



Window Dressers

INSULATING WINDOW INSERTS

**A Business Case Study for
Building a Wellbeing Economy**

By PivotAll

Case Study Summary

This case study reveals how a non-profit organization in New England, U.S. is providing remarkably affordable, environmentally sustainable, high-performance window insulation while pioneering an innovative pricing and production model that builds community, helps people save money, and ultimately makes energy-efficiency more accessible to everyone.

About the Case Study Subject

[WindowDressers](#): Insulating Window Inserts

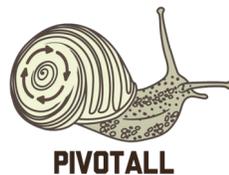


WindowDressers is a volunteer-driven non-profit organization dedicated to helping Northern New England residents reduce heating costs, fossil fuel consumption, and CO-2 emissions by lowering the amount of heat loss through windows.

About PivotAll

[PivotAll](#): Pivoting Businesses To a Purpose-Driven Economy

At PivotAll (pi·vuh·tl), we are working to pivot from "business-as-usual" to "business-that-benefits" all. We believe in transforming traditional business models into ones that prioritize social and environmental impact. Our team works closely with founders to identify areas where they can pivot their operations to benefit not just their bottom line but also the communities they serve. Together, we can create a sustainable future.



Acknowledgements

PivotAll is grateful to the WindowDressers team for their trust and partnership throughout the process of producing this case study. Special thanks to Jessica Williams, Executive Director of WindowDressers, for being so generous with her time and effort in helping us bring this story to the business world.

The author of this case study also acknowledges that his residence and place of business are situated on the ancestral and unceded homelands of the Wabanaki (Dawnland Confederacy) and the N'dakina (Abenaki / Abénaquis) peoples. His relationship to this place is one of home, livelihood, and growing commitment. He plans to honor this relationship by acknowledging and respecting the enduring sovereignty of the ancestral inhabitants of this place, while dedicating himself to protecting the health of its lands and waters. This commitment moves into action through reminding others of our shared duty to protect and regenerate the air, water, and soil that sustain life here and everywhere. He hopes that this case study is a catalyst for workers, business owners, and people everywhere who seek to do the same for their communities.

Case study details and credits

- Publication date:** March 2026
- Author and designer:** Patrick Loftus
- Data collection:** Stella McShera, Patrick Loftus
- PivotAll editors:** Seth Schori, Jack Blumenshine, Veronica Devenin, Lauren Goetze, Stella McShera
- WindowDressers editor:** Jessica Williams
- Image credits:** Community build images provided with permission from WindowDressers.
- Copyright:** PivotAll, 2026. [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

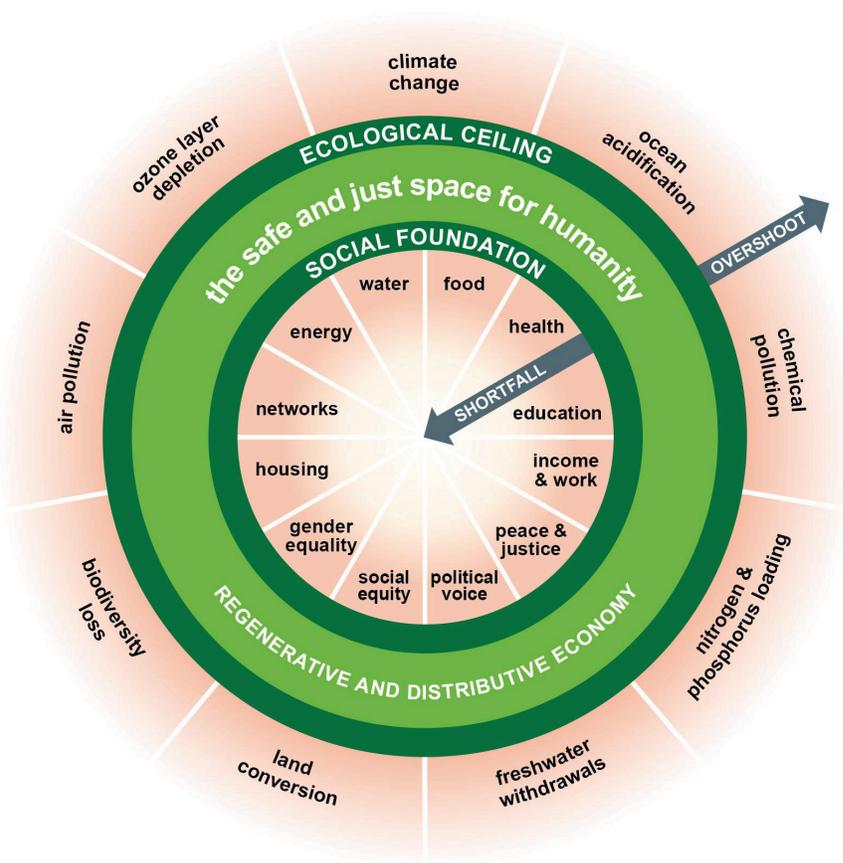
Table of Contents

- What do we mean by a 'Wellbeing Economy'?..... 3
- Case study introduction..... 4
- How WindowDressers got started..... 5
- The product: Affordable, low-tech, effective insulating window inserts that are environmentally sustainable.....5
- The process: Ordering, measuring, and community builds..... 7
- Challenges and opportunities..... 9
- Takeaways for entrepreneurs and business owners..... 11
- The bigger picture..... 12

What do we mean by a 'Wellbeing Economy'?

A “wellbeing economy” describes an economic system that is *intentionally designed* to prioritize wellbeing for all. This kind of economy stands in stark contrast to growth-based economic models, which are what the United States and most other countries across the world have officially pursued since the 20th century in terms of economic policy.

Growth-based economies prioritize the growth of a single indicator called gross domestic product (GDP). This is a number that measures national income, or the sum of all monetary transactions within the formal economy, over a certain time period, typically a year.



The “Doughnut” model for designing and assessing a wellbeing economy, developed by economist Kate Raworth.

Unlike a wellbeing economy, a growth-based economy is not intentionally designed to prioritize wellbeing. As a result, even as GDP grows, key social and ecological indicators – from life expectancy to biodiversity – are suffering both nationally and globally. This is because GDP is just an aggregate number; it provides too little information, excluding what matters to us, while ignoring what causes harm. Under such a system, businesses are rewarded for prioritizing power and profits at the expense of the common good.

That’s why PivotAll is inspired by fields of research – such as degrowth, post-growth, and doughnut economics – that align with the vision of an economy centered on shared wellbeing rather than abstract growth targets. In many ways, the wellbeing economy already exists in small pockets all over the United States.

We see it in creative and innovative business models and business owners who have figured out how to do the right thing for their workers, their communities, and the environment. We hope business case studies such as this one can inspire other businesses to pivot from business-as-usual to business-that-benefits all. Eventually, the wellbeing economy will be here before we know it.

Case study introduction

Heating and cooling homes is a major expense for low-income and working-class people, especially in regions with cold winters and warm summers like New England. Drafty windows are one of the largest sources of heat loss in a home during winter, and getting new windows installed can be prohibitively expensive. The next best thing, custom-sized window insulation inserts (sometimes called “storm windows”) aren’t affordable for most people’s budgets either, typically costing hundreds of dollars per window.

That’s why a Maine-based non-profit organization called [WindowDressers](#) has been getting so much interest in recent years. We spoke with WindowDressers’s Executive Director, Jessica Williams, to get the full story.

Since 2010, WindowDressers has been filling the gap – literally, in drafty window frames, but also the gap in affordability – by offering insulating window inserts at a fraction of the price for people across New England. Roughly 35% of their inserts go to low-income households for whatever they can afford to pay, or for free (if they cannot afford anything). They often get their product requested from folks in other states as far away as Texas, and are currently considering expansion into other areas of the Northeast.

The window inserts that WindowDressers produce are custom-sized, tight-fitting, and extremely effective at window insulation, clocking in with an R value of 2, which means doubling or tripling the insulation-ability around the window frame for single or double-pane windows that are common in older homes. While it can cost a building owner or homeowner between \$500 to \$1000 or more per window to install new windows, and \$300 to \$500 for conventional window inserts, WindowDressers sells their window inserts at between \$40 to \$100 per window depending on window size. And if a household’s income is so low that they can’t afford the inserts at those prices, WindowDressers offers up to 10 of them for free as part of their Special Rate program.



WindowDressers customers and volunteers assemble window inserts at a “community build” shift – a production model that lowers the cost of the window inserts and brings locals together.

What really makes WindowDressers unique is their Community Build business model. Whether they qualify for free inserts or not, all customers volunteer a few hours of their time (or they ask a friend or family member to volunteer in their place) at a local “community build” workshop session, led by a small team of volunteers, where they assemble the window inserts themselves.

While they are a 501(c)(3) non-profit that is able to offer about a third of the windows they produce on a “pay what you can afford” basis to low-income customers, over two thirds of their revenue comes from sales of the window inserts from paying customers.

How WindowDressers got started

In 2010, an energy audit of the Universalist Church in Rockland, Maine revealed the church building had leaky windows. To fix the problem, Richard Cadwgan, a friend of the church, borrowed an original, do-it-yourself (DIY) window insert design from Topher Belknap, another member of the community, and built 26 window inserts for the church. The inserts substantially warmed the building, reduced heating costs, and lowered its carbon dioxide emissions.

Other church parishioners took notice and asked how to get inserts for their own homes. So, Cadwgan teamed up with former congregation president Frank Mundo to build 185 more inserts in their basement workshops for the parishioners. The following season, Cadwgan and Mundo received orders for over 1,200 inserts. They took out a \$2,000 loan from the church for the materials, quickly repaid with sales proceeds, and began establishing the framework of the WindowDressers business model – including the community build concept. Today, WindowDressers produces over 10,000 inserts across dozens of community builds in Maine, Vermont, and New Hampshire every season.

The product: Affordable, low-tech, effective insulating window inserts that are environmentally sustainable

Storm windows on the market tend to be made of a variety of mass-produced and often complex industrial materials, like plastics, plexiglass, and metals. WindowDressers’ inserts are relatively simple in comparison, but just as effective.



Community build participants with a finished window insert.

Pricing

A quick Google search will tell you that you can expect to pay anywhere from \$300 to \$500 per window for similar window insulation insert products from various retailers in the United States. Thanks to WindowDressers' ongoing focus on simplicity, waste-reduction, its community-based production system, and its non-profit pricing model, customers can expect to pay as low as \$40 to \$100 per window insert.

Performance

Insulation products with a higher R-value (as in "resistance") are better at preventing heat transfer and thus more effective at insulating a space. Standard single pane windows tend to have R-values of about 1, while more expensive double pane windows range from 2 to 4.

WindowDressers' [own analysis](#) says their window inserts come with an R-value of 2, which is slightly higher than similar products from other companies that tend to cost more. So, for an old home with standard single pane windows with an R-value of 1, adding WindowDressers inserts brings a window frame's total R-value to about 3. The result is a more affordable and easier-to-install alternative to replacing windows in a house or buying expensive window inserts, and a more practical pathway to lowering utility bills and energy use.

Because of their design, the inserts are a great solution for renters who often don't have the ability to make structural changes to their living space. The product doesn't require any hardware or adjustment to the window frame in order for it to function.

Environmental impact and material usage

Each WindowDressers window insert consists of a pine frame (optionally painted white), assembled with some screws and glue, wrapped in shrink-wrap plastic film and bordered by a thin foam strip for a tight fit and a smooth installation. These are all inexpensive materials you could buy from a hardware store and DIY-assemble with some time and simple tools, as the founders did initially. WindowDressers inserts are known to last for five to ten years or more

depending on use, and if the inserts get damaged, customers can bring them to a local community build to have them repaired for a flat fee of \$15.

Compared to companies that make high-efficiency windows and conventional window inserts, WindowDressers actively prioritizes ecological sustainability and decarbonization. With the exception of the foam strip, the materials used to build the inserts are recyclable, and the wood is finger-jointed pine sourced from the eastern United States.

Each window insert can help a standard oil-powered home furnace burn about 8.5 gallons less each year, which works out to around \$45 in annual fuel savings for each insert. Expand those numbers to a full room or house, and it's easy to see why the energy-use and cost savings are so great for their customers. The window inserts pay for themselves in two heating seasons or less. This calculation doesn't even consider how much money and energy a household saves if they leave their inserts in their windows while air conditioning their home during the summer months.

The process: Ordering, measuring, and community builds

Ordering the window inserts can be done through the WindowDressers website. Once an order is placed, volunteers schedule an appointment to hand-measure the windows at the customer's home, taking great care to get the dimensions correct. The volunteer team then enters the dimensions into a proprietary order management system. Those dimensions are then sent to WindowDressers' production facility in Searsmont, ME where the wood is cut to size, using Tigerstop software and mechanical wood positioner to cut the wood precisely and efficiently, ensuring only 5% of the material cut is lost to waste. The cut and pre-drilled wood is bundled and packaged up with all other insert assembly materials until it is sent to the various community builds across the region for assembly.



Recyclable shrink wrap is placed around the frame of the window insert to create an insulation barrier.

Next, the customer is scheduled to attend a community build in their area, usually in the fall. For every one to five window inserts ordered, WindowDressers asks that you devote a four-hour shift at a community build. If, for example, a couple wants to insulate a single room or a first floor, that requirement can be met if they attend a community build together for a half-day or full-day shift.

Community builds are led by a small team of local volunteers. They guide the customer-volunteers (and sometimes non-customer volunteers, who want to do community service) through the process. Teams of two are assigned to specific workstations (e.g., table tops devoted to screwing and glueing frames together, or shrink wrapping), each with their own “jig” or table-top setup. Each jig is proprietary and has been developed by WindowDressers over the years, using volunteer feedback to optimize for consistency, quality control, cost-effectiveness, and ease of use. Food and breaks are provided to all volunteers, giving participants a chance to rest and get to know other locals during the shift.

This community build system, combined with a carefully-curated supply chain and smart use of volunteer labor-time, are the key ingredients to WindowDressers’ success: a great product at a remarkably low price.



Foam tape is placed around the frame of the insert, creating a snug fit in the window frame and allowing for the insert to be easily installed and removed as needed.

Financials, operations, and approach to growth

WindowDressers has a board of directors, alongside five full-time paid staff focused on organizational operations. Localized volunteers in different communities throughout Maine, Vermont, and New Hampshire conduct measurements and run each community build, sometimes with training and support provided by staff members and volunteer mentors.

WindowDressers’ current revenue model presents a barrier to geographic expansion in new states. Maine, Vermont, and New Hampshire don’t require financial audits for businesses with less than \$1 million in revenue, unlike other states in the region with stricter limits. New York, for example, sets that limit at \$500,000. Therefore, staff size and limited administrative capacity to handle financial audits has been an obstacle to expansion. Because the organization continues to gain

attention from people around the country interested in their product, WindowDressers is currently interviewing certified public accountants (CPAs) to find someone who can conduct a financial review and/or audit to help them expand beyond their current service area.

As a mission-based non-profit without shareholders, growth and profit-maximization are not the primary goals of the organization. Growth in sales and scale of operations have been driven organically, primarily by word-of-mouth, leading to increased demand for inserts within and outside of their current geographic area of operation.

WindowDressers has recently decided to open operations in Massachusetts (a state that only requires a financial review for organizations with revenue between \$500K and \$1M, hence their search for a CPA) to meet increasing demand there. They are currently in the process of talking with people and organizations in the state who expressed interest in the past to see if those groups are still interested, and if they have the capacity to take on the work of organizing a community build with the same level of support that WindowDressers offers in its current service area.

WindowDressers is considering what kinds of expansion models can work in other states, too. Some board members have suggested starting franchises, consulting and supporting other organizations (for example, on designing the jigs used to build inserts), or sending out teams to train other organizations directly.

This approach to growth is unique for a product-centered business because WindowDressers is a mission-based organization. Their growth and expansion is centered around meeting the organization's mission while sustaining business operations.

Challenges and opportunities

Energy efficiency rebate programs from state governments

The economic policy environment in New England has been a mixed bag for WindowDressers, especially when it comes to state-subsidized energy efficiency programs. WindowDressers offers an insulation product that, like other products subsidized by state rebate programs, helps homeowners and renters warm their living spaces, reduce fossil fuel reliance, and save money on utility bills. But despite the incredible impact that WindowDressers has already made for thousands of New Englanders, saving them millions of gallons of heating oil and millions more dollars, there aren't many state programs that offer rebates for DIY or low-tech insulation solutions. Providers of things like spray foam insulation, high-efficiency HVAC systems, professional energy audits, and heat pumps are typically allowed to partner with state subsidy programs. However, some states, like Maine and its public-private rebate agency, Efficiency

Maine, only subsidize traditional installation business models. This excludes providers like WindowDressers from qualifying for those beneficial state subsidies. Whereas in Vermont, through Efficiency Vermont, residents can get a \$100 rebate if they order at least three inserts from WindowDressers for their home.

Reliance on a volunteer labor force

It's easy to imagine why many people would be willing to volunteer at a community build for a few hours to access the most affordable window inserts on the market. But WindowDressers also relies on a more permanent labor force of longer-term volunteers to conduct outreach, measure windows, and organize and run community builds. Maintaining adequate numbers in their volunteer labor force is an existential priority, so experimentation towards this end is ongoing. WindowDressers does everything it can to make the volunteer experience as streamlined as possible, from standardizing and improving training materials and processes to making the order management software as user-friendly as possible, in order to encourage volunteer retention. Volunteer recruitment and training, along with succession planning for retiring volunteers, are incredibly important to the organization. Over the long-term, volunteerism has been in decline (reflecting downward trends in volunteering nationwide), partially due to volunteers aging out and not enough young people being available or interested in volunteering. Therefore, WindowDressers is constantly making an effort to recruit people of all ages.

Fundraising is a challenge and limiting factor

About one third of WindowDressers's revenue comes from grants and donations. As with most non-profits, fundraising is a constant challenge. Customers pay for their inserts many months in advance, which provides the funding to order materials for community builds. But donations are a major limiting factor for full-time staff capacity and compensation. Jessica, the Executive Director, shared that funding for more staff would significantly help free up time for employees. She highlighted that having time to focus less on administrative work and more on strategic planning would significantly help the organization.



Community build participants at a jig, screwing together the wooden frame of an insert.

Takeaways for entrepreneurs and business owners

WindowDressers offers a few lessons to the business world:

First, they demonstrate that, for certain necessities, a significant amount of people are willing to volunteer their time in order to purchase those products at a much lower price, or to help other community members afford those products.

- Some people have more time than money. Some people have more money than time. Some have little or lots of both. When a business allows contributions of both time and money in order to provide a beneficial product or service to everyone in a community, it can give the community more ways to stay resilient, affordable, and cohesive.
- The community build concept may not be ideal in its entirety for every business owner. However, the model itself raises questions about which goods and services must be entirely produced by skilled workers, and which ones customers might be willing to help produce in exchange for a lower price.
- In a way, the community build model pioneered by WindowDressers is like IKEA's business model in reverse. Instead of the customer traveling to the store and assembling the product at home, WindowDressers customers assemble the product at the community build and bring it home already assembled. In either case, customers save money by putting labor into assembling the product, rather than paying to have it assembled by someone else.

Additionally, WindowDressers shows that certain products don't need to be excessively durable or material-and-energy intensive in order to work exceptionally well and earn customer loyalty.

- Their product, a simple shrink-wrapped wooden frame with a thin foam seal, is an ingenious low-tech solution to the widespread problem of unaffordable home insulation options, high energy prices, and carbon emissions from buildings.
- It's possible to rip the plastic by accident, but this is easily repaired with a patch made of clear shipping tape. And if the product is more heavily damaged, you can bring any window insert back to a local community build for a \$15 repair.
- Compared to the price of conventional products in this category, the customer savings gains far outweigh any durability losses, especially for people seeking to avoid going further into debt to insulate their homes.

Finally, it's possible to run a low-tech assembly business serving a large geographic area with a small team of full-time staff and a large team of volunteers.

- WindowDressers only has about five full-time staff, operates in three bordering states, and is considering expansion into nearby areas like Massachusetts and New York.
- Volunteers are empowered to serve their immediate community with the right mix of training and logistics technology that keeps them organized and maximizes the impact of their volunteer time.

The bigger picture

Sometimes the best solutions are the simplest. WindowDressers has saved New England households roughly four million gallons of heating oil and over \$13 million during the last 16 years by unlocking the power of community and marrying it with practical and inexpensive ways to meet people's basic needs. In an era of crises of affordability, ecology, and loneliness, the "community build" model of collective production and consumption is needed more than ever. Residential energy efficiency saves people money and reduces environmental harm. It is in all of our best interests that organizations like WindowDressers, that produce low-tech, high-impact insulation products, are accessible to everyone everywhere.



WindowDressers also shows us what is possible when we break the mold of conventional non-profit and for-profit business models. What would it look like at scale if more local businesses blended conventional non-profit volunteer labor models with product revenue generation and innovative customer-powered collaborative assembly? What if more non-profits leaned into revenue generation from selling essential goods and services? And how could this innovative blending of business models make basic necessities more affordable, accessible, and sustainable at the macro-economic level?

Home weatherization is an ongoing need when it comes to retrofitting our aging housing stock for energy efficiency and comfort, as well as reducing carbon emissions and pollution. There are a number of approaches involving various degrees of materials, energy, and time. But WindowDressers shows that there are a lot of low-hanging fruit for DIY and low-tech options that make insulation easier and more affordable. Additionally, the community build model demonstrates the efficiency gains of not just doing-it-yourself but doing-it-together (DIT?) with your community.

Governments will certainly need to make large public investments in order to make our economy more sustainable and affordable. However, immediate policy levers (e.g., more inclusive rebate programs for alternative insulation options), can be pulled to make low-tech home weatherization more accessible to more people.