



ENERGY FUTURES GROUP

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Weatherization for All

TESTIMONY TO VT SENATE COMMITTEE ON NATURAL RESOURCES
& ENERGY

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Overview

- Who I am and my experience in Vermont
- Vermont's energy and climate goals
- A little weatherization history
- What should be done?
- Recommendations

Richard Faesy

- 30+ years in the energy efficiency industry in Vermont
- Residential buildings expertise
 - LEED, HERS, US DOE Home Energy Score certifications
- Program and policy experience
 - Throughout the U.S. and Canada
- Vermont energy industry involvement
 - 21 years at VEIC, managed Energy Efficiency Consulting Group
 - Chair, Energy Coop of Vermont
 - Board Member, Building Performance Professionals Association (BPPA)
 - Chair, Funding & Finance Committee of 2012 Thermal Efficiency Task Force
- Starksboro resident
 - Chair, Starksboro Energy Committee
- Partner in Energy Futures Group
 - Hinesburg, Vermont clean energy consultancy

About Energy Futures Group

Vermont-based clean energy consulting firm established in 2010

Areas of Expertise

- Energy Efficiency & Renewable Energy
- Program Design
- Policy Development
- Expert Witness Testimony
- Building Codes
- Evaluation
- Cost-Effectiveness

Range of Clients

- Government Agencies
- Advocates
- Regulators
- Utilities

Clients in 39 states and provinces plus regional, national and international organizations.



Why Weatherize Our Buildings?

- Climate change is real and needs to be addressed
- Governor Scott reminds us:
 - Grow the economy
 - Make Vermont more affordable
 - Protect the most vulnerable
- Frugality is the Vermont way
- Support the energy contractor job market
- Meet the State's goals...

Vermont's Energy Goals re. Weatherization

- Act 92 of 2008
 - Improve 25% of housing stock by 2020 (80,000 housing units)
 - Reduce annual fuel use and bills by 25% in homes served
 - Reduce total fuel use across all buildings by 0.5%/year, leading to 6% by 2017 and 10% by 2025
 - Increase low-income weatherization services
- Comprehensive Energy Plans of 1998, 2011 and 2016
 - Increase weatherization (and Weatherization) services
- Governor's Climate Action Commission (2018)
 - Double the rate of Weatherization Assistance Program activities consistent with funding
- Energy Action Network's 2018 Annual Progress Report
 - Weatherizing an additional 90,000 homes by 2025

Vermont's Energy & Climate Goals

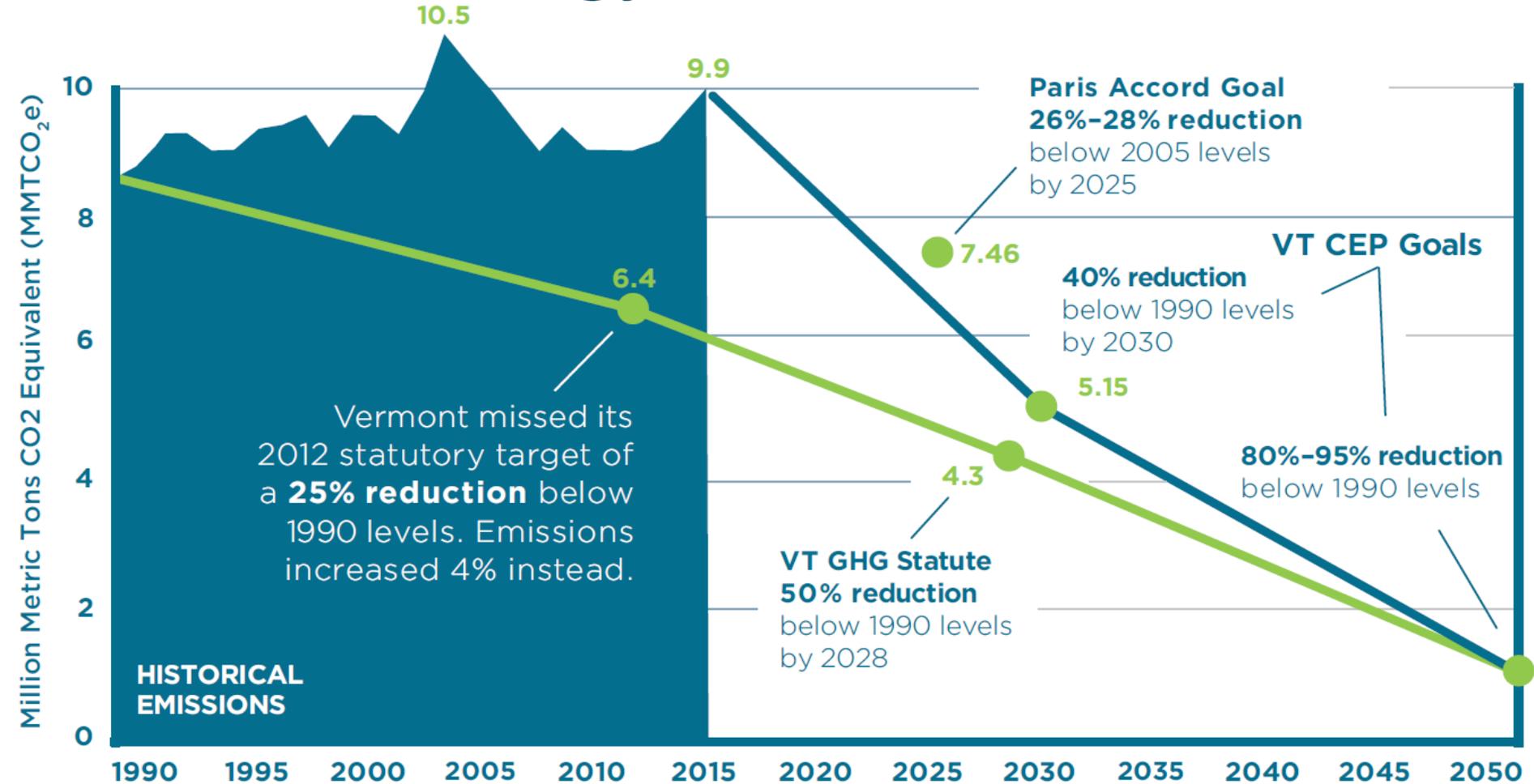
- Energy

- Vermont's Comprehensive Energy Plan (CEP) sets a goal of meeting 90% of our energy needs through efficiency and renewables by 2050.
- Building efficiency/weatherization play an important role

- Climate

- Vermont joined a bipartisan coalition of states committed to upholding the Paris Climate Accord with a **26-28% greenhouse gas (GHG) emissions reduction from 2005 levels by 2025.**
- Vermont's own statutes are even more ambitious, with the goal of a **50% reduction from 1990 levels by 2028.**

Vermont's Energy & Climate Goals



Weatherization History

- Low-income “Weatherization Assistance Program” (WAP)
 - Started life as a job training effort in Maine and morphed into and energy savings program run by U.S. DOE/OEO in VT
 - Vermont supplements Federal funding
 - Funding for <60% AMI; 100% grant
 - Long prioritized waiting list means 60-80% rarely served
 - 3E Thermal supplements WAP funding for multifamily
- Market-Based Programs
 - “Home Performance with ENERGY STAR”, Heat Saver Loan
 - Certified “Building Performance Institute” (BPI) contractors
 - Supported by Efficiency Vermont
 - Builders and contractors added services
 - Building Performance Professionals Association (BPPA)

Current Activity (2018)

- WAP

- ~900 homes/year
- \$11.3 million/year
 - Only 10% from the Feds
 - 90% raised in Vermont
- Revenue Sources:
 - U.S. DOE: \$1.2 mil.
 - \$.02/gal. for oil, LP: \$4.7 mil.
 - 0.75% GRT nat. gas: \$1 mil.
 - 0.5% GRT elec: \$4.4 mil.

- Market Efforts

- Programs:
 - Home Performance w/ES
 - Heat Saver Loan
 - 3E Thermal (MF)
- 1,200 homes/year
- RGGI & FCM funds
- \$3.6 million/year

- Total Vermont

- 2,100 housing units
- \$14.9 million
- 76% WAP/ 24% Market

What Should Be Done?

- Make progress towards our weatherization goals
 - 15,000 homes/year goal (vs. 2,100 currently)
- Ensure that WAP funding continues
- Raise additional funding for weatherization
- Prioritize low/moderate income households
- Shore up and grow existing infrastructure and capacity
- Ramp up and provide long-term assurances for business planning
- Benefit from economic development, job creation, GHG reductions, health impacts

What Else?

- Promote Zero Energy Now approach
 - 50-100% savings with weatherization, solar PV & heat pumps
 - Savings guarantee
- Make energy visible through building energy rating and labeling
 - S.118 of 2018 (H.440 of 2019)
 - Allows the market to “see” and value buildings based on energy performance
 - MLS, appraisals, lending...
- Workforce training
- Marketing

Recommendations

1. Reauthorize existing WAP funding sources
2. Ramp up WAP and market weatherization funding
 - a. Increase funding (by \$0.02/gal. & GRT on natural gas to \$0.04/gal. and 1.5% GRT)
 - i. \$5.7 mil. in new revenue
 - ii. FY 2020
 - iii. 3,000 weatherized homes
 - b. Increase funding again (by another \$0.02/gal. & GRT on natural gas to \$0.06/gal. and 2.25% GRT)
 - i. \$11.4 mil. in new revenue
 - ii. FY2021
 - iii. 4,000 weatherized homes
 - c. Ramp up over at least two years
 - d. Lock in for as long as possible before reauthorization

Recommendations con't

3. Workforce development training
 - a. BPPA & VTC
4. Marketing to 60-120% AMI
5. Sliding scale of grants & incentives based on income
 - a. Grants, incentives and loans, based on the customer
6. Direct budget to OEO and Efficiency Vermont
 - a. Grow existing programs
 - b. WAP, HPwES, 3E Thermal, Heat Saver Loan
 - c. Develop Zero Energy Now
7. Building energy rating & labeling for transparency
 - a. H.440

In Summary

- Preserve low-income WAP funding and expand for moderate income
- Ramp up over a few years by doubling the revenue, then double it again
- Direct funding to existing entities: OEO and EVT
- Include workforce training and marketing components
- Support market visibility through energy labeling
- Make some meaningful progress towards our weatherization goals!



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