

Representative Bennett, Chair

March 21st, 2024

House Environment and Natural Resources Committee Rhode Island House of Representatives

Re: Green Energy Consumers Alliance Supports H7617

Dear Chair Bennett and member of the committee,

On behalf of Green Energy Consumers Alliance and our thousands of members across Rhode Island, I write in support of House Bill 7617 – The Building Decarbonization Act, which starts to address emissions from both new construction and existing buildings via two main sections.

We Are Not on Track to Achieve Our Climate Goals

The building sector accounts for nearly 30% of all Greenhouse Gas emissions in the state, and we do not currently have a clear path on how to reduce these emissions. 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 Councils (EC4's) 2022 plan to meet the Act on Climate shows that the state is not on track to meet this mandate. Modeling of their plan only projects Rhode Island will achieve 40% emissions reductions by 2030, and that's if everything in the plan gets implemented. To achieve the Act on Climate, essentially all buildings by 2050 must be carbon-free. A building energy benchmarking requirement and subsequent standard is the number one policy we can implement this year to address emissions from large existing buildings (section 1). At the same time, we must also phase in all-electric new construction to stop us from making the problem worse (section 2).

Section 1. Building Benchmarking & Performance Improvement

This section tackles emissions from large existing buildings by requiring energy reporting and then subsequent emission reductions over time. Addressing emissions from existing buildings is a larger piece of the building decarbonization puzzle as around 70% of our building stock in 2050 is already in place today.

Building Energy Reporting: Requires large buildings to report their energy usage and GHG emissions to a central data repository such as ENERGY STAR Portfolio Manager, a free and secure EPA platform used by nearly half a million buildings nationwide.

Buildings Covered by Reporting Requirements (estimated 2,320 total):

- o Starting 2025: Public buildings larger than 25,000 sq ft
- o Starting 2026: Private buildings larger than 50,000 sq ft
- o Starting 2027: Private buildings larger than 25,000 sq ft
- The data collected will:
 - Help building owners measure their energy usage and emissions, compare to buildings of similar size and uses, and implement ways to reduce their energy usage and costs.
 - Enable the state to perform analyses and develop a standard by which large buildings must reduce their emissions.

Evaluation & Creation of a Building Performance Standard: Requires the Office of Energy Resources (OER) to evaluate benchmarking data, consult with stakeholders, and create a building performance standard (BPS) for large buildings to reduce emissions in line with the Act on Climate.

- OER to analyze building energy data and publish reports.
- OER to create a BPS to address existing building emissions by setting long-term energy or emissions intensity reduction targets, with interim compliance milestones.
- OER to provide technical assistance to support owners in meeting interim or final BPS's.

Establishes Framework for Effective Programs: Designates the Green Building Advisory Committee (GBAC) established by RIGL 37-24-5(g) as an advisor to the OER on the implementation of building benchmarking and performance standards. Requires the creation of an Environmental Justice Advisory Board (EJAB) to advise OER on the equitable implementation of building benchmarking and performance standards. Also, OER is to estimate capacity and budgetary needs annually and provide to the General Assembly.

RI Would Follow Larger Markets

There are currently 6 states and 50 municipalities with building energy benchmarking policies. 4 states, 1 county, and 7 municipalities have also adopted a building performance standard with dozens more in development. In a small state such as Rhode Island, it makes the most sense to implement these policies statewide, in line with the Act on Climate. If we want to achieve the Act on Climate mandates, we must reduce our emissions from large existing buildings. This legislation will put us on track to do that.

RI Has Committed to Explore the Adoption of Building Performance Standards

On September 21st, 2023, as part of the <u>U.S. Climate Alliance</u> Rhode Island committed to exploring the adoption of Building Performance Standards, but we have yet to see one begin to be implemented.

Buidling Performance Standards Will:

- **Save Building Owners Money:** A <u>study</u> by Lawrence Berkeley National Lab estimated the potential savings in Maryland on adoption of their BPS law. It found that, on aggregate, between 2025 2050, the state could see \$22.3 billion dollars in energy cost savings. Even when accounting the modeled investment costs for energy improvements in large existing buildings, the predicted savings are in the region of \$4.5 billion.
- Create a Market for Energy Services in RI: Building owners would gain insights
 into the most suitable energy enhancements and initial measures to enhance their
 efficiency, facilitating the creation of local employment opportunities.
- Improve Indoor Air Quality: Better ventilation and fossil fuel free heating equipment will lead to reduced indoor air pollution and decrease the risk of respiratory issues such as asthma and allergies among occupants.
- **Provide Community Benefits:** Having access to data regarding the energy efficiency of commercial and multifamily properties will enable tenants, potential buyers, and investors to make more informed choices regarding where they live and how they spend their money.

Section 2. All-electric new construction

Addresses emissions from new construction by providing tiers by which new buildings must become all-electric in alignment with the Act on Climate. The tiers are as follows:

- Requirement for electric-ready construction of new buildings
 Effective after December 31, 2024, all permits for new construction or alterations must include an electrical system that provides sufficient capacity for a future retrofit of a mixed-fuel building to an all-electric building.
- 2. Requirement for all-electric construction of public buildings, including schools
 Effective after December 31, 2024, all permits for new public construction or
 alterations must be all-electric. Includes labor standards and apprenticeship
 utilization requirements for public projects over a certain dollar amount.
- 3. <u>Local approval of all-electric new construction</u>
 Effective immediately, through local approval, municipalities can require that only permits for all-electric new construction and alterations within their jurisdiction be issued.
- 4. Requirement for all-electric construction of new buildings

Effective after December 31, 2026, all permits for new construction of buildings statewide must be all-electric.

Costs and Meeting our Climate Goals

Building all new construction all-electric prevents us from continuing to make the problem worse. It doesn't make sense to be installing fossil fuel equipment, which is designed to last 20 years, bringing us further away from our goals to reduce our carbon emissions 45% by 2030 – now only six years away.

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.

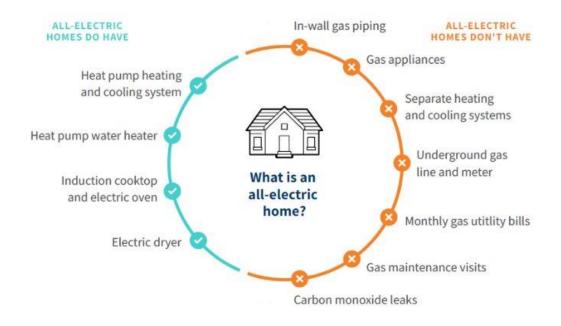
A <u>Win Climate report</u> on the Impact of the All-Electric Building Act on the cost of heating new homes in New York found that **the average new single-family home built in New York State would save approx. \$904 per year**, if built with a cold-climate Air Source Heat Pump instead of a furnace or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

	Average yearly savings vs. conventional heating, by heating system and fuel							
Geo- graphy	ccASHP + HPWH				GSHP + HPWH			
	Gas		Propane		Gas		Propane	
	Furnace +Water Heater +Central AC	Boiler +Water Heater +Central AC	Furnace +Water Heater +Central AC	Boiler +Water Heater +Central AC	Furnace +Water Heater +Central AC	Boiler +Water Heater +Central AC	Furnace +Water Heater +Central AC	Boiler +Water Heater +Central AC
Climate Zone 4	\$170	\$324	\$2,406	\$2,553	\$268	\$422	\$2,505	\$2,652
Climate Zone 5	\$8	\$180	\$2,725	\$2,897	\$273	\$445	\$2,990	\$3,162
Climate Zone 6	-\$137	\$61	\$3,067	\$3,265	\$270	\$468	\$3,474	\$3,672
Statewide	\$11	\$185	\$2,733	\$2,906	\$271	\$445	\$2,993	\$3,166

Source: Win Climate

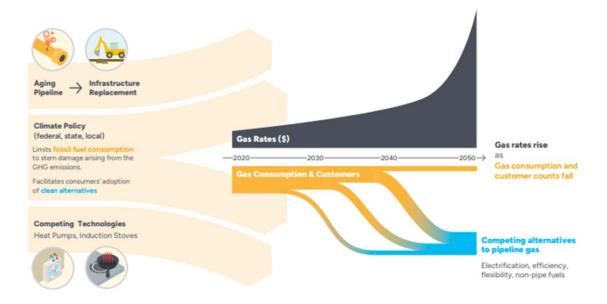
Furthermore, all-electric homes cut out unnecessary materials and equipment. Constructing homes with gas requires a new underground extension from the gas main, a gas meter, and piping throughout the home to gas-powered appliances — an added cost of \$3,100 per home according to RMI. All-electric homes operate

without gas infrastructure and use a single efficient heat pump for heating and cooling. This simpler construction saves money.



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 in order 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

Only an Electric Building Can Get Cleaner Over Time

Given that Rhode Island has a 100% renewable energy standard by 2033, the energy powering our buildings is guaranteed to become increasingly renewable and cleaner allowing an all-electric building to become net-zero over time.

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 limits</u> and posing significant health risks to individuals exposed to them.

Heat Pump Sales Are Increasing

Heat pump sales are increasing and outpacing gas and oil furnace sales nationally. Residential cold climate heat pump technology has advanced significantly in recent years. Maine, one of the coldest states in the country, has installed the most heat pumps of all states in the Northern United States. The Clean Heat RI program here in Rhode Island is popular and on track to become fully subscribed.

Conclusion

In order to achieve the Act on Climate, we need to address emissions from both existing buildings and new construction. House Bill 7617 puts us on track to do just that. Green Energy Consumers Alliance thanks Representative Kislak 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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