DOCKETED	
Docket Number:	19-DECARB-01
Project Title:	Decarbonization
TN #:	233374
Document Title:	BayREN Comments re AB 3232 Comments - BayREN Comments re AB 3232
Description:	N/A
Filer:	Karen Kristiansson
Organization:	BayREN
Submitter Role:	Public Agency
Submission Date:	6/8/2020 4:38:13 PM
Docketed Date:	6/8/2020

BAYREN

Local Governments Empowering Our Communities

June 8, 2020

California Energy Commission
Dockets Office MS-4
1516 Ninth Street
Sacramento, CA 95814-5512
Submitted via Docket No. 19-DECARB-01

Re: AB 3232 Assessment of GHG Reduction Potential
in Residential and Commercial Building Stock

Dear Commissioners and Staff,

The San Francisco Bay Area Regional Energy Network (BayREN) is pleased to submit these comments and recommendations for the agencies charged with implementation of AB 3232: the California Energy Commission (CEC), the California Independent System Operator (CAISO), and the California Public Utilities Commission (CPUC) (collectively "implementing agencies"), for consideration.

BayREN is a collaboration of the Association of Bay Area Governments (ABAG) and the nine Bay Area counties that administers energy savings programs throughout the region. Our programs include electrification measures, particularly for single family and multifamily buildings, and we are working to complement our energy efficiency measures by adding incentives, public education, contractor and professional trainings and cross-promotion of measures that will also reduce greenhouse gas emissions from existing buildings. Based on our experiences, BayREN suggests the implementing agencies:

- Develop a framework to align state goals, including cost effectiveness;
- Include assumptions about increasing demand for air conditioning when carrying out cost effectiveness calculations for space heating and cooling in existing buildings;
- Increase the rate of existing building retrofits, through voluntary and/or mandatory programs, including
    - Using incentives and rebates to reduce equity impacts,
    - Coordinating new efforts with existing programs, and
    - Developing mandatory approaches with compliance in mind; and
- Modify existing low-income programs and develop electrification readiness pilots in order to serve the multifamily building sector effectively.

Each of these recommendations will be discussed in turn.

Develop a framework to align state goals, including cost effectiveness.
Cost-effectiveness has been a key element of energy efficiency programs for decades and has ensured that consumers save enough on their energy bills to pay for required energy efficiency measures. State goals related to the energy sector have expanded beyond energy savings to reducing greenhouse gases and mitigating the impacts of climate change on public health and safety. Minimizing cost impacts continues to be important, particularly given the current economic difficulties, the Covid-19 impacts, and high unemployment. We caution, however, against prioritizing cost effectiveness over other state goals.

Using cost effectiveness as the primary metric will inhibit the adoption of new, low-emission technologies which may need to gain market share in order to become cost effective. While cost effectiveness should be considered as an important goal, there must also be a recognition that this may sometimes work at cross-purposes from other goals.

We hope that the AB 3232 Assessment will establish a framework for aligning state goals, including documenting trade-offs and synergies between state goals such as greenhouse gas reductions, energy savings, grid impacts, and cost effectiveness. This framework is needed to bring these efforts together and maximize synergies while avoiding working at cross-purposes. California will only be able to meet its greenhouse gas emissions goals, particularly those for existing buildings, with a concerted, coordinated effort.

Include assumptions about increasing demand for air conditioning when carrying out cost effectiveness calculations for space heating and cooling in existing buildings.
When evaluating cost-effectiveness of strategies for reducing greenhouse gas emissions from space heating in existing buildings, we ask that the methodology consider the increasing demand for air conditioning as temperatures rise and climate conditions change. Because heat pump space heaters include air conditioning, replacing an existing gas heater with an electric heat pump space heater also adds air conditioning capabilities, even if air conditioning was not available before. At the same time, air conditioning is often already being independently sought as part of retrofit projects.

The Fourth Climate Change Assessment for the San Francisco Bay Area notes that "[e]ven with substantial global efforts to reduce greenhouse gas emissions in the coming decades, the Bay Area will likely see a significant increase in temperature by mid-century."[1] Many existing homes in the Bay Area do not currently have air conditioning, which leads to both increased use of inefficient cooling technologies such as window units[2] and negative health impacts, particularly on low income and

[1] https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-005_SanFranciscoBayArea_ADA.pdf, p. 13.
[2] https://www.sfchronicle.com/business/article/Air-conditioners-a-Bay-Area-rarity-are-selling-13968796.php

disadvantaged residents.[3] Municipal buildings are also facing this situation. BayREN's Municipal Zero Net Energy/Carbon Technical Assistance Program recently assisted the City of Oakland with a project to improve energy efficiency even while adding air conditioning in a branch of the Oakland Public Library which had started having to close on hot days. Hence, the question is often not whether to add air conditioning to existing buildings, but rather what type to add.

BayREN requests that the implementing agencies acknowledge this reality when evaluating the cost-effectiveness of upgrading from a gas furnace to high efficiency electric heat pump space heating in areas where the existing building stock has not included air conditioning in the original building construction, such as coastal portions of the San Francisco Bay Area. This will involve estimating and projecting the demand for air conditioning for existing buildings as temperatures increase, and considering the relative energy impacts of the different options, ranging from window units to heat pump space heaters. Utilities are rightfully concerned with unpredictable load growth from newly installed air conditioning from a grid management perspective, necessitating a way to estimate and track this growth.

Increase the rate of existing building retrofits, through voluntary and/or mandatory programs.

In the San Francisco Bay Area, almost 7 out of 10 single family homes and 6 out of 10 multifamily homes pre-date the state's energy efficiency standard, first adopted in 1978. About 2/3 of these buildings will still exist in 2050. Some of the owners of these buildings will retrofit them voluntarily, either as part of normal maintenance or building upgrades. At the current rate, however, it would take over 100 years to retrofit all of these existing buildings.

In order to meet state goals, the rate of existing building retrofits will need to be increased significantly. This can be done either by providing incentives, subsidies, or other enticements for voluntary actions; or by mandating retrofits through the California Building Code, other policy vehicles; or through a mix of these measures.

Use incentives and rebates to reduce equity impacts.

Retrofitting buildings is expensive. Many low-income (and moderate-income) homeowners will not be able to afford improvements, and low-income tenants could find themselves facing increased rents once multifamily buildings have been retrofit. Additional subsidy will be needed, and carefully designed and administered incentives and rebates can help address these inequities.

Coordinate new efforts with existing programs.

New efforts aimed at reducing greenhouse gas emissions from existing buildings should be coordinated with and leverage efforts with complementary goals, such as energy efficiency programs. This type of coordination has several benefits. First, consumers can potentially reap the benefits of a more comprehensive approach through coordination by using one program to address life-safety or public health concerns together with energy efficiency or electrification measures. Second, using

[3] https://www.kqed.org/science/1933237/investigation-finds-home-can-be-the-most-dangerous-place-in-a-heat-wave

the infrastructure of existing programs can help to reduce administrative costs and effort for new programs. Most importantly, coordination can help simplify information and processes for consumers, so that they are not confused by a plethora of different, uncoordinated programs.

One example of such coordination is a BayREN project to work with Bay Area clean energy providers under a grant from the Bay Area Air Quality Management District to develop a regional incentive program for heat pump water heaters. This program uses a common application processing system for contractors for different, layered incentives in participating areas. As a result, a contractor who works in both MCE and East Bay Community Energy territories can now use the same, common platform to obtain an incentive in both areas, and at the same time, leverage BayREN's Home+ program. Regional coordination can increase the uptake and impact of a program, and simplify the process for the market.

Develop mandatory approaches with compliance in mind

To meet state goals, mandatory measures such as new code requirements will likely be needed. The Building Decarbonization Coalition suggested in their presentation in the docket that the Energy Code should be emissions-based, and the CEC has already been incorporating elements into the Energy Code aimed at reducing greenhouse gas emissions. Work on the 2022 Energy Code is underway, and additional mandates may be added through the Building Code or another vehicle.

When developing new requirements, BayREN strongly recommends that the implementing agencies consider at the outset how to ensure compliance. A complex regulation may address the goal in theory, but in practicality, it needs to be understandable, implementable, and enforceable in order to achieve the stated purpose. We recommend the implementing agencies work with local government officials, staff, and others responsible for implementation and enforcement of any new requirements.

Modify existing low-income programs and develop electrification readiness pilots in order to serve the multifamily building sector effectively.

To increase multifamily retrofits, existing low income and multifamily programs will need to align with AB 3232 goals. CPUC staff are already working on a proposal to better integrate the Energy Savings Assistance (ESA) program with other programs touching low-income residents who live in multifamily buildings; we recommend a similar alignment with the Low Income Weatherization Program (LIWP) program.

Based upon BayREN's experience successfully engaging multifamily property owners to conduct energy efficiency upgrades through our Bay Area Multifamily Building Enhancement (BAMBE) incentive program, we recommend modifying both the ESA and LIWP programs to better leverage multiple sources of funding and increase access to the energy efficiency potential in multifamily buildings. These modifications should be aimed at moving towards a one-stop shop for low-income customers in multifamily buildings by:

- Improving data sharing between program implementers to help alleviate the duplication of administration and paperwork for participants;

- Streamlining the income verification process, aligning income requirements between programs, and sharing income verification between programs such as ESA, LIWP, Solar on Multifamily Affordable Housing (SOMAH), and Self-Generation Incentive Program (SGIP);
- Allowing multifamily property owners to have the flexibility to utilize their own contractors, rather than having to work with separate approved contractor networks for each program;
- Providing significant or full subsidies for electrification measures through ESA in order to enable low-income households to adopt electrification strategies that might otherwise not be available to them; and
- Integrating programs through a seamless technical assistance provider who could assist participants with accessing services and subsidies.

We also support Gridworks' recommendation from their presentation in the docket on gathering and evaluating data on electrical panel and wiring infrastructure in multifamily buildings. Having this data would enable pilot programs to get multifamily buildings electrification-ready. We note that some of this groundwork is being developed in a report by StopWaste entitled "Electrification Readiness for Existing Multifamily Buildings," funded by a California Energy Commission's Local Government Challenge grant.

Conclusion

We appreciate the opportunity to provide this input, and thank the CEC for its careful consideration of the BayREN's comments. We look forward to continuing to be involved in these important issues.

Respectfully Submitted,

Jennifer K. Berg
Energy Programs Manager

Cc: Sara Moore, CEC-BayREN Liaison