Board On: **08/03/2021** ☒ APPROVED AS RECOMMENDED ☐ OTHER

Clerks Notes:

See Addendum

### **VOTE OF SUPERVISORS**

AYE: John Gioia, District I Supervisor  
Diane Burgis, District III Supervisor  
Karen Mitchoff, District IV Supervisor  
Federal D. Glover, District V Supervisor

NO: Candace Andersen, District II Supervisor

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: August 3, 2021

Monica Nino, County Administrator and Clerk of the Board of Supervisors

Contact: Demian Hardman-Saldana,  
925-655-2816

By: June McHuen, Deputy

cc:

## FISCAL IMPACT: (CONT'D)

the findings and supporting analyses required under Section 10-106 of the State's Building Energy Efficiency Standards to adopt amendments to a locally adopted building code that increase energy code requirements beyond the State-wide minimum requirements, commonly referred to as a "reach code." Cost effectiveness studies substantiate that the initial cost paid by an owner to install the improvements at the time of construction will be paid back in savings over time. The County may also request the CEC to conduct studies, at no cost to the County, to determine the cost effectiveness of building electrification in additional building types not covered by existing studies.

The County could also choose to hire a technical consultant at the County's expense to complete its own independent cost-effectiveness study for any particular building type. However, this approach is not recommended because CEC staff has confirmed that it can assist with providing cost-effectiveness studies, if requested by the County.

## BACKGROUND:

On September 22, 2020, the Board of Supervisors adopted a Climate Emergency Resolution, which included among other things, that the County should develop policies to require newly constructed buildings to be fully powered by electricity. The built environment is one of the largest sources of greenhouse gas emissions in the County and in California.

On May 24, 2021, the Sustainability Committee received a report from staff on the requirements needed to amend the County building code to require that certain types of newly constructed buildings be powered only by electricity, including the requirement that such amendments be demonstrated to be cost-effective for the property owner.

An alternative to amending the County building code to require full electrification of newly constructed buildings would be to wait for such requirements to be incorporated into the California Building Code. The next State building code update will occur in mid-2022 with an effective date of January 1, 2023. This code update is expected to require in most cases where gas equipment is being installed for new construction the building also be designed to be electric ready. It is also expected that an all-electric building code for new construction would not be required until the 2025 building code is adopted, which would become effective on January 1, 2026.

## SUSTAINABILITY COMMITTEE RECOMMENDATION(S)

The Sustainability Committee recommends that the Board of Supervisors authorize staff to develop an ordinance amending the County building code to require that newly constructed buildings be powered only by electricity for all building types where studies have already been accepted by the CEC demonstrating the cost effectiveness of such requirements for the property owner. Table 1 below is a list of all the building types recommended by the Committee where cost-effectiveness studies have been completed

that cover Contra Costa County (Climate Zones 3 and 12).

**Table 1**

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|--|
| <b><i>- Cost-Effectiveness Studies Completed - Building Types Recommended by Sustainability Committee</i></b>                            |
| <b><i>Residential</i></b>  |
| Low-Rise Residential (Single-Family or Multi-Family, 3 stories or less)  |
| <i>Detached Accessory Dwelling Units (ADUs)*</i>   |
| <i>Mid-Rise Residential (4 to 7 stories) *</i>   |
| <i>High-Rise Residential (8 stories or higher) *</i>   |
| <b><i>Non-Residential</i></b>  |
| <i>Hotel</i>   |
| <i>Office</i>  |
| <i>Retail</i>  |
| * Cost-effectiveness studies obtained from the CEC that were not included in the report to the Sustainability Committee on May 24, 2021. |

The Committee's initial recommendation was to direct staff to have the Statewide IOU Team complete cost-effectiveness studies for Detached Accessory Dwelling Units, Mid-Rise, and High-Rise Residential building types. However, at the time this recommendation was made, County staff had not been informed by the CEC that cost-effectiveness studies had been completed for all these building types. In summary, the reports for the additional residential building types found that an all-electric only building code were cost-effective for all climate zones in Contra Costa County. These reports are provided in Exhibit B, attached.

Since the Committee did not provide specific direction on obtaining cost-effectiveness

studies for other building types beyond the building types listed in Table 1 above, staff recommends the Board of Supervisors refer to the Sustainability Committee on whether newly constructed restaurants and industrial buildings, such as life sciences and manufacturing be required to be all-electric in a future amendment to the County building code.

## OUTREACH TO BUILDING INDUSTRY

At the direction of the Sustainability Committee, County staff also met with staff from the Building Industry Association (BIA) and East Bay Leadership Council (EBLC) to solicit feedback on the Committee's recommendation to the Board. Paramount to our conversation was that the building industry should be given sufficient time to adapt to the building code changes so that projects in the pipeline for new construction would not require a redesign to comply with such changes. The BIA also expressed concerns related to the costs of operating all-electric homes (see attached letter for additional detail) while acknowledging that many jurisdictions in the Bay Area have or will soon prohibit the use of natural gas in new construction based on anticipated greenhouse gas emissions reductions.

## CONSEQUENCE OF NEGATIVE ACTION:

The County would not implement one of the actions specified in its Climate Emergency Resolution adopted by the Board of Supervisors on September 22, 2020.

## CLERK'S ADDENDUM

**Speakers: Floy, Richmond; Janet Johnson, Richmond; Eduardo Martinez, Richmond City Council; Elsa Stevens; Shoshana W., Sunflower Alliance; Dan Geiger; Brad Waite, Walnut Creek; Howdy Goody; Jan Warren, Interfaith Climate Action Network of Contra Costa; Marisol, Richmond; Lisa Jackson, 350 Contra Costa; Melissa Yu; Dr. Cynthia Mahoney, Climate Health Now; Brenna Shehezada, Climate Reality Project; Carol; Linda Deschambault, Contra Costa Climate Leaders; Wes Sullens, Sustainability Commission; Gary Farber; Renee Fernandez-Lipp; Patricia Aguilar, Bay Point; Denise Dennis, 350 Contra Costa, Betty Lobos, Concord; Ogie Strogatz; Claudia Reynolds.**

The Board clarified that the proposed ordinance would apply only to new construction projects, not including any restaurant or industrial buildings. In the proposed draft ordinance to be brought back to the Board for review, staff will address concerns related to:

1. Accessory Dwelling Units (ADU's), specifically in regard to attached/detached, with the expectation that attached units would be allowed to continue the energy delivery model of the dwelling it would be attached to (detached would qualify as a new building);
2. The allowed use of backup power sources such as generators that may be fossil-fuel operated that would be used as replacement power should there be an emergency in which electric power is not available;
3. The possible need for exemptions in locations where the supply of solar and/or electric power is not reliable or deemed

sufficient; 4. The timing of when the draft ordinance provisions would come into effect in relation to the new construction, such as the date upon which the application for a building permit is filed;

ADOPTED the staff recommendations to include those matters raised today and REQUESTED that staff provide information to the Board in regard to future retrofit of existing buildings, particularly those located in low-income area's.

#### ATTACHMENTS

Exhibit A- Sub Committee Rpt.

Exhibit B-2019 Cost-effectiveness Study

BIA Comment Letter

Building Electrification Ordinance for New Construction-Presentation