2013 YEAR IN REVIEW

Successfully Completing The First Triennial Plan

efficiency MAINE
The Efficiency Maine Trust lowers the cost and environmental impacts of energy in Maine by promoting energy efficiency and alternative energy systems. Efficiency Maine delivers information, technical assistance, quality assurance, financial incentives, and financing to help consumers save electricity, natural gas, and heating fuels. This saves energy and money for residents and businesses while growing the economy and creating jobs.

Efficiency Maine is governed by a stakeholder Board of Trustees with oversight from the Maine Public Utilities Commission. Funding for the Trust comes from electric utilities, natural gas utilities, the Regional Greenhouse Gas Initiative, the ISO-New England Forward Capacity Market, and government grants.
In 2013, the Trust completed its third fiscal year. This also marked the end of the Trust’s First Triennial Plan and the start of its Second Triennial Plan.

It was a year of several important accomplishments. Chief among them was delivering Maine’s lowest cost energy resource for a third consecutive year. The electrical savings from equipment upgraded last year were purchased at an average cost of 3 cents per kilowatt-hour; the fuel oil and natural gas savings that will result from more efficient heating systems and better insulation were bought at an average cost of $10 per million British thermal units, or the equivalent of $1.39 per gallon of oil.

The thousands upon thousands of energy upgrades delivered through the First Triennial Plan will, over the full life of the equipment, reduce the amount paid by Maine’s energy consumers by a cumulative total of $777.5 million.

This pattern of success contributed to three important events that made 2013 special for Efficiency Maine. First, the Efficiency Maine Board of Trustees and the Maine Public Utilities Commission approved the Second Triennial Plan, laying out a path for modest but steady growth of energy efficiency programs in Maine. Second, new legislation was enacted with broad bipartisan support that stabilized funding for Efficiency Maine’s electricity-saving programs and expanded critically important funding for programs to reduce heating demand. Third, in a national scorecard of energy efficiency policies and programs among the U.S. states, the American Council for an Energy Efficient Economy (ACEEE) increased Maine’s ranking nine places, from 25th to 16th among all states, the most improved ranking in the country.

We are thankful for the many contributions that helped achieve this success. Contractors and suppliers in Maine’s marketplace have played the leading role, explaining to customers the value of energy-efficient appliances and equipment and helping them choose from among the multitude of high-efficiency product models. With professionalism, thoughtful advice, and quality installations, these businesses are transforming the Maine marketplace, making accessible more efficient product models at lower prices for all sectors of Maine’s consumers.

Another critical player in this success is the Maine consumer. Consumers have invested wisely, understanding the economic benefits of purchasing efficient equipment that, though it carries a higher up-front price, pays dividends year after year thanks to lower energy costs. As investments in energy-efficient appliances and equipment have grown, so too have the businesses and the number of jobs involved in designing, selling, installing and servicing this equipment. Together, the contractors and customers have emerged as a growing and influential constituency.

This constituency has impressed upon state policymakers the effectiveness of energy efficiency in lowering energy bills and the magnitude of the economic development that comes with investments in energy upgrades. For their part, policymakers carefully considered the views of this constituency and balanced it with the input of utilities, regulators, and environmental advocates. They worked in a bipartisan fashion, amending Maine law to bring more stability and predictability to the energy efficiency marketplace while expanding Efficiency Maine’s ability to bring energy-saving solutions to more businesses and homes.

Thanks is due to the Public Utilities Commission, the state’s experts in energy economics and guardians of the best interest of utility ratepayers, for objectively and expeditiously handling the review and final approval of Efficiency Maine’s strategic plans and related proceedings. Finally, the Trustees of Efficiency Maine, who volunteer their time to serve on our board, have fulfilled their duties with attention to detail, faithfulness to the law, and commitment to reducing Maine’s energy costs. Their guidance and staff support over the past three years constitutes a public service unsurpassed by any collection of volunteers or institution in the state during this period, and for this we are profoundly grateful.

Having three good years behind us, Efficiency Maine is eagerly moving ahead to implement the Second Triennial Plan with hopes of achieving even greater energy savings. A recent study indicated that over the next ten years, cost-effective energy efficiency could grow to satisfy between 12% and 16% of Maine’s electric energy needs. It is not hard to imagine that we can do at least as much with natural gas, heating oil and other heating fuels. So please help us get the word out. Working together to promote energy efficiency, we can reduce energy waste, lower energy costs and minimize the environmental impact of our energy use.
In 2009, as a result of the Maine’s Energy Future Act, Efficiency Maine transitioned from operating under the umbrella of the Maine Public Utilities Commission to operating as an independent trust. Last year marked the completion of the First Triennial Plan period. The Triennial Plan is a three-year road map that set energy-saving targets and priorities for helping Maine’s homeowners, renters, and businesses. Following are some key milestones from the Trust’s formative period through last fiscal year.

**June 2009** The Maine Legislature passes An Act Regarding Maine’s Energy Future establishing the Efficiency Maine Trust, overseen by a nine-member Board of Trustees, to manage and administer the funds of Efficiency Maine, the State Energy Program, and the Energy and Carbon Savings Trust, effective July 1, 2010.

**January 2010** Using ARRA funds, Efficiency Maine launches the Home Energy Savings Program (HESP), a home weatherization program with incentives of up to $4,000; more than 3,200 Maine homes are weatherized from 2010 to 2011 and achieve an average energy savings of 31 percent.

**April 2010** First Triennial Plan is approved by the Board of Trustees and the Maine Public Utilities Commission.

**April 2010** US DOE awards $30 million from the BetterBuildings Program to fund Efficiency Maine’s Revolving Loan Fund for home weatherization and other energy upgrades.

**April 2010** The Maine Legislature passes L.D. 1717, the Maine Property Assessed Clean Energy (PACE) Bill, a residential loan program that allows municipalities to pass a local ordinance for residents to access low-interest loans from a revolving loan pool to finance energy efficiency measures.

**July 2010** EMT assumes responsibility for administration of energy efficiency programs throughout Maine and all funds and contracts are transferred from the Maine PUC and the Energy and Carbon Savings Trust to the Efficiency Maine Trust.

**April 2011** First PACE loan is underwritten.

**November 2009** The federal economic stimulus package called the American Recovery and Reinvestment Act (ARRA) provides significant funding to the U.S. Department of Energy to increase investment in energy infrastructure. Efficiency Maine received more than $25 million for Maine’s share of the State Energy Program, helping to fund such efforts as the Home Energy Savings Program and major investments with large industrial facilities. Efficiency Maine also received $9.6 million targeted for Energy and Efficiency Conservation Block Grants (EECBG) to promote energy upgrades at more than 100 Maine municipalities.

**September 2010** Nine grants, totaling $4.3 million, are awarded through Efficiency Maine’s newly launched Competitive Bid Program (later called the Large Customer Program) for large-scale electrical and greenhouse gas reduction projects to assist major energy consumers including paper mills, hospitals, wastewater treatment facilities, and large manufacturers.

**September 2010** Nine grants, totaling $4.3 million, are awarded through Efficiency Maine’s newly launched Competitive Bid Program (later called the Large Customer Program) for large-scale electrical and greenhouse gas reduction projects to assist major energy consumers including paper mills, hospitals, wastewater treatment facilities, and large manufacturers.

**2011** The Residential Lighting Program distributes 1.9 million energy-efficient bulbs at hardware, big-box and other retail stores statewide, nearly doubling the number sold the previous year.

**2011** The Business Program’s network of independent trade allies, called Qualified Partners, grows to several hundred; on the Residential Program side, a similar network of home energy contractors is established, and referred to as Participating Energy Advisors and later, Registered Vendors.
Community Projects

In 2013, Efficiency Maine completed its work managing more than 100 sub-grants to municipalities across the state to make efficiency upgrades at various municipal buildings including town halls, community centers, fire and police stations, libraries, water treatment facilities, and other public buildings. These projects were funded under the U.S. Department of Energy’s Energy Efficiency & Conservation Block Grants initiative, part of the American Recovery and Reinvestment Act (the Recovery Act or ARRA). Efficiency Maine was awarded $9,593,500 in grant funds in 2009 to help local governments “promote, implement, and manage energy efficiency and conservation projects and programs designed to: reduce fossil fuel emissions; reduce total energy use; improve energy efficiency; and create and retain jobs.”

A variety of thermal and electric measures were installed, from simple but essential lighting upgrades and insulation to more complex solutions including destratification fans, air exchange heating systems, and solar hot air systems.

Pictured at right is librarian Dawn Thistle, whose Vassalboro Library benefited from an EECBG project.
If you have an electronic tablet or a smart phone, not only do you arguably have one of the most sophisticated electronic devices ever created, but one of the most energy-efficient as well. According to *Forbes* magazine, if you fully drain your iPad and charge it every other day, the annual cost for that electricity is about $1.50. That's right. The gadget you use to check weather, keep track of your schedule, contact the grandkids, book travel plans, and perhaps even dim your lights remotely when you're away — costs less to charge than the cost of a large coffee at your favorite donut shop.

But if you still have 100-watt incandescent bulbs at home, say five of them scattered about, and you leave them on for just 20 hours, you will have spent about the same amount to power those bulbs as you would to charge your iPad for an entire year.

That speaks to the rapid advancement of energy efficiency and technology in today's world. It's a dynamic marriage, and something of a revolution is taking place, both in terms of electric and thermal efficiency.

From high-efficiency heating systems to advanced thermostat controls, new energy efficiency technologies are emerging in the marketplace. However, they face numerous barriers such as high up-front costs, lack of consumer knowledge and availability, and a steep learning curve among contractors. Through its programs, Efficiency Maine is reducing these barriers by offsetting high up-front costs with incentives, price reductions, and low-interest loans.

Together with technical assistance, dynamic web site tools, consumer information, and training for contractors, Efficiency Maine's efforts laid the groundwork for the start of another exciting triennial period. In Fiscal Year 2013, Maine homeowners, renters, and businesses bought energy efficient equipment through Efficiency Maine programs to realize projected savings of $185 million in present and future energy costs. Hundreds of businesses and thousands of homeowners will save money year after year, often with additional benefits such as increased comfort and a decreased environmental impact.

As a result of last year's programs, Efficiency Maine delivered electricity savings at an average levelized cost of

**Avoided Electric Capacity from Efficiency Maine Programs**

![Graph showing avoided electric capacity from Efficiency Maine programs from 2011 to 2013.](image)

*as reported to ISO NE Forward Capacity Market*
3 cents per kilowatt hour, and generated more than $75 million in total investments in energy efficiency in the Maine economy. Together, the participants of Efficiency Maine programs completed projects last year that will deliver an energy resource equal to 1.2 percent of the statewide electric load.

New technology is also providing more consumer choices. Heat pumps for residential and commercial use are providing new heating options that weren’t available in Maine just a few years ago. After a successful pilot project, Efficiency Maine now offers incentives for high-efficiency heat pumps, pellet stoves, and other heating systems through its Home Energy Savings Program. Through Efficiency Maine’s Lighting Program, LED bulbs are now available at retail stores statewide at prices that are affordable even for modest budgets.

Homeowners can now receive a $300 rebate through Efficiency Maine for purchasing a high-efficiency ENERGY STAR heat pump water heater. These units can save up to $250 a year compared to electric water heaters.

More than ever, Maine consumers have more options, better technology, and better program offerings for making energy efficiency changes. Efficiency Maine is striving to stay connected, seeking new and better ways to deliver programs, offering more and better information using new media, and testing pilot programs that, if effective, may one day become regular program offerings.

Read on to learn more about just how powerful these collective changes have been.

A heat pump water heater can save up to $250 a year compared to standard electric water heaters.
Above: About 1,400 businesses participated in Efficiency Maine’s Business Incentive Program in fiscal year 2013. The points on the map represent the towns and cities in which Business Incentive projects were performed. (Some communities had multiple projects but are represented by a single dot per location.)

At right: An engineer monitors the energy use of a variable frequency drive on a touch screen.
Whether they're running a large industrial facility or a convenience store, savvy business managers often share two common goals: reducing operating costs and making sound capital investments. Energy efficiency often accomplishes both.

In total last year, smart investments in energy efficiency equipment purchased by small and mid-sized businesses, multifamily property owners, and large commercial organizations will result in more than $48 million in both electric and thermal savings over the life of that equipment.

Nearly 1,400 businesses participated in Efficiency Maine’s Business Incentive Program by completing more than 2,000 energy efficiency projects. Collectively, these small and mid-sized businesses will shave operating costs annually by having installed energy-efficient equipment such as lighting, HVAC systems, variable speed drives, refrigeration, and compressed air systems. The savings amount to an estimated $21 million over the lifetime of those installed measures. Companies don’t simply realize savings in operating costs; they often save in maintenance costs and experience process improvements as well.

In Fiscal Year 2013, Efficiency Maine supported higher efficiency equipment installations used in new construction projects, renovation projects, and for the early replacement of functioning, but less efficient, existing equipment. Incentives were also offered for high-efficiency heating systems including natural gas.

The Business Program also added new incentives for LED lights, air compressors and ancillary air system equipment, and welcomed more than 65 new Qualified Partners to the fold. Qualified Partners, or trade allies, are vendors, suppliers, and architects who are familiar with Efficiency Maine programs and incentives, and are located across the state.
Lighting remained the most popular upgrade among businesses. As one laundromat owner put it, installing energy-efficient LEDs is not just about saving energy, but about making customers feel secure in a well-lit facility open late into the evening. Making his space more inviting potentially translates to increased business.

Under the program, owners of 2,489 multifamily units also received an energy benchmarking report on their units at no cost. The report compares a building’s energy use with other similarly sized multifamily buildings in Maine, and includes a fuel and electricity cost comparison; a list of suggested improvements, including estimated payback, energy cost savings, and installation costs; and an estimate of how much the property owner might save if installing a set of prescribed measures.

The program has achieved higher thermal savings per unit than similar programs in other parts of the country.

**Multifamily Program**

In 2012, Efficiency Maine launched a Multifamily Efficiency Program that provides incentives for building owners to install energy efficiency measures in multifamily buildings that have between five and 20 apartment units. In Fiscal Year 2013, about 250 retrofits were completed on the way to a target of 1,800 units (which is about 2 percent of this category of apartments in the state). Participants are projected to realize an average energy savings of 26 percent a year, based on computer modeling. Incentives were provided for such measures as air sealing, insulation, high-efficiency heating system replacement, and the purchase of energy-efficient appliances.

All that work makes for more comfortable apartment units and happier tenants and property owners. It also amounts to about $1.8 million in fuel and energy costs saved throughout the lifetime of the installed measures.

**Making Apartments Warmer**

If you think your heating bill is high, imagine how Kurt Shillington feels. As operations manager for Princeton Properties, he oversees the operations and maintenance of 477 units in four multifamily apartment buildings in Portland. Most units were built circa 1944 and 1971, when buildings had limited insulation and energy efficiency technology was rudimentary compared with today's standards.

But Shillington’s apartment units will use significantly less energy as a result of Efficiency Maine’s Multifamily Efficiency Program.

“We've always been concerned with energy efficiency and have made huge improvements to our assets’ bottom line by focusing on efficiency, sustainability, and responsible development,” explains Shillington.

“These projects, the Efficiency Maine incentives, and our efforts in developing and operating our properties as efficiently as possible give us a real competitive edge.”
Large Customer Program

Efficiency Maine’s Large Customer Program provides an opportunity for Maine businesses, institutions and municipalities to compete for funding for large electrical energy efficiency, distributed generation, and greenhouse gas reduction projects.

These incentives are targeted at some of the state’s largest energy consumers, those with an average electricity demand of more than 400 kilowatts, including hospitals, paper mills, large manufacturers, and organizations that have multiple facilities (like college campuses or grocery chains). These incentives helped reduce the initial capital cost of large energy upgrade projects, often helping projects meet corporate return-on-investment criteria that wouldn’t be possible otherwise. As a result, last fiscal year, 12 Maine businesses made important facility improvements and freed up operating budgets in a challenging economic environment. Collectively, they are expected to save more than $21 million from their energy bills over the life of the equipment installed.

Wyman’s of Maine Reaps Sizable Benefits

During the month of August, Wyman’s of Maine processes about 1.2 million pounds of blueberries a day. About 400,000 pounds a day are processed in their Cherryfield operation alone.

The company has perfected the science of “fresh freezing” fruit to maintain optimum flavor and nutritional benefits. However, it takes a lot of energy to bag, freeze, and ship all that fruit. Wyman’s old system could no longer keep up with growing demand, especially during the peak times of the year.

So Wyman’s had an eye on purchasing a new and more efficient $1.4 million refrigeration system. Purchasing that new system would cost the company $550,000 more than a less efficient one, an added cost that would not meet the company’s internal payback standards.

Through its Large Customer Program, Efficiency Maine offered to share the extra cost with an incentive of nearly $260,000. Wyman’s purchased two compressors, and the existing roll-up doors were replaced with more efficient air curtains that allow employees to move freely in and out of the cold-storage area. As a result, Wyman’s expects to save about $90,000 annually in energy costs.

“If not for these incentives, Wyman’s would not have moved forward with this project, and otherwise would have purchased equipment that was nowhere near as efficient as the units we installed,” explains Bob Stanley, Wyman’s engineer.

The floating ribbons pictured above indicate where Wyman’s new air curtain reduces air loss from the cold-storage area.
Pilot Project Sails in Boothbay Harbor

The Boothbay region is a seasonal tourist destination that is the envy of many vacationers. It is also served by a single electric transmission line, which struggles to meet the need of a growing load during the summer as a result of healthy tourism. That line is close to the point of exceeding capacity limits on the hottest days of the summer, when air conditioners and restaurant kitchen equipment are on full bore. Central Maine Power, which serves the peninsula, has indicated that it will cost approximately $18 million to upgrade this line to increase its capacity to handle the few hours in any year when it is at risk.

One antidote to upgrading or building a new transmission line to accommodate growing demand is through distributed generation installation, energy efficiency, and demand response, examples of what’s called Non-Transmission Alternatives (NTAs). Securing these NTAs results in a net load reduction in an area, avoiding or postponing the need for a transmission line upgrade.

High electric bills for small businesses should be noticeably reduced in the Boothbay region thanks to the success of an NTA pilot project. The initiative was designed to reduce peak summer demand in the region by 2,000 kilowatts.

Efficiency Maine partnered with local contractors in Boothbay Harbor to identify peak demand savings opportunities through energy efficiency measures such as installing efficient lighting. Efficiency Maine helped many local businesses that had been using energy-intensive halogen and incandescent lights upgrade to LEDs, which will save them money year after year and help to defer or eliminate the need to build that expensive transmission line.

The Boothbay Harbor region, pictured here, struggles to meet reliability needs of a growing electric load during the summer. The area is served by a single transmission line.
RESIDENTIAL PROGRAMS

By weatherizing their homes and installing energy-efficient light bulbs and appliances, Maine homeowners and renters saved tens of millions of dollars last year on energy costs through Efficiency Maine programs. Over the full life of the energy upgrades installed, Efficiency Maine estimates that Maine residents will lower their energy bills by more than $130 million compared to what they would otherwise have spent.

It was a big year for Residential Programs. Last year, Efficiency Maine offered a limited-time promotion of up to $600 toward the cost of air sealing and insulating residential properties of four units or less, benefitting 5,118 participants.

The incentive, which required homeowners to get an energy assessment, was designed to get homeowners started on the right path for their home energy improvement projects and to establish a relationship with one or more contractors to work on their house. Efficiency Maine hoped the momentum would continue and result in homeowners undertaking deeper energy retrofits such as insulating attics and basements, upgrading heating systems, and financing those retrofits through Efficiency Maine’s Home Energy Loan Program.

According to an independent evaluation, 86 percent of homeowners who completed air sealing projects as part of the promotion during the 2013 fiscal year were satisfied with participation in the program, rating at least a seven on a ten-point scale.

On average, program participants were estimated to save 67 gallons of heating oil annually, representing a savings of more than $230 per home assuming the price of heating oil was $3.44 per gallon.

Efficiency Maine also issued 203 Home Energy Loans last year totaling $2.5 million. These low-interest loans allowed homeowners to finance energy efficiency projects ranging from heating system replacements and energy-efficient appliance purchases to insulation and air sealing. These upgrades are projected to save more than $7 million in lower heating costs over the lifetime of the measures.
Verified first-year, annual gross savings for each of the 192 financed projects completed last fiscal year are estimated to save an average equivalent of 394 gallons of oil.

Borrowers find it attractive that monthly payments are offset by the energy savings realized through the projects.

**Retail Program**

The Efficiency Maine program that touches the most Mainers from all walks of life and in all 16 counties is the Retail Lighting Program. Most people who turn their hallway or bedroom lights on may not think twice about where their bulbs come from, but there’s a good chance that if those sockets have energy-efficient bulbs, they were purchased at a significant discount through Efficiency Maine. Last year alone, Efficiency Maine provided discounts on nearly 2 million compact fluorescent light bulbs (CFLs), and nearly 6 million bulbs over the past three years. Over 30 models of Light-Emitting Diodes (LED) bulbs were also added to the program. CFLs and LEDs use 75 percent less electricity for the same light output and last longer than traditional incandescent bulbs.

Efficiency Maine is able to offer low prices for bulbs by collaborating with ENERGY STAR manufacturers and retailers, and reimbursing retailers for lowering their prices. Last year, the program added Big Lots, Dollar Tree, Reny’s, and Walgreens to an already large list of participating big-box, appliance, and grocery stores statewide.

**Low-Income Programs**

The Low-Income Weatherization Program is intended to increase energy efficiency in multifamily homes that benefit Maine low-income electricity and natural gas customers who are eligible for the federal Low Income Home Energy Assistance Program (LIHEAP). Last year, the program weatherized 2,192 electrically-heated apartment units, installed 1,325 high-efficiency ductless heat pumps, and completed a 201-unit retrofit using Unitil ratepayer funds. The program is projected to realize a 27 percent average reduction in energy consumption per unit.

Through a partnership with the Good Shepherd Food Bank, Efficiency Maine also distributed about 169,000 energy-efficient compact fluorescent bulbs through food pantries and soup kitchens to low-income Mainers at no cost.
Prt of Efficiency Maine’s mission is to provide public information and outreach. Efficiency Maine strives to increase consumer awareness of cost-effective options for saving energy by installing energy-efficient equipment, using energy more efficiently, using more alternative or renewable energy, and financing these measures.

For busy consumers, that information is largely disseminated and accessed via the Internet. Last year, Efficiency Maine redesigned its website with an eye toward making it more dynamic, user-friendly, and visually interesting. Following the redesign, the number of unique visitors to the site increased 18 percent from 50,231 in the first six months prior to redesign to 59,270 in the six months following. Efficiency Maine added more online tools and technical information, made its website accessible to tablets and smart phones, and added a library of video case studies and overviews on heat pumps and heat pump water heaters. These changes marked the start of a steady stream of website improvements and visual enhancements that will continue in 2014. Contractors and vendors are also kept informed about program changes and results through regular seminars, video conferences, and monthly teleconferences. The Trust is also more active on social media. Efficiency Maine will also continue to use video to help convey information, program details, and results.

Pilot Projects

When it comes to energy efficiency, early investments in technological innovation can pay big dividends in future energy savings and economic development. Efficiency Maine’s Innovation Program provides funding for pilot projects that demonstrate new types of energy efficiency or alternative energy measures. Efficiency Maine selected Bangor Hydro Electric Company and Maine Public Service Company’s joint proposal on air-source ductless heat pump space heating solutions due to its potential for cost-effective energy savings and large-scale market adoption. More than 660 rebates were claimed for heat pump installations during the course of the pilot program.

According to a preliminary evaluation of the pilot program, 91 percent of customers would recommend heat pumps to their friends and family, and four out of five program participants would not have installed an energy-efficient heat pump without the assistance offered by the program. As part of its regular program offerings, Efficiency Maine now offers rebates for ductless heat pumps.

The integration of smart meters in a high percentage of Maine’s buildings offers an unprecedented chance to better understand energy use and identify efficiency and conservation opportunities. Under the Innovation Program last year, Efficiency Maine also solicited proposals for projects to shed light on opportunities for using smart meter data to save energy, with a focus on short intervals of data from recently installed smart grid technology. Findings of the three resulting pilot projects will be delivered in fiscal year 2014.
Annual Symposium

Efficiency Maine presented a number of awards honoring the year's outstanding contractors, customers, and partners at its Annual Symposium and Awards Ceremony held in Portland last November.

Five Qualified Partners received awards for their efforts in saving their clients energy and money. Qualified Partner Awards were presented to the following companies:

The Supplier of the Year Award was presented to Graybar Electric Company, a national distributor of electrical, communications and data networking products. Graybar's Portland office was involved in more than 100 Efficiency Maine projects over the past year.

The Multifamily Program Partner of the Year Award recognized Strategic Energy Group for its work on 14 retrofit projects representing 186 residential unit retrofits.

Electrical contractor Kaplan Electrical Construction, with offices in Winthrop and Belgrade, was named the Qualified Partner of the Year for Lighting Projects for its work completing 40 lighting projects that qualified for Efficiency Maine incentives.

Mechanical Services received The Qualified Partner of the Year Award for Mechanical Projects for completing 35 heating, ventilation, and air conditioning projects throughout the state. Mechanical Services has offices in Augusta, Bangor, Portland, and Presque Isle.

The Qualified Partner of the Year Award was presented to Horizon Solutions for “integrating the Efficiency Maine Business Program into their customer’s projects, consistently and reliably.” With offices in Scarborough and Bangor, Horizon Solutions provides technical support, supply chain solutions, and training to industrial manufacturers, machine builders, and commercial, institutional and municipal facilities.

Efficiency Maine also recognized a number of other organizations and partners for delivering successful programs and sharing in its mission of energy efficiency:

The Participating Energy Advisor of the Year was presented to Keith McPherson of Home Energy Answers for his efforts in growing his Albion-based energy auditing and weatherization company and using Efficiency Maine programs. With the help of a federal grant to the Town of Unity and because of Efficiency Maine's Residential Direct Install air sealing, McPherson added five full-time positions.

Sam's Club was named the Retail Partner of the Year, in part for hosting 29 in-store promotions with Efficiency Maine field representatives, who trained more than 1,000 customers and store associates. Sam's Club also dedicated aisle displays in high-traffic areas.

The Island Institute, a nonprofit organization working to sustain Maine's island and remote coastal communities, was named the Customer of the Year. The Island Institute has partnered with island residents to build and install low-cost storm window inserts; organized community-wide weatherization initiatives such as Weatherization Week; and worked to support Efficiency Maine initiatives.

The Island Institute, a nonprofit organization working to sustain Maine's island and remote coastal communities, was named the Customer of the Year. The Island Institute has partnered with island residents to build and install low-cost storm window inserts; organized community-wide weatherization initiatives such as Weatherization Week; and worked to support Efficiency Maine initiatives.

The annual Philip C. Hastings Award recognizing extraordinary commitment to energy efficiency was
presented to Denis Bergeron, the Director of Energy Programs for the Maine Public Utilities Commission. Bergeron previously directed Efficiency Maine when it was administered by the PUC. He has worked for the PUC for nearly 20 years focusing on energy and policy issues related to both the electric and gas utility industries, and has advanced the cause of energy conservation while representing Maine before the Independent System Operator of New England.

Evaluations

Efficiency Maine regularly conducts third-party evaluations of its programs and initiatives to inform program delivery, verify results, and ensure continuous improvement. Through these evaluations, Efficiency Maine assesses its programs’ impact on energy savings and cost-effectiveness, as well as the overall energy marketplace. Efficiency Maine also uses evaluation results to inform decisions regarding modifications to program strategies and budgets.

In fiscal year 2013, final evaluation reports were issued for the Residential Lighting Program and the Retrocommissioning Pilot Program. The multi-year evaluations of the Home Energy Loan Program and Air Sealing Initiative were in full swing, with final reports to be issued in early fiscal year 2014. To access a number of recent program evaluations, visit efficiencymaine.com/about/library/reports.

Omnibus Energy Bill: A Game-Changer

In June of 2013, the Maine Legislature passed LD 1559 An Act to Reduce Energy Costs, Increase Energy Efficiency, Promote Electric System Reliability and Protect the Environment, also referred to as the “Omnibus Energy Bill.” From the perspective of Efficiency Maine, the legislation was noteworthy for expanding funding for energy efficiency programs, including electric saving projects, sustaining funding for home heating solutions, and adding programs for natural gas customers. Given that energy efficiency resources are the lowest cost resource in Maine, the investments that will result from these policy changes will lower the total costs of energy for many years to come.

A critical piece of the Omnibus Energy Bill was a new directive to invest 35% of Regional Greenhouse Gas Initiative (RGGI) auction revenues to home heating solutions. This change in RGGI statute allows Efficiency Maine to fund projects that save heating oil, Maine’s most common heating fuel, without relying on federal funds. These funds arrived just as the federal funds were running out. New budget allocations also allowed more incentives to business customers in the Business Incentive Program.

Hosting a number of statewide public meetings via teleconference, Efficiency Maine staff worked with its Board of Trustees and stakeholders to determine how to best direct these funds towards residential energy efficiency.
A BRIGHT FUTURE

As Efficiency Maine embarks on the first year of its Second Triennial Plan period covering 2014-2016, we reflect on the organization’s accomplishments. Much has happened since Efficiency Maine’s First Triennial Plan was drafted.

An increasing number of businesses in Maine and across the country see energy efficiency as a smart investment opportunity. According to a 2013 Bain and Company white paper, a typical U.S. manufacturing company can save between 10 and 30 percent of direct energy costs in three years through energy efficiency. Indirect savings, like reduced maintenance, materials and waste, as well as lower risks, typically add another 50 percent on top of the direct energy cost reductions.

Here in Maine, over the past three years, Efficiency Maine has helped more than 4,300 businesses with nearly 6,500 energy efficiency projects, from lighting and controls to heating and cooling systems.

Terms such as “energy assessment,” “air sealing,” and “heat pump” are now part of the Maine lexicon. More than 3,200 homeowners completed a whole-house weatherization as participants of the first Home Energy Savings Program, and from fiscal year 2011 to 2013, more than 500 homeowners borrowed nearly $7 million to make energy upgrades large and small through Efficiency Maine’s Home Energy Loans. Meanwhile, last fiscal year, 5,118 homes completed basic air sealing through

This chart illustrates the first three years of actual annual energy savings from Efficiency Maine programs plus the potential savings from future years’ efficiency programs aimed at delivering all cost-effective electric savings through 2021. Note that the savings from each new year of program investments is stacked on top of the cumulative savings from the prior years. This reflects the fact that annual energy savings from high-efficiency products continue for the useful life of the product, which is typically longer than the period shown here.
a special promotion, estimated to save about 67 gallons of fuel a year, or nearly $230 a year, per household.

Thanks to the Omnibus Energy Bill, the Trust now has the authorization to pursue more thermal efficiency measures, helping homeowners overcome the battle of keeping homes comfortable and energy efficient in a cold, oil-dependent state.

Mainers continue to discover the advantages of efficient lighting and appliances, casting a new light on efficiency in their homes every day. Efficiency Maine has done its part to make nearly 6 million energy-efficient CFL and LED bulbs affordable and available to Mainers statewide.

Energy efficiency is an investment that keeps on giving, as savings are cumulatively realized year after year (see chart at left). And the beneficiaries aren’t just program participants, but all ratepayers who benefit from energy price suppression due to deferred or reduced need for expensive transmission lines and power plant additions.

Still, there is much left to do, and opportunities are plentiful. Although much has changed over the past three years in terms of program delivery and technology, and some of the original board members and architects of that first plan have come and gone, certain fundamental principles remain unchanged:

• Together with its residential and business customers and vendors, Efficiency Maine is committed to harvesting the lowest-cost energy resource in Maine, which is energy efficiency;

• There is an abundant supply of cost-effective energy efficiency resource available in Maine;

• Investing in cost-effective energy efficient products or processes will:
  • reduce wasted energy
  • lower energy bills
  • reduce air pollution

• Making electric efficiency upgrades suppresses the price of electricity paid by all ratepayers, not just program participants.

We hope you’ll join us in our mission. We look forward to partnering with you in meeting new energy-saving goals over the next three years.
Board of Trustees

2013

James Atwell (Chair), Sevee & Maher Engineers
David Barber, AdvancePierre Foods
Brent Boyles, Assistant Adjutant General of the Maine Army National Guard
John Gallagher, Director, MaineHousing
Al Hodsdon, A.E. Hodsdon Engineers
Naomi Mermin, Naomi Mermin Consulting
John Rohman, WBRC Architects-Engineers (Retired)
Douglas Smith, Attorney/Tree Farmer
Patrick Woodcock, Director, Governor's Energy Office

2012

Naomi Mermin (Chair), Naomi Mermin Consulting
Michelle Atherton, New Form Building Systems, Inc.*
James Atwell, Sevee & Maher Engineers
Kenneth Fletcher, Director, Governor's Energy Office
Adam Lee, Lee Auto Malls
Dale McCormick, Director, MaineHousing
Glenn Poole, Verso Paper
John Rohman, WBRC Architects and Engineers
Tom Tietenberg, Mitchell Family Professor of Economics, Emeritus, Colby College*

*During FY12, Trustees Tom Tietenberg and Michelle Atherton completed their terms and new Trustees Doug Smith, Attorney/Tree Farmer, and Al Hodsdon of A.E. Hodsdon Engineers were appointed

2011

Adam Lee (Chair), Lee Auto Malls
Michelle Atherton, New Form Building Systems, Inc.
James Atwell, Sevee & Maher Engineers
John Kerry, Director, Governor's Office of Energy Independence and Security
Dale McCormick, Director, MaineHousing
Naomi Mermin, Naomi Mermin Consulting
Glen Poole, Verso Paper
John Rohman, WBRC Architects-Engineers
Tom Tietenberg, Mitchell Family Professor of Economics, Emeritus, Colby College