SLASHING POLLUTION & ENERGY BILLS WITH VIRGINIA'S UNTAPPED RESOURCE: ENERGY EFFICIENCY

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EXECUTIVE SUMMARY

Virginia must make energy efficiency a bedrock component of our energy mix in order to lower Virginia's rising energy bills and excess carbon pollution. Reducing inequitable energy burdens is especially important for low- and middle-income households, who pay electric bills that are the nation's 6th highest¹ and electric rates that are among the highest in the region.² Without further action, our citizens, health, environment, and economy will continue to be unnecessarily sapped by our outdated and inefficient energy system.

CHALLENGE

Though Virginia has recently passed significant energy efficiency legislation, the state still has substantial untapped potential to avoid wasting energy.³ This is reflected in our state's high electricity bills,⁴ as well as some of the highest energy burdens borne by lower income Virginians.⁵

Efficiency—achieving the same output with less energy—lowers Virginians' electric bills and rates, creates thousands of local jobs, and reduces the harms from energy-related pollution. Avoidable energy waste disproportionately hits low-income, Black, and Latinx residents.⁶

We could reduce carbon pollution 50% by 2050 if we fully tapped efficiency technology.

Efficiency is also one of our best climate action tools, both to lower upstream power plant pollution and to shift buildings away from fossil fuel. If we fully tapped efficiency technology, we'd reduce carbon pollution 50% by 2050.⁷

Though energy efficiency is a smart investment, longstanding barriers block its full implementation in Virginia: upfront costs of retrofits can deter some households, while regressive elec-

tric monopoly incentives increase both energy waste and utility profits.

Virginia's energy is also wasted by outdated appliances that run on fossil fuels, which cannot be upgraded to utility-delivered electric appliances due to needlessly restrictive policies. Action is also needed to ensure that buildings are built with efficiency in mind from the start. Although the best time to make a building energy efficient is when it is first built, builders lower their construction costs by excluding efficiency measures, resulting in 50 to 100 years of higher energy costs and pollution.

Government policy is needed to overcome all these barriers so that energy resources are used efficiently and households save money.

SOLUTION

Virginia should build on policy that expands access to energy efficiency by setting stronger energy efficiency targets and removing the restriction on the more efficient electrification of buildings and related infrastructure currently powered by polluting fossil fuels.

Such policy will ensure Virginia's monopoly electric utilities include more efficiency in their future energy mix and avoid building far costlier new generation.⁸ Ratepayer costs and climate pollution could also be further reduced by authorizing more efficient electrification projects to replace outdated appliances that rely on fossil fuel.

Promptly implementing highly efficient building codes for new and rehabilitated buildings and empowering local governments to advance efficiency are also critical for lowering bills and reducing pollution. The Commonwealth and residents, especially low- and moderate-income

residents, will benefit. While the 2021 General Assembly sensibly called for building codes to be "at least as stringent as" International Energy Conservation Code when savings and other benefits over time would exceed the initial construction costs, it is unclear when and how Virginia regulators will actually implement such standards.

Lastly, localities need to be granted authority (a) to require building owners to publicly "benchmark" their buildings' energy efficiency, so that potential tenants know energy costs in advance, incentivizing owners to make cost-effective building efficiency upgrades, and (b) to adopt "stretch codes" with stronger energy and climate standards, including net-zero goals, for buildings constructed within their jurisdictions.

POLICY RECOMMENDATIONS

Extend and strengthen the Energy Efficiency Resource Standard beyond 2025, including a low-income specific standard, so electric monopolies equitably lower pollution and bills while avoiding building far costlier power generators.

Allow electric utilities to electrify buildings when doing so is more energy efficient than continued reliance on fossil fuels.

Empower local governments to adopt "stretch codes" with stronger energy efficiency and climate standards.

Allow local governments to require large building owners to make their buildings' energy intensity public, for greater transparency of building efficiency and related tenant costs ("benchmarking").

Authorize the Virginia Department of Energy to establish minimum appliance efficiency standards exceeding Federal standards.



