



4/4/2017

A Look Into Low-E Storm Windows as a Potential EE Opportunity

2017 ACEEE Market Transformation Symposium

Jenna Pugliese

Efficient Products Program Manager



Who is Efficiency Vermont?

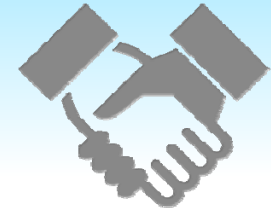
- Statewide energy efficiency utility
- Sustainable energy solutions for all Vermonters
 - Education
 - Services
 - Rebates and financing

How We Have Looked at Low-E:

- Market Pilot
- Consumer Insights Survey

2015 R&D Pilot: Low(-E) and Behold

Partners

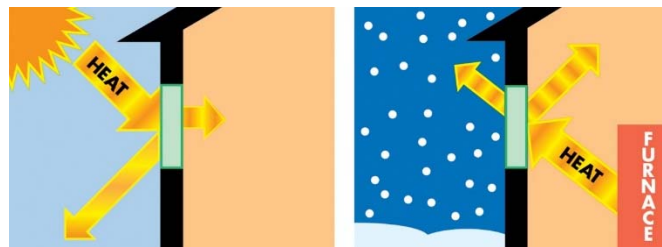


- **Larson Manufacturing, D+R International**
- **Home Depot**
 - Bennington, Rutland & Williston VT stores participating
- **Lowe's**
 - Essex & South Burlington stores participating



The Opportunity for Low-E In Vermont

- Customers interested in window options
- Lower cost than total window replacement
- Low-cost entry point & DIY
- Alternative for older/historical building stock
- DOE / AERC performance ratings / independent testing



Efficiency
Vermont

Pilot Design



- Full markdown of Low-E storm window incremental cost to clear glass (regular) storm windows
 - Assess Market Lift
 - Raise awareness of low-cost alternative
 - Survey participants
- Promotional Period:
 - August 17 – October 12, 2015

Marketing

Handout

LARSON
Low-E Storm Windows
 An Efficiency Vermont SMART CHOICE

What is Low-E?
 Low emissivity (Low-E) glass is formed by adding an ultra-thin layer of metal to clear glass. LARSON® storm windows feature pyrolytic Low-E glass. The metal-oxide (pyrolytic) coating is applied when the glass is in its molten state, so the coating becomes an permanent and extremely durable part of the glass. This coating is also known as "hardcoat" Low-E.

How does it work?
 Low-E glass is designed to reflect heat back towards the source.

Warmer in Winter

- Improves window performance by reflecting heat back into the home and reducing energy transfer through the window opening
- Helps reduce heating energy costs

Cooler in Summer

- Less solar energy is transmitted with Low-E glass
- Helps keep interiors cooler
- Helps reduce cooling energy costs

Visible Light Transmittance and Appearance

- Minimizes reduction in visible light passing through the window
- Provides interior and exterior appearance similar to clear glass

Reduces Ultraviolet Energy

- Reduces fabric fading UV energy more effectively
- Helps protect interior furnishings, fabrics, and carpets from fading

Key upgrade selling features

LARSON® Performance Series Low-E Storm Windows offer the following upgrade selling features over standard clear glass storm windows:

- Low-E "hard coat" interior glass
- Expander for uneven sills
- Extended Warranty

For a limited time, begin 8/17/15.

SKU	Site	WTS	Now
744-01			
28859			
28827			
28906			
32439			
37427			
32438			
38433			
38827			
38432			

Special order Low-E storm windows will be priced at 20% off regular retail for a limited time, begin 8/17/15.

Efficiency Vermont
 See other side for more information on the Efficiency Vermont SMART CHOICE program

Sales Staff Pocket Reference Card

Efficiency Vermont

ABOUT LOW-E STORM WINDOW INSTANT DISCOUNTS

Limited time only (offer could last until early October 2015, but will only be available while supplies last)

Customers should purchase windows or place special orders as soon as possible to ensure that they receive the instant discount

Efficiency Vermont reserves the right to cancel this promotion at any time

Limit: 15 windows per Vermont electric utility account
 Efficiency Vermont is testing this promotion, and may decide to create a longer-term promotion at a later date

ABOUT EFFICIENCY VERMONT

Efficiency Vermont was created by the Vermont Legislature and the Vermont Public Service Board to help Vermonters reduce their energy use

Services include technical assistance, education, financing, and financial incentives for the purchase and installation of energy-efficient products

Efficiency Vermont is funded through the Energy Efficiency Charge on electric bills.

www.efficiencyvermont.com | 888.921.3990

Survey

GOT 5 MINUTES?

Respond to this survey and receive a \$10 Amazon.com gift card.*

amazon.com

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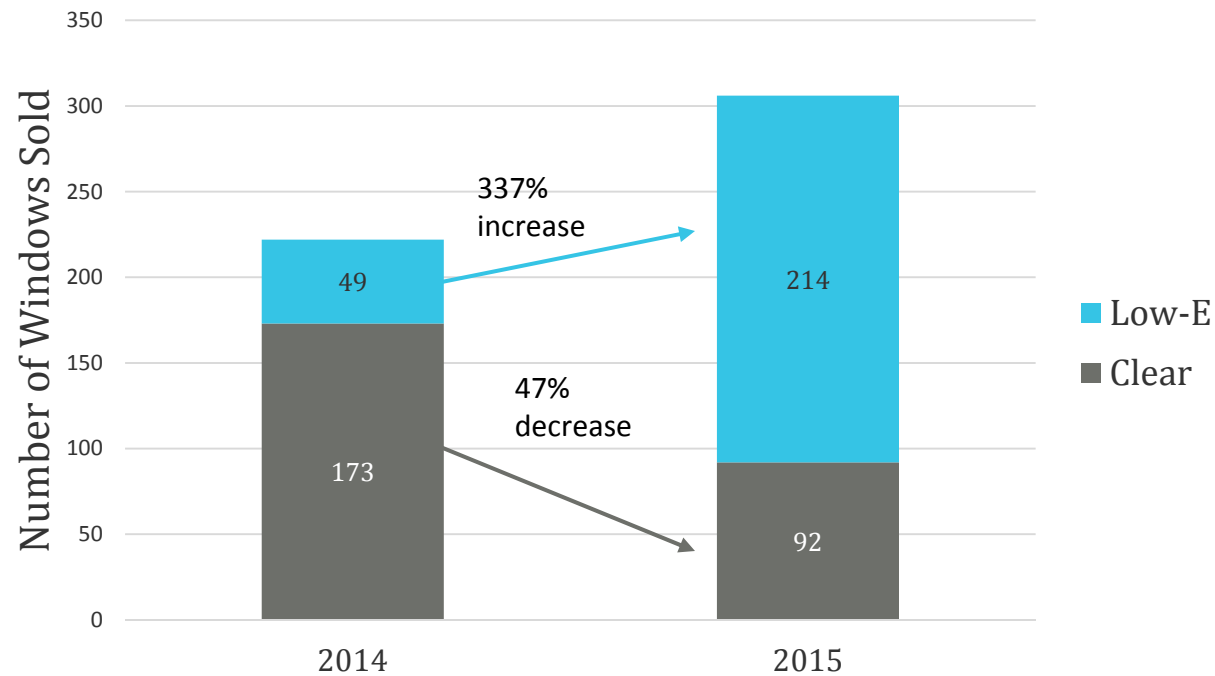
*Respond by 10/26/15 to receive an Amazon.com gift card. Limit 1 gift card per household/utility account. Contact information required for verification.

Stack-Out



Efficiency Vermont

Results – Overall Sales



- 337% Increased sales lift of Low-E storm windows Year over Year
- 47% Decrease in market share of clear glass YOY
- Overall lift in storm window category sales

Pilot Results



- First Low-E Storm Incentive Pilot
- Successfully demonstrated market impact & lift
- Utility outreach & marketing activities had impact
- Opportunity to engage DIY, low- to moderate-income groups
- Customer Survey

Low-E Storm Window Market Characterization

Objectives

1. Measure Vermont homeowners' awareness, knowledge, interest and adoption of storm windows; specifically Low-E storm windows.
2. Identify the motivators and barriers surrounding storm window adoption.
3. Gauge the level of impact Efficiency Vermont rebate programs have on Vermont homeowners' likelihood to purchase Low-E storm windows.

Methodology

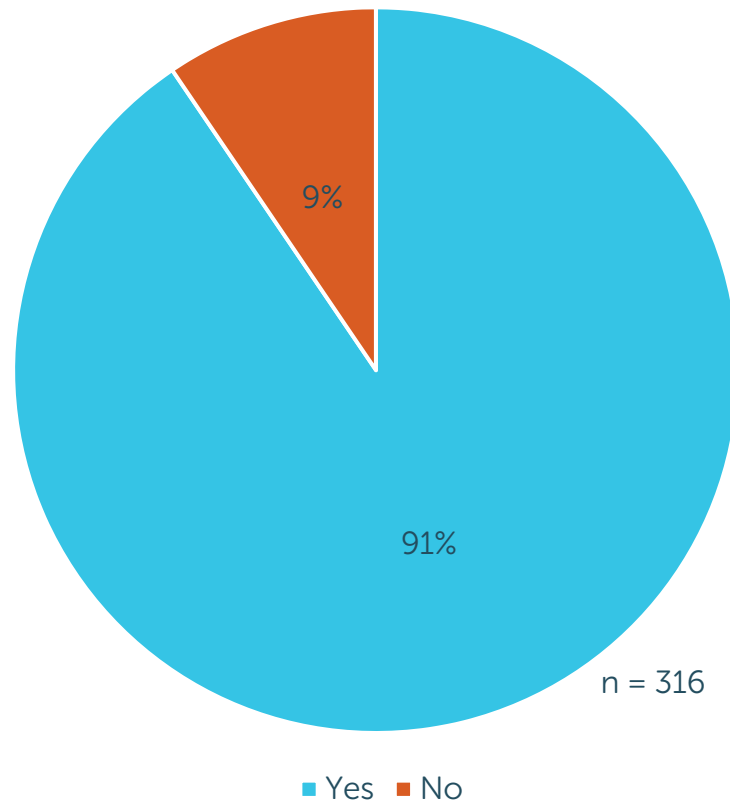
- 10-minute online survey
 - November 16th – November 24rd 2016
- Sample obtained via Qualtrics
- 316 completed responses
 - Error Margin (95% CI): +/- 5.5%

Storm Window Target Market

91% of respondents qualified as Efficiency Vermont's target market for storm windows.

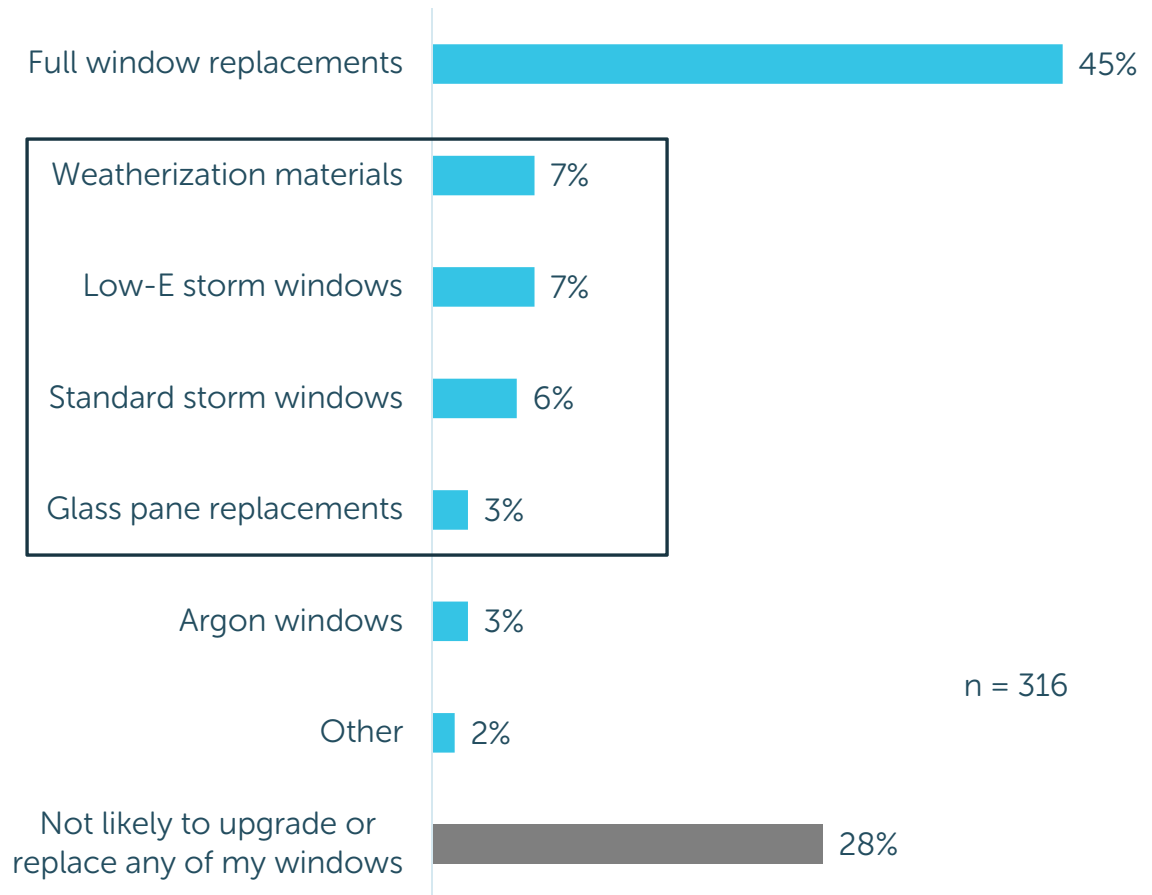
The target market for storm windows was defined as anyone who:

- Uses workarounds to compensate for less efficient windows (Q9)
- Received a recommendation from a professional to replace or upgrade their windows (Q9)
- Has concerns with their current windows (Q10)
- Has a home with single pane or older windows (Q12 & Q13)
- Has interest in replacing or upgrading their windows (Q14)



Window Upgrade/Replacement Consideration

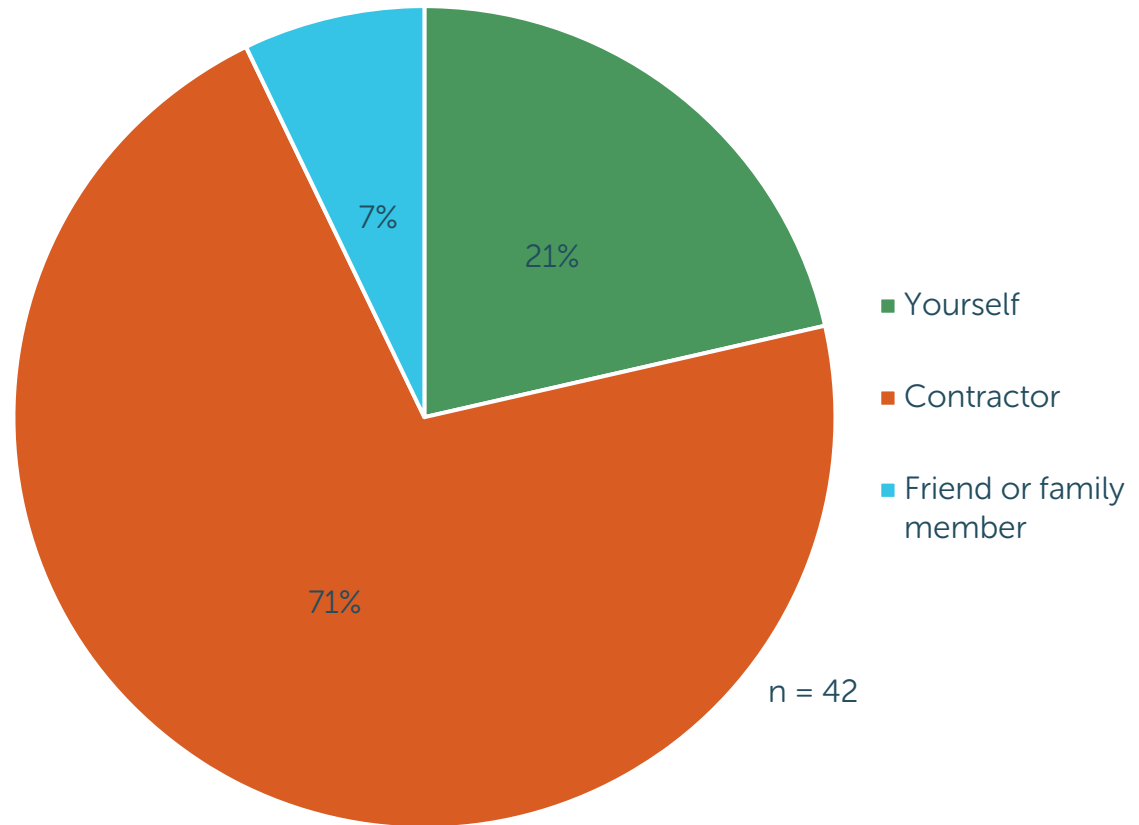
23% of respondents would select a low cost alternative over full window or argon window replacements.



Q27. If you were to upgrade or replace your windows, which of the following would you be most likely to purchase?

Storm Window Installer

71% of respondents who would consider Low-E storm windows would likely have a contractor install them.



Q28. Who would most likely install storm windows at your home?

Key Takeaways

1. 9 out of 10 Vermont homeowners would benefit from installing storm windows.
 - a. 41% own at least one storm window. The vast majority have them installed in multiple rooms in their home.
2. Only a third of the market is even aware that Low-E storm windows exist.
3. An opportunity may exist for Efficiency Vermont to work with contractors to sell and install Low-E storm windows.
4. When customers understand the Low-E storm window value proposition, their likelihood to purchase increases.

Next Steps

EM&V and Program Design



- Currently developing a TRM Characterization
- Exploring different program delivery options
 - Home Performance
 - Direct Install
 - Low/Moderate Income Programing
- Continue to Learn
- Stay involved with AERC and other national/regional conversations.

Thank you!

Jenna Pugliese

JPugliese@efficiencyvermont.com

802-540-7802

www.efficiencyvermont.com/news-blog/whitepapers

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