American Council for an Energy-Efficient Economy
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March 29, 2021

Testimony of Bryan Howard
Director, State Policy, American Council for an Energy-Efficient Economy
Regarding Senate Bill 0414

On behalf of the American Council for an Energy-Efficient Economy (ACEEE), I write in support of Senate Bill 0414 (SB 414) the Climate Solutions Now Act. ACEEE is a nonprofit research organization based in Washington, D.C. that conducts research and analysis on energy efficiency policy and programs. We have been active on energy efficiency issues at the national, state, and local level for more than forty years, collecting extensive best-practice information on topics including energy efficiency programs.

SB 414 is vital legislation to reduce emissions in the state of Maryland. The energy efficiency provisions of the legislation are critical for economic development, energy affordability, and job creation in Maryland while serving as a cost-effective means to reach these reductions targets. We urge the committee and the General Assembly to retain and not weaken key efficiency measures in the bill including building energy codes and updates to the energy efficiency and conservation goals for designated utilities.

Building Codes:

Residential and commercial buildings in Maryland account for nearly 60 percent of energy consumption in the state[1]. Unfortunately, the energy being used to heat, and cool these buildings is often wasted in inefficient equipment. This passes unneeded costs onto consumers, many of who are those who can least afford high utility bills.

In 2020 ACEEE released an updated analysis on household energy burdens (i.e. those that pay more than 6% of income on energy bills) and found that high energy burdens remain a persistent national challenge. This research specifically examined energy burdens in Baltimore, and the results are troubling. We found that in the Baltimore metro area (pre-pandemic), the median energy burden of low-income households was four times higher than non-low-income households, and Black households paid 34% more of their income on energy bills than non-Hispanic white households. In addition, at least one-quarter of low-income households had energy burdens above 18%, which nine times higher than the average U.S. household[2].

Provisions of the bill to improve renovation standards for large buildings (including private multifamily buildings) could help alleviate energy burdens in Maryland communities, support the state's emission reduction targets and provide additional benefits. Such standards have been adopted

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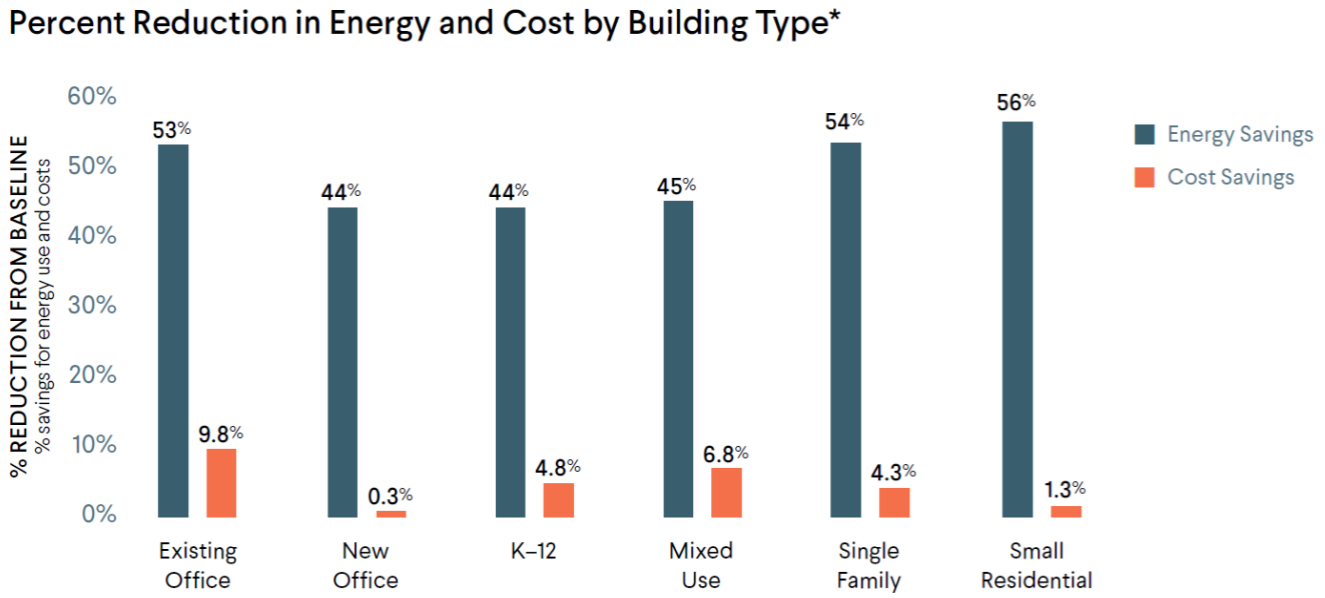
[1] U.S. Energy Information Administration Maryland State Profile and Energy Estimates. https://www.eia.gov/state/?sid=MD#tabs-2

[2] More information on Baltimore area energy burdens is available on the ACEEE website: https://www.aceee.org/sites/default/files/pdfs/aceee-01_energy_burden_-_baltimore.pdf

by the legislature in Washington State and by the City Council in Washington, DC, New York City and St. Louis[3]. Large savings are generally possible in existing buildings as shown by a federal deep retrofit program that reduced energy use an average of 38% as part of building renovations[4]. Often energy efficiency upgrades can make buildings more comfortable and healthier by improving indoor air quality and thermal comfort. Our current public health crisis should serve as an important reminder of the need to improve the health and safety of buildings across the state.

The legislation also takes important steps to incrementally improve the efficiency of new buildings until reaching net-zero energy by 2033. This will ensure that energy savings are locked in at the point of construction, which avoids unnecessary energy costs to consumers over the lifetime use of a building. It can also avoid the logistical challenges and higher costs that arise during a renovation process.

It is important to note that building to net-zero energy standards is already cost effective. Indeed, a study from the U.S Green Building Council Massachusetts Chapter (now Built Environment Plus) examined the steps to bring various types of buildings to net-zero levels. The report found that all building types can achieve 44-56% energy savings and do so with cost savings[5]. A figure from the report is included below to depict the level of available savings in various building types.



Utility Energy Efficiency and Conservation Goals:

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[3] Mandatory Building Performance Standards: A Key Policy for Achieving Climate Goals. Washington, DC: ACEEE. https://www.aceee.org/sites/default/files/pdfs/buildings_standards_6.22.2020_0.pdf.

[4] Energy Savings from GSA's National Deep Energy Retrofit Program. Oak Ridge, Tennessee: Oak Ridge National Laboratory. https://www.gsa.gov/cdnstatic/NDEREnergySavingsReport5.pdf.

[5] The USGBC Massachusetts Chapter Zero Energy Buildings in Massachusetts: Saving Money from the Start 2019. https://builtenvironmentplus.org/zero-energy-buildings/.

ACEEE closely tracks efficiency policies in our *State Energy Efficiency Scorecard,* including energy efficiency targets for utilities, often called energy efficiency resource standards (EERS). These targets are critical to encouraging savings over the near and long term, and our research[6] and research from the Brattle Group finds they are the number one policy driver of energy efficiency savings[7]. While Maryland has a quality EERS of 2 percent gross energy savings (or 1.6 percent net) the existing EERS falls below several states in the Northeast and others throughout the country.

The proposed legislation would ramp up the savings goals to 2.25 percent and incrementally reach 2.75 percent gross energy -savings in 2027. The average of the proposed EERS goals from 2022 to 2027 is 2.57 percent gross savings (or 2.05 percent net) would place Maryland as a clear saving leader, but still behind states in the Northeast like Massachusetts, Rhode Island and Vermont who all have higher savings targets.

The table below is data taken from *the Scorecard* of states with an EERS and the five-year average electric target based on net savings[8]. It includes Maryland's current and projected EERS target for comparison.

State	% of sales covered within EERS policy	Approximate average annual electric savings target for 2020–2025
Massachusetts	85%	2.7%
Rhode Island	99%	2.5%
Vermont	98%	2.4%
Arizona†	56%	2.1%
Maryland Under SB 462	97%	2.05%
New York†	100%	2.0%
Illinois	89%	2.0%
Colorado	56%	1.7%
New Jersey	100%	1.6%
Maryland Under Current Law†	97%	1.6%
California†	73%	1.4%

[6] Policies Matter: Creating a Foundation for an Energy-Efficient Utility of the Future. Washington, DC: ACEEE. https://www.aceee.org/sites/default/files/policies-matter.pdf.

[7] Energy Efficiency Administrator Models: Relative Strengths and Impact on Energy Efficiency Program Success. Boston, MA: The Brattle Group. https://www.brattle.com/news-and-knowledge/news/report-by-brattle-economists-evaluates-effectiveness-of-energy-efficiency-administrator-models.

[8] The 2020 State Energy Efficiency Scorecard. Washington, DC: ACEEE. aceee.org/research-report/u2011

State	% of sales covered within EERS policy	Approximate average annual electric savings target for 2020–2025
New Hampshire	100%	1.3%
Arkansas	50%	1.2%
Minnesota†	97%	1.2%
Oregon†	61%	1.2%
Connecticut	93%	1.1%
Maine†	100%	1.0%
Michigan	100%	1.0%
Hawaii	100%	1.4%
Virginia	87%	1.2%
Nevada	88%	1.1%
New Mexico	69%	1.0%
Iowa†	75%	0.9%
Washington†	83%	0.9%
Wisconsin	100%	0.7%
Pennsylvania	96%	0.6%
North Carolina	100%	0.4%
Texas†	74%	0.2%

It's also important to note that Maryland is well positioned to meet the increased target. Based on reporting from 2019, the state is already documenting a 2.6% gross savings which is well above the existing codified target and close to the proposed updated target for 2027.

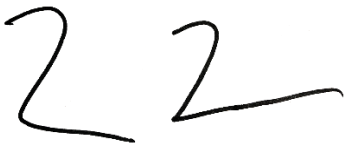
Economic Benefits:

Strengthening energy efficiency requirements for buildings and the power sector can also support economic development and job creation. Energy efficiency programs stimulate jobs with local contractors, jobs that cannot be outsourced to other states or countries. Recent analysis documents that over 8,000 jobs in the clean efficiency have been lost in Maryland since the public health emergency.[9] This bill can help to provide immediate opportunities for many individuals who have suffered from job loss in light of the current health and economic crises.

[9] Jordan, P. 2021. Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis. https://bwresearch.com/covid/docs/BWResearch_CleanEnergyJobsCOVID-19Memo_Dec2020.pdf

We urge support of SB 414, which would put Maryland on an important path towards greater energy efficiency while reducing emissions. I appreciate your time and consideration today and pleased contact me with any questions you may have.

Sincerely,



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