

MEMORANDUM

To: Vermont Public Service Department
Vermont Climate Council

From: EAN Weatherization at Scale Network Action Team

Re: **Weatherization at Scale Comments for Comprehensive Energy Plan and Climate Action Plan**

Date: October 22, 2021

This memorandum briefly outlines the unique benefits of weatherization, its importance in reducing greenhouse gas emissions, its significance as an equity strategy, and offers a multi-part proposal to fund weatherization through 2026 as a ramp to a long-term sustainable funding strategy. This document is written for non-technical readers and is not intended as a compendium of the EAN Network Action Team's research and analysis.

Summary

- The Weatherization at Scale Network Action Team is mobilized to achieve an ambitious goal: to weatherize every home of low-to-moderate income Vermonters by the end of the decade.
- Weatherization is a unique, 'no regrets' approach that complements other emissions reductions strategies. The science of weatherization is proven in Vermont with 30+ years of experience.
- Given its multiple benefits, weatherization represents a meaningful and actionable effort to support an equitable and just transition for low-to-moderate income Vermonters.
- The Network Action Team supports an additional \$72 million of State and/or Federal funds between FY23–FY26 for a steady ramp up of weatherization work calibrated to workforce levels. Additionally, we support weatherization carve-outs in a Clean Heat Standard, expansion of on-bill payback, and a long-term sustainable funding strategy to close the funding gap and build momentum toward weatherization of 120,000 homes as indicated in the Climate Action Plan.

Definitions

- **Weatherization**: Deep thermal energy efficiency and moisture management improvements on residential properties, i.e., both single-family homes and multi-family buildings. The weatherization process may expose other building problems that may also require attention.
- **Low-to-moderate income Vermonters**: Homeowners and renters who make less than 120% of area median income.
- **Global Warming Solutions Act**: Vermont law that establishes greenhouse gas emissions reduction targets for the milestone years of 2025, 2030, and 2050.
- **Clean Heat Standard**: A credit-based performance standard linked to greenhouse gas emissions reduction targets for major suppliers of heating fuels in Vermont.

Weatherization works

Weatherization delivers multiple benefits for residents: lower monthly energy bills; improved housing affordability; reduced greenhouse gas emissions; enhanced home comfort; boosted health outcomes; improved resilience during temporary energy disruptions; reduced building maintenance cost; and, for

homeowners, increased home value. Weatherization provides immediate savings to residents and improves the effectiveness of other energy improvements. Average energy cost savings are estimated at 20% and range +/- 10% depending on the scope of the work. Weatherization and fuel switching are highly complementary; fuel switching works best when residents reduce overall energy usage to allow renewable supply to cost-effectively replace fossil fuels.

Weatherization is an investment

Vermont's ambitious climate goals are built on the foundation of energy efficiency, but we have not yet invested in weatherization to deliver benefits at scale. Based on the principle that the greenest and most affordable energy is that which you don't have to use, weatherization reduces energy demand and brings Vermont closer to achieving emissions targets in the Global Warming Solutions Act.

Weatherization is a capital investment that requires upfront funding for ongoing savings. We estimate that the public investment gap between current levels of funding and cumulative funding needed to hit the 120,000 home goal is over \$600 million. The gap will not be filled by a single source or method, and will require a variety of strategies over many years. While this investment is sizable, weatherization returns \$1.50 in lifetime bill savings to the customer for every \$1.00 invested, in addition to unquantified health, comfort, resilience, and economic benefits outlined above.

We appreciate the Administration and Legislature's efforts in 2021 to secure over \$20 million in new weatherization funding, including a dramatic expansion of the Weatherization Assistance Program, an on-bill payback pilot through Vermont Housing Finance Agency, and enhanced incentives through Efficiency Vermont. As outlined below, we support lawmakers' continued efforts in 2022 with weatherization funding from State and Federal funds, Clean Heat Standard obligations, and other innovative funding methods, especially for low-to-moderate income households.

Weatherization is a partnership focused on the client

Energy is a largely invisible resource and most consumers are not familiar with the concepts and terms used by weatherization contractors. This combination of factors can serve as barriers to a homeowner pursuing an energy audit or evaluating the benefits of some recommendations versus others. Energy counseling/coaching provides a trusted advisor to help navigate the process from idea through implementation: help translating audit report findings; confirming recommendations and defining a roadmap for the work; overseeing project execution; and ensuring quality workmanship. The Office of Economic Opportunity's recent [Energy Savings Counseling Report](#) provides additional information. We support continued financial assistance to develop robust energy coaching services for customers.

Growing the weatherization workforce

We must cultivate the weatherization workforce to keep pace with increasing demand. The best solution to workforce issues is a long-term, stable, and growing funding stream that gives the private sector certainty to train crews and purchase equipment knowing a market will exist to support long term investments. Other recommendations can be found in Efficiency Vermont's recent [Weatherization Workforce Plan](#). Given the importance of the weatherization mission, we support enhancing wage levels and benefits to recruit workers into the clean energy workforce. Also, EAN has selected [Building Vermont's Climate Workforce](#) as one of its 2021 winning pitches and will fund and support the initiative.

Proposals to support weatherization at scale

The Network Action Team supports a “bite off what you can chew” funding strategy over the next several years to allow the weatherization workforce to blossom as a sustained funding strategy emerges.

- Increase funding with a mix of State and Federal funds: Although State funds provide more flexibility, home weatherization is an allowable use of Federal stimulus funds. We support a mix of funds for new weatherization funding of \$72 million over four years: FY23: \$7.5 million; FY24: \$20 million; FY25: \$21.75 million; FY26: \$22.75 million. The jump in FY24 allows the state to maintain momentum when current ARPA funding runs out at the end of FY23. This four-year strategy is a realistic ramp for contractors to hire and train new crews. Our modeling includes inflationary adjustments to reflect market conditions. This appropriation would fund 7,000 additional home weatherizations – a significant 40% increase over projected levels – but still short of the mitigation pathway indicated by the Climate Action Plan.
- Allow Clean Heat Standard carve-outs: The emerging Clean Heat Standard is a companion effort to Weatherization at Scale and would allow weatherization as an allowable method to reduce greenhouse gas emissions. While this is an important step, it is unlikely to yield a large number of new weatherizations when weighed against other allowable methods. We support carve-outs for weatherization, specifically for low-to-moderate income Vermonters as an important equity measure. These carve-outs would direct obligated parties to generate a portion of their annual credit requirement from weatherization activities. We are committed to working with policy makers on the appropriate size and scope of the carve-outs.
- Support for on-bill payback: Through the collaboration led by Vermont Housing Finance Agency, several Vermont utilities expect to file a pilot on-bill payback tariff in early 2022. The pilot would allow customers to “finance” weatherization and clean heating systems work directly on their monthly energy bill, which greatly simplifies payback for the improvements and increases customer uptake. Customer heating costs would decrease from pre-weatherization levels due to the energy savings. At the completion of the pilot, we urge policymakers to consider increased funding to make the program self-supporting (i.e., into a revolving fund) and to expand the program’s scope to include additional zero-emissions heating systems and appliances.
- Sustainable weatherization funding: The proposals above, taken together with recent funding increases, are a meaningful step forward to weatherize 120,000 homes by 2030. But there’s still a considerable gap. Given workforce challenges, the proposals outlined above represent a responsible approach in the near-term. However, we urge policy makers to review market demand regularly and adjust funding upward when the workforce challenges abate. The Network Action Team will continue to collaborate with policy makers on long-term funding strategies to keep weatherizations apace to meet State objectives.

Work ahead for 2022

In support of efforts by the Administration, Legislature, and Climate Council, the Weatherization at Scale team has built a broad coalition of allied individuals and organizations focused on our ambitious goal. We stand ready to support policy makers with analysis, perspective, and innovative thinking.