

TO Interested Parties

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FM3 Research

RE: California Voter Views of Building Decarbonization

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Fairbank, Maslin, Maullin, Metz & Associates (FM3) recently completed a survey of California voters to assess their attitudes about building decarbonization, also called efficient building electrification. Electrification describes replacing appliances that run on fossil fuels like gas with efficient electric technologies powered by renewable electricity.

The study found that Californians strongly prefer to power their home appliances with renewable electricity rather than gas. While many Californians are not familiar yet with available clean alternatives to gas, they are supportive of policies to increase the use of alternatives as they learn more. This is especially true when considering that these proposals would reduce safety risks from gas leaks and explosions, and lower monthly energy bills.

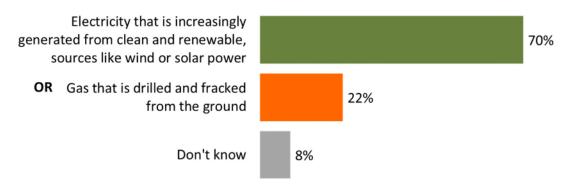
Key findings include:

- Most Californians have gas appliances, and many are largely unaware of alternatives. More than three in five (62%) said they are unfamiliar with heat pump appliances such as water heaters or space heaters. Just a slim majority (53%) is "somewhat familiar" with induction cook stoves. Gas appliances are broadly used. Specifically:
 - Of the respondents with a water heater, 70% say their water heater runs on gas.
 - More than four in five (81%) with a furnace say they have a gas or propane furnace.
 - Three-quarters (76%) say they have a gas or propane cook stove.
- Despite Californians' current use of gas appliances and general lack of familiarity with clean electric
 alternatives, they would strongly prefer to have appliances that are powered by clean electricity. In fact, by
 a 48-point margin, Californians prefer their appliances be powered by electricity generated from renewable
 sources over gas drilled and fracked from the ground. As shown in Figure 1 on the next page, seven in ten
 Californians say they prefer their appliances to be powered by "electricity that is increasingly generated from
 clean, renewable sources like wind or solar power."



Figure 1: Preference for Home Appliance Power Source

Thinking about home appliances that may run on gas or on electricity, like those used for heating and cooling, cooking, or laundry, which do you prefer that your future appliances be powered by:



• Policies to advance decarbonization are broadly popular, especially training or workforce development, rebates, and updated rates to incentivize use of efficient electric appliances powered by renewable energy. Figure 2 on the next page shows support for a variety of decarbonization policies, each of which has support from at least two thirds of Californians. Notably, job training programs have 81% support overall, including 95% support from Democrats and 59% support among Republicans. Rebates are also favored by a 94% of Democrats and a majority (50%) of Republicans in the state.

Voters of color and younger respondents, especially women under 50, support these policies most broadly, though majorities do across gender and age.



Figure 2: Support for Elements of a Decarbonization Policy

Here is a list of some of the specific elements of a transition to phase out gas appliances and equipment in homes and buildings. Please indicate whether each sounds like something you would strongly support, somewhat support, somewhat oppose, or strongly oppose.

Element of Policy	Total Support	Total Oppose	Don't Know
Supporting workforce development, training and certification programs to ensure that workers have the knowledge and skills to install and maintain energy-saving electric systems	81%	16%	6%
Providing new rebates and incentives that lower the upfront costs of advanced electric appliances for consumers	77%	20%	3%
Updating electricity rates to ensure buildings that produce low or no carbon emissions are affordable and reward use of renewable energy	75%	20%	5%
Creating financing programs to help families upgrade to energy-efficient electric appliances and equipment powered by clean energy	72%	25%	3%
Creating policies that prioritize getting clean energy to low-income households	69%	26%	5%
Creating a statewide goal that aligns with the state's climate goals, to reduce climate change pollution from buildings	65%	31%	3%

• Safety, energy efficiency and lower bills are highly valued goals for Californians. Figure 3 on the next page shows the value Californians assigned to a variety of goals the decarbonization policy could achieve. Three-quarters or more called reducing the risk of gas leaks, fires and explosions and improving energy efficiency "extremely" or "very important" to them. Seven in ten also assign a high priority to lowering energy bills.

Majorities, in fact, say each aspect is at least "very important" to them, including improving public health and safety, saving energy, reducing carbon pollution and indoor air pollution, providing new job opportunities, and meeting the state's clean, renewable electricity goals.



Figure 3: Goals for a Decarbonization Policy

Here is a list of some of the goals that this proposal is designed to accomplish. Please indicate how important it is to you that each goal be achieved: extremely important, very important, somewhat important, or not too important.

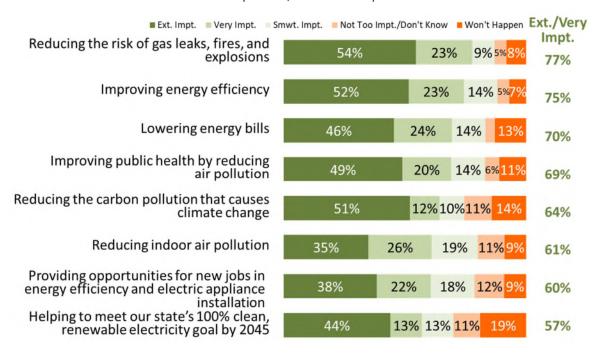


Figure 4 on the next page shows the importance of each of these goals within each region of California. Broad majorities across the state value safety, energy efficiency, lower energy bills and public health improvements as outcomes of the electrification policy. Climate change is less of a motivation in the rural north and Central Valley compared with safety and lower energy bills in particular.



Figure 4: Importance of Goals by Region

% Extremely/Very Important

Goal	LA County	Counties Surrounding LA	Bay Area	San Diego	Sac'to/ Northern CA	Central Valley/ Coast
Reducing the risk of gas leaks, fires, and explosions	80%	70%	83%	75%	79%	71%
Improving energy efficiency	87%	68%	78%	75%	74%	53%
Lowering energy bills	74%	70%	69%	65%	74%	62%
Improving public health by reducing air pollution	77%	66%	76%	56%	64%	57%
Reducing the carbon pollution that causes climate change	74%	60%	73%	53%	53%	48%
Reducing indoor air pollution	66%	55%	66%	58%	55%	56%
Providing opportunities for new jobs in energy efficiency and electric appliance installation	67%	56%	66%	58%	51%	53%
Helping to meet our state's 100% clean, renewable energy electricity goal by 2045	76%	45%	62%	65%	45%	29%

In sum, the study demonstrates that although Californians are largely personally unfamiliar with alternatives to their gas appliances, they strongly support an array of policies that would electrify California's buildings, allowing them to power their appliances with their preferred energy source - renewable electricity. Rebates, financing and updating rates are key to such a change; they also support policies that prioritize low-income households in the shift to clean energy. Workforce development appeals broadly and across party lines. They are also unhappy with their gas utilities' work to keep fight climate change, keep prices low, and ensure gas infrastructure is safe.

¹ **Methodology:** From Jan. 2-14, 2020, FM3 conducted 1,004 online interviews with California voters. The margin of sampling error is +/-3.1% at the 95% confidence interval. Due to rounding, some percentages do not add up to 100%.