

Representative Stephen Casey, Chair

March 20th, 2025

House Municipal Government and Housing Committee Rhode Island House of Representatives

RE: Green Energy Consumers Alliance Supports House Bill 5450

Dear Chair Casey and members of the Committee,

On behalf of Green Energy Consumers Alliance and our thousands of members across Rhode Island, **I write in strong support of House Bill 5450**, which would require permits for new construction issued after December 31st, 2026, to be for all-electric buildings.

Rhode Island Is Not Yet on Track to Achieve Act on Climate Goals

The Act on Climate mandates that Rhode Island reduce its total greenhouse gas (GHG) emissions 45% by 2030 and net zero by 2050. However, the Executive Climate Change Coordinating Council's (EC4's) 2022 plan to meet the Act on Climate shows that the state would only achieve 40% emissions reductions by 2030, and that's if everything in the plan gets implemented. Notably, the *Building Benchmarking and Performance Standards* report required by Joint Resolution 7617 Substitute A depicts buildings as already contributing 49% of Rhode Island's 2022 Gross Greenhouse Gas Emissions when including both Scope 1 and Scope 2 emissions, as shown in the image below. Rhode Island lacks a policy to address and prevent emissions from new buildings and will only further increase the amount of GHG emissions from buildings if a policy like the All-Electric Buildings Act is not passed. Though Green Energy Consumers Alliance would like to see the schedule for compliance moved up by one year, this bill is a critical first step to ensuring future construction is all-electric.

APPENDIX 1: SUPPLEMENTAL TABLES AND FIGURES



Rhode Island 2022 Gross Greenhouse Gas Emissions

Figure 4: Rhode Island Gross Greenhouse Gas Emissions Breakdown, 202237

Note: The emissions breakdown presented in this figure differs from the official accounting framework used by DEM to in the *Rhode Island Greenhouse Gas Inventory*.

Source: Executive Climate Change Coordinating Council report: "Building Energy Benchmarking and Performance Standards", Appendix 1 Figure 4.

Costs and Meeting our Climate Goals

Building new construction all-electric prevents us from continuing to make the problem of building emissions worse. It doesn't make sense to be installing fossil fuel equipment, which is designed to last 15-20 years, bringing us further away from our goals to reduce our carbon emissions 45% by 2030 – now only five years away. Gas costs are also projected to rise in the coming decades and the <u>technical report</u> prepared by consultant group E3 in Rhode Island's Future of Gas proceeding found that in scenarios of high conversion to electrification, the cost burden of supplying gas to households will increase as it is spread over a declining customer base. Continuing to build fossil fuel infrastructure now will only harm consumers in the future, with potential for the cost burden to disproportionately harm low-income ratepayers. These costs can be avoided if new construction is built all-electric from the start.

All-electric new construction is low-hanging fruit that Rhode Island can and must pursue to bring us closer to meeting our Act on Climate goals. Electrification of space and water heating is not only an opportunity to reduce building greenhouse gas emissions but can also save money on utility bills. The operating cost of all-electric buildings can be managed through electric rate reform and thoughtful rate structure which we hope the General Assembly pursues through other legislation.

New All Electric Buildings are at Rough Parity to More Cost-effective than New Fossil Fueled Buildings

A recent <u>study by the Rocky Mountain Institute</u> found that the new all-electric single-family home **costs less to build and operate** than the new mixed-fuel home, resulting in lower net present costs in all cities studied. A <u>report produced by Groundwork Data</u> on behalf of ZeroCarbonMA had a similar conclusion, finding that all-electric new construction for residential buildings has achieved cost-parity with fossil fuel construction, with construction costs being 1% more or less depending on certain design considerations.

A <u>Win Climate report</u> on the Impact of the All-Electric Building Act on the cost of heating new homes in New York found that **the average new single-family home built in New York State would save approximately \$904 per year**, if built with a cold-climate Air Source Heat Pump instead of a furnace or boiler.

	Average yearly savings vs. conventional heating	
Geography	Cold Climate Air Source Heat Pump + Heat Pump Water Heater	Ground Source Heat Pump + Heat Pump Water Heater
Climate Zone 4	\$375	\$473
Climate Zone 5	\$609	\$848
Climate Zone 6	\$2,079	\$2,486
Statewide	\$904	\$1,165

Source: Win Climate

Furthermore, all-electric homes cut out unnecessary materials and equipment. Constructing homes with gas requires a new underground extension from the gas main, a gas meter, and piping throughout the home to gas-powered appliances. All-electric homes operate without gas infrastructure and use a single efficient heat pump for heating and cooling. This simpler construction can save money and can prevent continued expansion of fossil fuel infrastructure. This is especially critical as we look towards meeting Act on Climate mandates and how to phase out the use of fossil fuel infrastructure.



Source: RMI

Additionally, new construction that is built with gas, will likely experience "retrofits of regret" where those homes must make expensive upgrades to electrify before the end of the life of their fossil-fueled appliances to avoid paying for increasing gas costs. This is because as consumption of gas declines due to people switching to electrification & efficiency, less people are going to be paying

into the system, which will cause gas rates to increase for those remaining on the system. Therefore, going all-electric today in new construction avoids the significant costs and disruption from retrofitting a building initially designed to use fossil fuels to convert to all-electric in the future. It makes more sense financially to build electric from the start.



Source: Groundwork Data

All-Electric Buildings are Better for Our Health

According to a <u>Stanford study</u>, poor air quality resulting from burning fossil fuels is linked to increased rates of disease and mortality. Even when not in use, these fuels can leak harmful substances, including cancer-causing benzene. <u>Studies</u> suggest that such emissions are responsible for 15% of childhood asthma cases, equivalent to the impact of having a smoker in the household. Moreover, these fuels release a cocktail of pollutants such as nitrogen dioxide, methane, carbon monoxide, formaldehyde, and benzene, producing poor air quality at <u>levels surpassing outdoor</u> <u>limits</u> and posing significant health risks to individuals exposed to them.

The American Lung Association <u>Healthy Air Initiative</u> also finds that state governments can take action to reduce building emissions and improve air quality to advance energy efficacy and climate goals. Measures including transitioning to all-electric construction in new buildings are outlined as practical solutions that benefit indoor air quality. Their <u>Rhode Island-specific fact sheet</u> finds that at least 53% of RI households burn fossil fuels which has direct impacts on childhood asthma and school attendance rates and healthcare spending. Passage of the All-Electric Buildings Act will take steps to reduce these outcomes by ensuring new construction does not burn fossil fuels.

Heat pumps can also be a solution as we face rising temperatures during the summer. Because heat pumps provide both heating and cooling, they eliminate the need for a separate AC unit and can maintain safe and comfortable indoor temperatures. Heat pumps also consume less energy than high-efficiency AC units, reducing strain on our electric grid. As we face rising temperatures because of climate change, heat pumps can manage the need for increased cooling in a climate-friendly manner.

Conclusion

To meet our Act on Climate mandates, Rhode Island must ensure we do not exacerbate the problem of building emissions by continuing to allow the construction of mixed-fuel buildings. The All-Electric Buildings Act will ensure new construction aligns with state climate goals and promotes better indoor air quality. Green Energy Consumers Alliance thanks Representative Handy for introducing this important legislation and urges the Committee and full General Assembly to vote in favor of its passage.

Sincerely,

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