SAVE LIKE A Mainer

2012 Year in Review

efficiency MAINE

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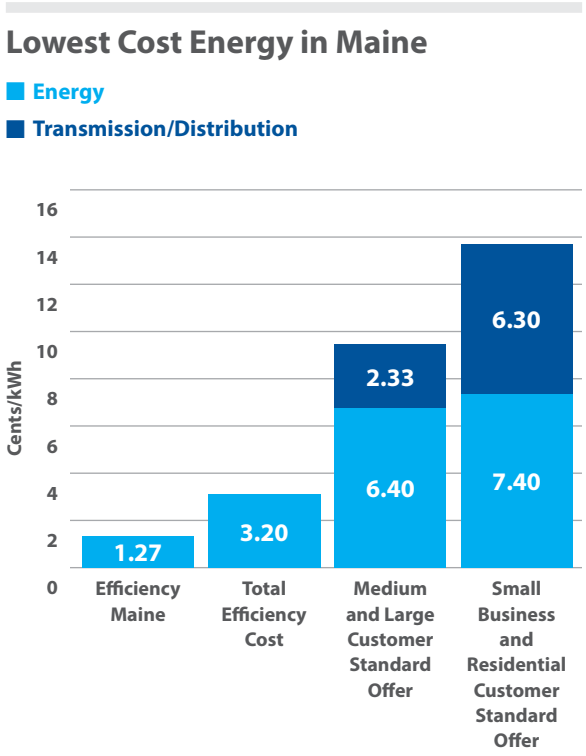
Energy Efficiency: Maine's Low-Cost Energy Alternative

A leaky faucet can have quite an impact over time. A steady drip fills a bucket within an hour or two, and a stubborn trickle quickly becomes a costly wasted resource.

THE SAME HOLDS TRUE FOR ENERGY. An inefficient piece of commercial equipment, an office complex with poor insulation, a home with air leaks and inefficient lighting, an aging heating system in need of replacement – little by little, that constant trickle of energy adds up to lots of wasted money.



Here's the good news: more Mainers are playing an active role in stemming the tide of wasted energy through energy efficiency and energy-saving measures.

And they are lowering the cost of energy in the process. In 2012, energy efficiency was the lowest cost energy resource in Maine as it has been for several years straight. Efficiency costs less than running power plants, expanding transmission lines, and delivering supply. Last year, for example, Efficiency Maine paid 1.27 cents for each kilowatt-hour (kWh) that will be saved through high-efficiency equipment and energy upgrades. Compare that to the 7.4 cents/kWh that customers would have paid for an equivalent supply of that energy.

Thanks to the thousands of businesses and homeowners who have participated in Efficiency Maine programs, electricity costs will be $142 million lower.

In 2012, Efficiency Maine's residential and business programs helped Mainers from Fort Kent to Kittery realize those savings in schools and hospitals, factories and coffee shops, restaurants and retail stores, single-family colonials and multifamily apartment buildings. Efficiency Maine program participants lowered their energy costs, making businesses more profitable and competitive and families more economically secure.

Consider that over the full life of the efficiency measures installed in the past year through Efficiency Maine's programs, consumers will avoid the need to buy more than 1.8 billion kilowatt hours. That's a lot of energy. Lumped together, that would be about the same amount of power required to operate the New York City subway system for a year.

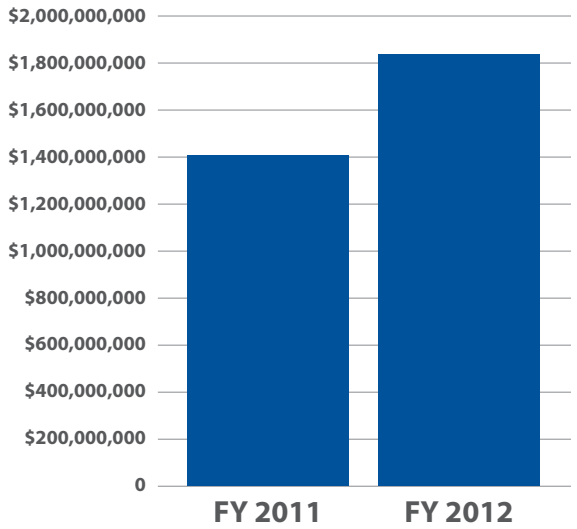
For the second year in a row, the resulting energy efficiency work realized through Efficiency Maine programs generated significant investments in energy infrastructure upgrades during a sluggish economy. With Efficiency Maine's funding as incentive, nearly $41 million in private investments was leveraged, helping create or retain hundreds of jobs and strengthening the local economy while reducing energy costs for all Mainers.

It has been a busy year for Efficiency Maine. The organization successfully completed its second year as an independent trust providing essential information, training, quality control and financial incentives for thousands of business and residential energy customers. Efficiency Maine introduced several new programs, including a loan product for home energy upgrades, more weatherization programs for multifamily buildings and for electrically heated low-income apartments, and a $600 air sealing promotion for homeowners. Furthermore, it wound down most of the programs that had relied on federal Recovery Act funding during the past three years. Efficiency Maine also conducted a number of evaluations of its programs, including its Home Energy Savings Program, Business Incentive Program, Commercial Project Grants, and Large Customer Program.

After holding numerous public meetings to garner feedback from stakeholders, Efficiency Maine drafted a new three-year strategic plan to chart a course for FY 2014-2016. The Triennial Plan serves as a roadmap for Efficiency Maine's business and residential programs and initiatives, and establishes cost-effective goals and objectives that help maximize energy savings statewide.

Thanks to homeowners, businesses, municipalities, and other organizations that have taken action to install energy efficient equipment and utilize programs through Efficiency Maine, the state has saved well over $1 billion in lifetime energy savings since 2002. So while plenty of additional energy efficiency opportunities still exist statewide, the trickle of wasted energy is slowing more every year. ▪

Lifetime Savings kWh



Cost of Oil Saved Through Efficiency Maine's Air Sealing Promotion*

Average Cost of Oil:
$3.74 per gallon**

Total Cost of Air Sealing Promotion, Including $600 Incentive:
$1.05 per gallon of oil saved

Average Consumer Cost Only (excluding incentive):
$0.21 per gallon saved

*Assuming conservative average 10-year measure life, and estimated average 81 gallons per year saved per household

**Cost as of 2/13

Efficiency Maine introduced several new programs, including a loan product for home energy upgrades, more weatherization programs for multifamily buildings and for electrically heated low-income apartments, and a $600 air sealing promotion for homeowners.

Business Programs

IT MAY NOT SEEM OBVIOUS what Sunday River, the Freeport Sewer District, Hannaford Supermarkets, and the Ramada Conference Center have in common. However, they all recognize the value of energy efficiency. From super-efficient snow guns that allow more Sunday River trails to remain open with greater predictability, to the addition of modern air compressors and other measures that will allow the Freeport Sewer District to save an estimated $80,000 on its electric bills, organizations large and small are discovering the impact efficiency has on the bottom line.

Efficiency Maine's Business Incentive Program has helped businesses save money and energy, and even function better. The Business Incentive Program provides education, technical assistance, quality control and financial incentives for energy upgrades to businesses of all sizes. Last year, more than 1,600 businesses received incentives that helped lower electric bills by an estimated $44 million over the lifetime of the installed measures.

That work was conducted by professional vendors and contractors from a stable of more than 400 trade allies, called Qualified Partners by Efficiency Maine, who are specially trained to help customers understand high-efficiency options and how to apply for and get financial incentives. High-efficiency lighting is how most organizations realized their energy savings, but businesses also saved money by improving their heating, ventilation, and air conditioning systems, along with installing variable frequency drives.

All told, more that 2,500 projects were completed, and more than 40 percent of them were by Maine's small businesses.

A COMPETITIVE ADVANTAGE

Any first-year business student will tell you that leading companies obsess over their competitors. What's increasingly obvious for large companies is that the competition isn't only from overseas or out-of-state rivals. An organization's own internal operations compete against each other for new capital investments. If a capital project for an energy upgrade shows a lower return on investment (ROI) than competing proposals in another division or department of the company, the upgrade won't go forward. And if the competing proposal comes from a facility outside of Maine (typical for Maine's largest companies), then the Maine-based facility may fall further behind.

Enter Efficiency Maine's Large Customer Program. Incentives for energy efficiency help shorten the payback period on a capital investment in efficiency upgrades. A faster return on investment means the energy upgrade proposal is not as likely shot down or postponed, but instead moves to the front of the priority list within the corporation. When Efficiency Maine's Large Customer incentives are put in play, it also means a capital improvement is made in a Maine

Hannaford's LEED-certified store in Augusta.

Bagging Big Savings

With 181 supermarkets in five northeastern states, Hannaford Bros. Co. requires lots of electricity. Here in Maine, Hannaford recognizes the importance of energy efficiency not only to control operating costs, but to improve the shopping experience for its customers. Last year, Hannaford improved the lighting at a number of its Maine stores by installing better, brighter energy-efficient fixtures. It also improved the energy efficiency of its coolers and refrigerators through Efficiency Maine's Business Incentive program.

Hannaford has a long history of recognizing the value of energy efficiency, and is among a handful of companies in New England to earn the EPA's prestigious ENERGY STAR Leaders designation for the overall performance of its New England and New York stores. Looking to the future, Hannaford is working toward a 20 percent reduction in greenhouse gas emissions by the year 2020, compared to a baseline year of 2008. In 2012, Hannaford's annual energy use intensity (Btu per square foot per year) was reduced by 4 percent vs. the prior year, a significant step toward achievement of this goal.

Hannaford has improved its energy performance through technology upgrades and management improvements, including illuminating its outdoor signs with red LEDs, which replaced its traditional neon lighting; re-using waste heat from refrigeration for space heating; and using a Building Automation System to integrate control of refrigeration, lighting, and HVAC systems.

Hannaford also opened the world's first Platinum LEED-Certified supermarket in Augusta in 2009.

Texas Instruments Considered Model of Efficiency

Texas Instrument's South Portland operation specializes in manufacturing semiconductors found in cell phones, computers, automobiles, and medical equipment, and is a marvel of precision manufacturing. The facility is 10,000 times cleaner than a hospital operating room. You can bet that with all that sophisticated technology and production capacity, the facility requires a whole lot of energy.

High utility costs have required Texas Instruments to design and implement a number of resource conservation projects. These projects have saved the plant in South Portland over $2.5 million a year, while meeting a financial return of less than two years. Strong management skills, technical innovation, and participation in Efficiency Maine programs have led to some of those breakthrough successes. The South Portland facility is now considered a model of system optimization used in semiconductor manufacturing.

Using Efficiency Maine programs, the South Portland facility recently replaced 52 chillers with high-performance models that cut electricity use by 75 percent. The $1 million investment will pay for itself in about three years.

facility instead of somewhere else in the corporation's portfolio of assets.

The program leverages private investment to achieve significant electrical savings and stimulates economic growth in Maine. These grants are targeted at many of the largest energy consumers in the state – companies such as Verso Paper and Texas Instruments – and were selected based on the quantity of electric energy saved per program dollar invested by Efficiency Maine. In FY12, Efficiency Maine's Large Customer Program provided grants for large-scale energy-saving projects that helped save nearly 468 million kilowatt hours – or more than $32 million – in lifetime energy benefits.

Sunday River Goes Great Guns on Efficiency

Ski enthusiasts count on Maine's ski resorts to have consistent snow cover and skiing conditions, but Mother Nature doesn't always cooperate. Snow making ensures that primary trails can open early in the season, but it's an energy- and cost-intensive process. This year, Sunday River Ski Resort made a $1 million investment to improve snow making capacity with energy efficient snow guns, a project made possible by a grant from Efficiency Maine.

The new snow guns will allow the resort to make more snow on more trails using less energy. The HKD SV10 Impulse snow

Sunday River

guns are the most energy efficient on the market and use up to 90 percent less compressed air than conventional snow guns – a significant savings if you consider that creating compressed air is the most energy-intensive aspect of the snow-making process. In addition to saving a significant amount of electricity, these new guns will allow the resort to make snow at warmer temperatures as well as build larger base depths on key trails for skiing later in the spring.

Portland Water District broke ground on a new UV water treatment facility. From left to right are Gordon Johnson, Engineering Manager, Portland Water District; Guy Cote, Water District Board Vice President; Roger Crouse, Maine CDC Drinking Water Program Director; Michael Stoddard, Efficiency Maine Trust Executive Director; and Wayne Ross, Water District Board President.

Savings on tap at Portland Water District

With the help of a grant from Efficiency Maine, the Portland Water District broke ground last year on an energy-efficient project to upgrade the Sebago Lake Water Treatment Facility with the addition of UV water treatment and an update of the ozone treatment process. The upgrade will provide new purifying capabilities and allow the Portland Water District to continue to meet the water quality standards area residents have come to expect. The ultraviolet light system will protect against various harmful, water-borne organisms. The project will also install new technologies to update the 20-year-old ozone system. More efficient equipment and a liquid oxygen system will replace a complex and energy-intensive process that creates ozone out of ordinary air.

Signs of Success: Partnering with the Private Sector

A number of Qualified Partners received awards for their efforts in saving their clients energy and money with the help of Efficiency Maine. Qualified Partners are experienced vendors, contractors, suppliers and other professionals who supply or install energy-efficient equipment, receive training from Efficiency Maine, and are familiar with Efficiency Maine's incentive programs.

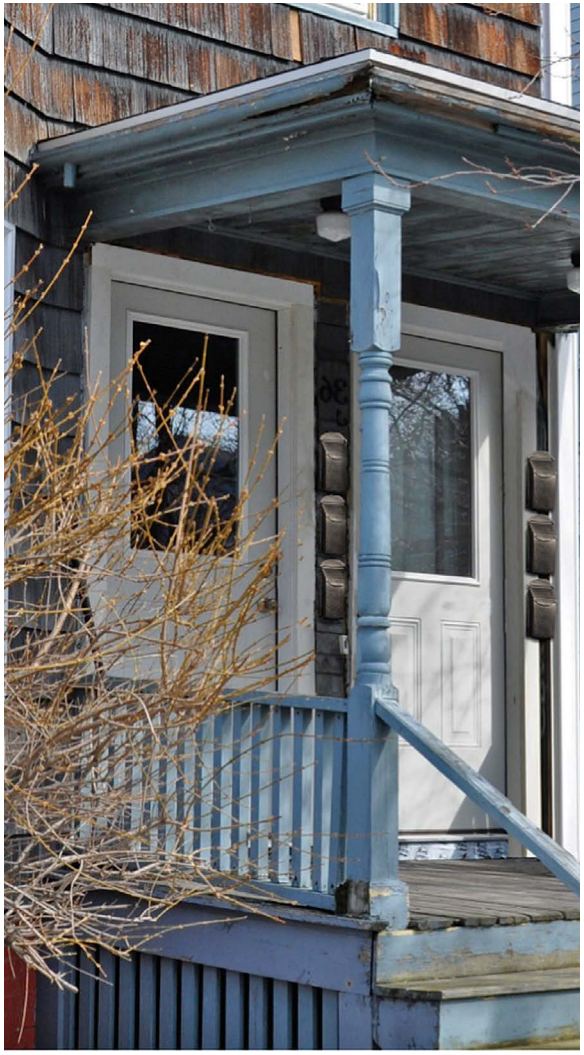
Qualified Partner Awards were presented to the following companies:

- The Largest Lighting Project award was presented to **Ameresco**, which undertook a lighting project for the City of Portland with anticipated savings of more than 900,000 kWh.
- **Woodard & Curran** of Bangor and Portland was honored with the Largest Mechanical Project award for an aeration system for the Freeport Sewer District.
- The Contractor of the Year award was presented to **Portland-based Mechanical Services Inc.**, which completed 42 projects this past year.
- The Supplier of the Year award was presented to **CED Gilman Electrical Supply**, whose eight locations statewide helped contractors realize 369 Efficiency Maine projects for a total estimated savings of 2.5 million kilowatt hours.
- The Qualified Partner of the Year award was presented to **EMC of South Portland**, which has completed numerous lighting projects with Efficiency Maine since 2009, including 20 over the past year.

Additionally, Efficiency Maine honored four other partners in its energy efficiency mission:

- The Customer of the Year award was presented to Portland-based real estate management and development company **East Brown Cow**, which has worked on 75 projects with Efficiency Maine since 2003, including the recent installation of 96 solar panels on a parking garage rooftop on Fore Street in Portland.
- The Retailer of the Year award was presented to **Walmart**, which sold more compact fluorescent bulbs in Maine than any other retailer, in part due to the success of its popular 97 cent six-pack.
- The Participating Energy Advisor of the Year award was given to **The Breathable Home**, a Manchester, Maine-based business led by Bo Jespersen, who has completed the most projects (20) financed through Efficiency Maine's low-interest PACE and PowerSaver loans and was an early adopter of Efficiency Maine's air sealing incentive for homeowners.
- The annual Philip C. Hastings Award recognizing extraordinary commitment to energy efficiency was presented to **Timothy Vrabel**, for his years of dedication to energy efficiency at organizations including Efficiency Maine, Central Maine Power, the Public Utilities Commission, and the Department of Energy Resources.

Awards were presented by Efficiency Maine Executive Director Michael Stoddard and Board of Trustees Chairwoman Naomi Mermin (pictured above) to a number of the Trust's partners. Among the winners were (top photo): Nadine Aubuchon and Bo Jespersen of The Breathable Home, recognized as Participating Energy Advisor of the Year; David Clay of Mechanical Services, recognized as Contractor of the Year; and Tim Vrabel, pictured with his wife Barbara Vrabel, who was presented with the Philip C. Hastings Award.



Efficiency Maine's Multifamily Efficiency Program offers comprehensive energy efficiency retrofits to buildings with 5 to 20 units.

Efficiency Maine helped fund the project because it will significantly reduce energy costs for Portland Water District rate payers. The water treatment facility will use 2,364,282 fewer killowatt hours, saving approximately $193,000 annually.

Portland Water District's customers won't notice any change in the water coming from their tap as a result of the upgrade, and thanks to significant energy savings, their rates will be kept in line as well.

MULTIFAMILY EFFICIENCY PROGRAM

Efficiency Maine has long had programs for businesses and homeowners. However, until recently, there were no programs available for owners of large multifamily buildings. In many cases, landlords do not pay heating or utility bills, so they have little motivation to invest in energy upgrades. Tenants could do little to help, since they have no authority to upgrade the building envelope or heating systems.

In FY 2012, Efficiency Maine opened the door for multifamily property owners by launching the Multifamily Efficiency Program to encourage comprehensive energy efficiency retrofits to multifamily buildings that have five to 20 units.

Multifamily buildings selected for program participation are benchmarked and audited by approved vendors called Program Partners. Building owners receive quotes with estimated financial incentives and payback calculations to make informed retrofit decisions reducing energy use by at least 20 percent. The Program is available to affordable housing units and market rate units, and is not restricted by fuel type.

Some examples of common improvement measures covered in the program include:

- Insulation and air sealing
- High efficiency boilers and furnaces
- Boiler controls
- High efficiency water heaters, lighting and air conditioners
- ENERGY STAR appliances (refrigerators, washers, etc.)
- Programmable thermostats
- Pipe insulation

Incentives are offered for completion of an energy plan, required before a project begins, and participants can then receive up to $1,400 for energy upgrades per apartment or 50 percent of installed costs, whichever is less. The first to participate in the program was a property owner of a 1912 building on Cumberland Street in Bangor. According to Stephen Wintle, President of Facility Management Group who oversaw work on the building, the outcome was that the property was nearly as efficient as a newly constructed building. ▪

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Residential Programs

HOME COMFORT, BIG SAVINGS

The Home Energy Savings Program (HESP) was designed to raise awareness about the benefits of home weatherization and to encourage homeowners to make efficiency upgrades sufficient to save at least 20 percent of their total home energy use. HESP started as a rebate program in January 2010 and transitioned to a loan program offering PACE loans in 2011.

Efficiency Maine offers low-interest home energy loans statewide to enable most homeowners to make energy efficiency improvements that can generate enough savings to offset monthly loan payments. By December of 2012, hundreds of homeowners had collectively financed more than $4 million of energy efficiency improvements, including: weatherization (insulation, air sealing, new windows and doors); energy efficient heating systems; lighting and appliances; and solar thermal or solar photovoltaic systems.

Flanked by home weatherization contractors at a press conference in Augusta last spring, Efficiency Maine Executive Director Michael Stoddard announced a new residential loan program called PowerSaver, a complement to Maine PACE Loans that allow homeowners to finance energy efficiency measures.

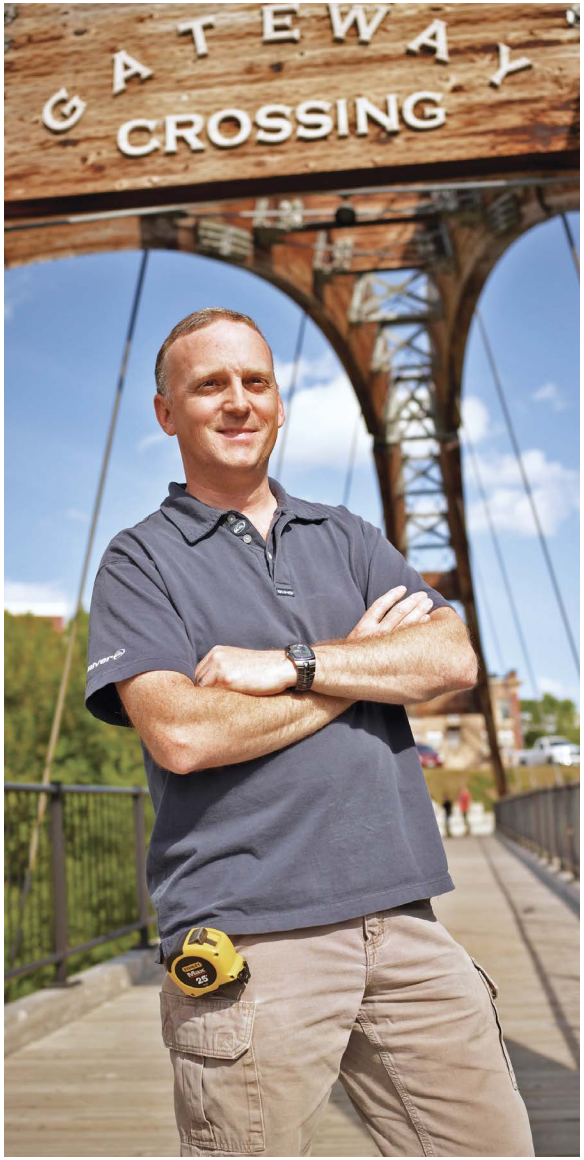
Efficiency Maine held a press conference last April to introduce a new loan product that would be made available to homeowners throughout Maine, regardless of where they live in the state. PowerSaver loans have allowed homeowners to finance smaller projects as well as large-scale energy efficiency projects.

To be eligible for a loan, borrowers must meet certain credit criteria and have completed an energy audit from a Participating Energy Advisor. Loans have terms of up to 15 years (20 in the case of alternative energy projects), and range from $6,500 to $15,000 for PACE, and from smaller amounts up to $25,000 for PowerSaver. Since the inception of the home weatherization loan program in April 2011, Efficiency Maine has processed more than 1,800 loan applications.

More than 150 municipalities across the state have opted in to the PACE Loan program. Residents of these towns comprise 72% of the state population.

Efficiency Maine enhanced its loan webpage to provide a wide range of information and resources at www.efficiencymaine.com/PACE. The website provides two on-line calculator tools that help estimate if energy upgrades are a worthwhile investment at a given home, and the amount of savings homeowners can anticipate by switching fuels or upgrading heating systems.

The Trust also promoted the benefits of home weatherization and increased demand for home energy upgrades through extensive TV, radio, and print ad campaigns, as well as through direct mail, trade show exhibits, and speaking engagements.



Lany Sherman of Houlton-based Buildings Etc. is a Participating Energy Advisor in Aroostook County. Sherman conducted an energy audit last year for Ken and Kristie Spittle of Houlton, who went on to be the first PACE loan participants in Aroostook County.

Andermans go from cold to comfy

Alice and David Anderman love their 110-year-old home. Until recently, however, they thought that having a home with character also meant living with chilly drafts in winter. "I thought it was simply a fact of life that working in the kitchen required wearing a thick sweater or two," said Alice.

For Alice, the days of double sweaters are over, thanks to a whole-house weatherization project on her Waterville home. With a Home Energy Loan from Efficiency Maine, the Andermans were able to make their home more comfortable and expect to save more than 40% on their energy costs.

"I was skeptical at first," recalls David. "Then after a recent snow fall, when the contractor was only partly done insulating the attic, I went outside and noticed that only half my roof had snow cover. The other side was bone dry. That really convinced me what a difference insulation and energy efficiency can make."

SEALING COLD DRAFTS

Everyone wants to save money on their heating bills, but consumers often need a gentle nudge to start the process. Efficiency Maine introduced a limited-time promotion offering a $600 incentive toward the cost of air sealing and insulation work when that work is recommended by a Participating Energy Advisor. The air sealing goes far in stopping cold drafts and can reduce air flow by 16 percent on average. In 2012, about 1,000 homeowners participated in the promotion which also makes them eligible to apply for a home energy loan.

Dave Ireland Builders, a Participating Energy Advisor in Howland, installed more air sealing incentives than any other weatherization company. According to Ireland, whose company primarily serves communities in Penobscot and Piscataquis counties, the air sealing promotion is an excellent opportunity to inform homeowners of the benefits and savings of air sealing and other energy efficiency measures. "This promotion has really allowed us to show homeowners the power of weatherization with simple air sealing," said Ireland. "They can feel the difference right away. Our increased business volume as a result of the air sealing promotion and the conversion rate to additional weatherization projects has permitted us to add one full crew to our team. We've gone from having four full-time people to 24 full-time people."

SHINING THE LIGHT ON SAVINGS

Most people are introduced to energy efficiency with a few simple twists of the wrist the first time they replace an inefficient incandescent light bulb with a high-efficiency compact fluorescent (CFL) bulb. These bulbs use 75 percent less electricity and last six to ten times longer than traditional incandescent bulbs.

However, their sales had been limited because the price per bulb was significantly more than the cost of an incandescent bulb. Thanks to Efficiency Maine's Lighting Program, a discount is applied to CFL bulbs at participating stores to nearly eliminate the price differential. Efficiency Maine reimburses retailers and manufacturers to make the cost of purchasing these bulbs at a number of hardware, discount, grocery, and big-box stores

Efficiency Maine launched a $600 limited-time air sealing promotion benefiting homeowners who hired a Participating Energy Advisor to conduct an energy audit. Also called Residential Direct Install, the promotion offered homeowners up to $600 toward the cost of air sealing or insulation work, which was often completed at the time of the audit. Ads like this one reminded Mainers to prepare for what was predicted to be a harsh winter.

Walmart sold more compact fluorescent bulbs in Maine than any other retailer, and won Efficiency Maine's 2012 Retailer of the Year award.

affordable to Mainers statewide. In FY 2012, Efficiency Maine sold a record 2.1 million CFL bulbs, resulting in an estimated lifetime energy benefit of more than $44 million. According to a recent evaluation of EMT's Lighting Program, a typical Maine household now has 15 CFLs installed, equating to CFL installations in 26 percent of sockets. The Lighting Program is also popular with shoppers of all income levels, helping Efficiency Maine ensure that the benefits of the programs extend to low income customers.

Walmart earned the distinction of winning Efficiency Maine's Retailer of the Year award for its collaboration and active participation in Efficiency Maine's Lighting Program. Walmart sold more compact fluorescent bulbs in Maine than any other retailer, in part due to the success of its popular 97 cent six-pack.

APPLIANCE REBATES HELP CONSUMERS

Efficiency Maine offers incentives ranging from $25 to $50 to encourage consumers to purchase ENERGY STAR refrigerators, clothes washers, and dehumidifiers. ENERGY STAR clothes washers consume about 20 percent less energy and 35 percent less water than regular washers. This saves consumers about $23 per year on utilities. Likewise, an ENERGY STAR refrigerator uses 15 percent less energy than a non- ENERGY STAR unit while an ENERGY STAR dehumidifier uses 15 percent less energy than a conventional one and can save about $20 per year.

In FY 2012, Mainers purchased more than 29,000 energy-efficient refrigerators, clothes washers and dehumidifiers saving more than $4 million in avoided energy costs.

A ductless heat pump indoor unit.

KEEPING LOW INCOME MULTIFAMILY HOMES WARM

In response to a continued sluggish economy and reduced federal funds for low-income assistance, Efficiency Maine redirected $5 million to help low-income Mainers who have been hardest hit by the recession. The Low Income Weatherization Program for Electrically Heated Multifamily Homes pays 100 percent of all cost-effective energy efficiency improvements for electrically heated multifamily homes where 66 percent or more of tenants are eligible for Low Income Home Energy Assistance Program (LIHEAP) participation. As a result of the program, a number of ductless heat pumps have been installed, an effective and common measure in many of these homes.

Although only 300 units were weatherized in fiscal year 2012 due to initial ramp-up activities, as of February 2013, nearly 1,300 units were completed. The program is projected to realize 22 percent in energy savings, or about $300 a year, per unit. ▪

Cross-Cutting Strategies

EFFICIENCY MAINE UNDERTAKES MULTIPLE ancillary initiatives that, while not resulting in quantifiable energy savings, are integral to the organization's success. These initiatives are collectively referred to as Cross-Cutting Strategies and include: Energy Information and Education; Innovation; and Research and Evaluation initiatives.

Perhaps most visible was the ongoing "Save Like A Mainer" campaign to raise awareness of opportunities for Mainers to save energy and money through Efficiency Maine programs. Using print, radio, TV, and digital media, Efficiency Maine encouraged Maine residents and businesses to make energy efficient improvements such as home weatherization, replacement of inefficient lighting, and participation in the Business Incentive and Residential Loan Programs. The story of energy efficiency and its related benefits were told through testimonials of Maine homeowners and iconic businesses that have participated in Efficiency Maine programs.

A number of enhancements were made to Efficiency Maine's web site, including the addition of new cost comparison calculators, consumer information, updated advisor directories, and information on emerging technologies such as heat pumps. Efficiency Maine also started designing a new web site to be unveiled in 2013.

Through an Efficiency Maine grant, the Maine Math and Science Alliance selected several Maine towns and cities where schools have been active in energy efficiency initiatives to host "Family Energy Nights" for middle school students during the 2011-2012 academic year. These sessions provided an opportunity for students and their families to immerse themselves in hands-on energy and energy efficiency projects. Energy Nights were held in Farmington, Augusta, Durham, Old Orchard Beach, Waterville, and South Portland.

Efficiency Maine Trust also held its Annual Awards Ceremony and Symposium in November. The event featured a standing-room-only symposium on trends in energy efficiency, and included an overview of a recent report on cost-effective energy efficiency opportunities that exist in Maine. Two panel discussions highlighted trends in energy efficiency technology and delivery from the perspective of business customers and vendors.

Efficiency Maine's Innovation Program aims to support pilot programs for assisting in the demonstration of commercially available, but not yet established, energy efficiency products or new ways of delivering cost-effective measures. Through the Innovation Program, EMT offers competitive grants to support market players seeking to demonstrate technologies or program designs that, if deployed at scale, could show substantial energy savings opportunities for the state. In fiscal year 2012, grants totaling $285,000 were awarded to Bangor Hydro Electric Company to support a pilot initiative focusing on ductless mini-split heat pumps and to Vermont Energy Investment Corporation to test the feasibility of heat pump water heating technology in Maine.

Efficiency Maine periodically conducts third-party evaluations of its programs to provide data-driven analysis to document and verify the impact on energy and demand savings. Staff members can then assess program cost-effectiveness relative to goals. Evaluations also provide a way for Efficiency Maine to understand why effects occur in its programs, and help identify opportunities for improvement in program design and implementation.

In Fiscal Year 2012, Efficiency Maine completed evaluations for its Business Incentive Program, Home Energy Savings Program, Commercial Projects Grants, and Large Projects Grants. ▪

Alternative Energy

Pursuant to a statutory directive, Efficiency Maine has offered an incentive for solar and micro-wind installations for several years. Incentive amounts are based on projected annual energy production, with a cap of up to $2,000 for residential systems, and up to $4,000 for commercial systems. In FY12, Efficiency Maine helped Maine customers install a total of 409 renewable energy systems, including 230 solar thermal systems, 176 solar PV systems, and 3 micro wind projects.

A Bright Future

IN PART BECAUSE OF DIMINISHED HOUSEHOLD WAGES brought on by a weak economy, coupled with the proven track record of cost savings and increased comfort, energy efficiency is a national priority with growing importance.

According to The Johnson Controls Institute for Building Efficiency's annual Energy Efficiency Indicator survey for 2012, interest in energy efficiency jumped 20 percent over 2011. Last year, 86 percent of executives from the commercial, industrial and institutional sectors who responded said that energy management was very or extremely important to their organizations, and 70 percent said they were paying more attention to energy. In fact, 74 percent of U.S. and Canadian respondents had invested in energy efficiency in the past year.

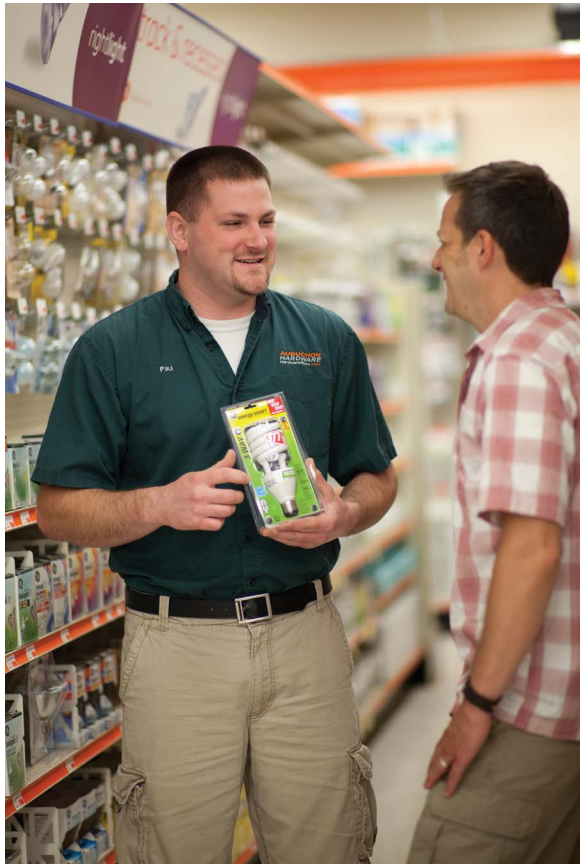
Homeowners see the value as well. More than 40 percent of American households knowingly purchased an ENERGY STAR labeled product in the past year, and 75 percent of those purchasers reported the label as influential in their purchasing decision.

Maine residents and businesses seems to echo the trend of prioritizing energy efficiency too, having invested more than $40 million in energy efficiency upgrades last year alone. More than 1,600 businesses conducted over 2,500 projects in fiscal year 2012, realizing energy savings, cutting operating costs, and even increasing productivity. Furthermore, since the inception of the PACE and the new PowerSaver loan programs, as well as the recent air sealing promotion, hundreds of homeowners are enjoying the benefits of weatherization, including living in a more comfortable home.

Energy efficiency also helps move Maine closer to energy independence and helps reduce greenhouse gas emissions. Pursuing energy efficiency doesn't merely benefit program participants. It benefits all Mainers on the electric grid, and defers and/or reduces the need to build new and expensive transmission lines and distribution facilities.

As evidenced by thousands of Mainers who are realizing the many advantages of making energy-saving measures, and will realize savings year after year, energy efficiency is by far the lowest cost energy resource. As one homeowner put it, "We didn't know how inefficient our house was until it wasn't drafty anymore."

Put another way, Maine energy consumers – from locally owned businesses and large enterprises, to homeowners and renters – continue to realize just how significant and expensive that constant trickle of wasted energy can be. ▪



A sales associate from Aubuchon Hardware explains the benefits of an energy efficient compact fluorescent bulb to a customer.

In Memorium: Tim Vrabel

In January of 2013, the staff of Efficiency Maine lost one of its long-time staff members, fellow colleagues, and dear friends, Tim Vrabel. Most recently Strategic Initiatives Specialist managing various education and innovation grants, Tim Vrabel was a familiar face associated with Efficiency Maine programs for nearly a decade. He spent much of his career helping Maine energy consumers at such organizations as Central Maine Power Co., the Maine Department of Energy Resources, the Public Utilities Commission, and Efficiency Maine. He also gave generously of his time serving on a number of boards and committees, including the E2Tech Board of Directors, the Maine Energy Education Program, and the Maine Technology Institute.

For his lifelong achievements in support of energy efficiency, Tim was presented with the Philip C. Hastings Award at EMT's Annual Awards Ceremony in November.

Tim left an indelible mark on Efficiency Maine, Maine's energy efficiency community, and the countless people whose lives he touched. We will miss him deeply.

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