November 2nd, 2022

San Rafael City Council City Hall 1400 Fifth Avenue San Rafael, CA 94901



Protecting Marin Since 1934

Dear Honorable City Council Members:

Marin Conservation League supports a robust coordinated effort by Marin County and its towns, cities, and agencies to accelerate building electrification. Working together, the County and other jurisdictions have now completed a model reach code requiring electrification in new construction, incentivizing electrification when renovating existing buildings, and assuring electric vehicle (EV) charging infrastructure in both new and renovated buildings. The County approved its first reading of the new code on October 18, 2022. We urge you to adopt the reach code by January 1, 2023.

It's critical that Marin jurisdictions enact a model reach code for new construction as soon as possible, since we expect thousands of new units to address the affordable housing crisis and to meet Regional Housing Needs Allocation (RHNA) requirements. Widespread adoption of the model code provides uniform standards that are easier for the construction industry to understand and follow. At the same time, since much of the construction in Marin involves renovating existing structures, frequently with upgrades to electrical panels and wiring, changing to electric appliances like heat pump space and water heaters, as part of a renovation makes sense and is cost-efficient.

Why is timely action so important?

1. Electrification Reduces Public Health and Safety Risks

Methane, a potent greenhouse gas (GHG) is the principal component of natural gas. It also poses numerous health and safety risks. Eliminating natural gas use in buildings reduces a major fire risk following earthquakes and removes a very dangerous combustion source for structure fires and explosions. Ending natural gas appliance use eliminates their release of toxic combustion byproducts into our homes and businesses that can have long term health impacts, especially for children and the elderly. Combustion byproducts include carbon monoxide, nitrogen dioxide, carbon dioxide, formaldehyde, benzene, and fine particulate matter.

2. Electrification Avoids Stranded Assets and Exposure to Rising Fossil Fuel Prices

Buildings typically last more than 50 years and if constructed with gas infrastructure those buildings will need to be retrofitted as society moves to phase out natural gas. PG&E acknowledges that we are moving toward all-electric buildings and supports that shift, including phasing out current California Public Utility Commission (CPUC) subsidies for gas lines and appliances in new residential construction. By avoiding the cost of installing exterior and interior gas piping, all-electric buildings often have lower capital costs than identical new buildings with both gas and electricity. They also will likely have lower energy costs.

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3. Electrification Combats Climate Change

The recent Intergovernmental Panel on Climate Change (IPCC) report makes it clear that we must accelerate the reduction in our GHG emissions to lessen damage from global warming. Marin must do likewise to meet its climate goals of reducing emissions 40% by 2030 (from 1990 levels) and below net zero by 2045. Approximately 25% of Marin emissions come from burning natural gas in buildings in which we live and work, mostly for space and water heating. While the normal operation of gas appliances produces carbon dioxide, the methane in natural gas is a far more potent GHG than carbon dioxide, and significant leakage of methane directly to the atmosphere occurs during its production, distribution, storage, and even its use inside our buildings. With this leakage, natural gas is nearly as dirty a fuel as coal, in terms of GHG emissions. At the same time, this reach code helps reduce the 50% of Marin's GHG emissions coming from cars by assuring EV readiness in buildings, with an emphasis on multifamily dwellings where many residents are now largely left out of the opportunity to own an EV because they have no place to easily recharge.

Next Steps

In addition to adopting the model reach code, we urge your continued participation with towns and cities countywide to develop a comprehensive Countywide Building Electrification Plan by January 1, 2024 in order to accomplish electrification of all existing buildings as rapidly as feasible. Both the Marin Grand Jury report on electrification earlier this year and Marin Conservation League's letter to you on July 20, 2022, suggested sound strategies for electrifying existing buildings.

Since then, passage of the Inflation Reduction Act (IRA) has provided significant federal funding to support electrification of new construction, renovations, and existing buildings over the next ten years. Enhanced amounts are provided for income-qualified residents and environmental justice communities. By addressing both cost and equity concerns, these incentives clear the path for a smooth transition to all-electric buildings and mobility. The attached charts summarize the extent of support provided by IRA, in addition to funds from Electrify Marin, Bay Area Regional Energy Network (BayREN), and others. We urge your action now to leverage these financial resources with the reach codes and other policies needed to implement electrification.

Marin Conservation League thanks you for moving forward on a strong electrification reach code, which is one of the few direct actions that local government can take to significantly reduce GHG emissions within the urgent timeframe we have to confront climate change.

Sincerely,

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¹ Currently available rebates from state and local sources can be found at https://www.bayren.org/rebates-financing. 2023 IRA tax credits and rebates are at https://www.bayren.org/rebates-financing. 2023 IRA tax credits and rebates are at https://www.bayren.org/rebates-financing. 2023 IRA tax credits and rebates are at https://www.rewiringamerica.org/app/ira-calculator.

Marin Conservation League, Climate Action Working Group Jim Burroughs and Belle Cole October 21, 2022

INFLATION REDUCTION ACT ELECTRIFICATION FUNDING

New Home Construction Tax Credits (single family or multi-unit)

- Up to \$2,500 tax credit if meets Energy Star certification requirements
- Up to \$5,000 tax credit if meets Zero Energy Ready Homes certification requirements
- Tax credit is "per unit" for multifamily developments; maximum tax credit requires conformance with prevailing wage requirements

Home Improvement Tax Credits (for households with tax liability)

- **30**% of project cost, capped at \$2,000 for heat pump installation and \$1,200 for other energy efficiency appliances and improvements
- Available January 2023 through 2032; tax credits can be claimed on a per year basis

Home Improvement Tax Rebates (for low and moderate-income households)

- Rebates up to \$14,000 depending on income for heat pumps, induction and electric ranges, and other energy efficiency improvements
- Available Fall 2023 through 2032

Home Renewable Power Tax Credits

- **30%** of project cost for installation of solar panels, battery storage, and any other renewable power source on property
- Example: \$19,000 to install rooftop solar panels generates \$5,700 tax credit
- Retroactive to 2022, full credit sunsets in 2032; then 22% credit expires in 2035

Commercial Building Improvement Tax Deductions

- Up to \$5.00/square foot of tax deductions if project meets 50% energy use reduction
- \$2.50/square foot deduction if project meets 25% target