

# LEAN AND GREEN

THE MASSACHUSETTS LOW-INCOME  
ENERGY AFFORDABILITY NETWORK (LEAN)



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**NCLC**<sup>®</sup>  
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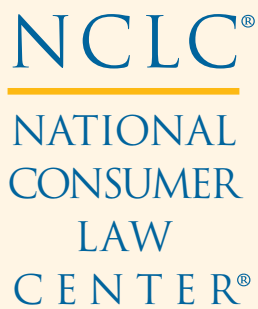
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*Cover image:* Worker insulating home courtesy of Advantage Weatherization.



#### ABOUT THE NATIONAL CONSUMER LAW CENTER

Since 1969, the nonprofit National Consumer Law Center® (NCLC®) has used its expertise in consumer law and energy policy to work for consumer justice and economic security for low-income and other disadvantaged people, including older adults, in the United States. NCLC's expertise includes policy analysis and advocacy; consumer law and energy publications; litigation; expert witness services, and training and advice for advocates. NCLC works with nonprofit and legal services organizations, private attorneys, policymakers, and federal and state government and courts across the nation to stop exploitive practices, help financially stressed families build and retain wealth, and advance economic fairness.

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## EXECUTIVE SUMMARY

The Massachusetts Low-Income Energy Affordability Network (LEAN) is an association of nonprofit agencies (mostly Community Action Agencies, or CAAs) that coordinate the delivery of government and utility-funded energy efficiency services to low-income utility customers throughout Massachusetts. Since its inception in 1997, LEAN's member agencies have delivered more than \$900 million in energy efficiency upgrades to more than 100,000 low-income Massachusetts households. LEAN also helps utilities to achieve their energy savings goals and the state to reach its ambitious greenhouse gas reduction targets. The American Council on an Energy-Efficient Economy (ACEEE) ranked Massachusetts as the best state for energy efficiency over the past four years (2011-2014). LEAN has weatherized well over 20,000 homes and provided green jobs for numerous local workers in the last four years alone. Still, there's more to be done: up to 200,000 low-income homes are still in need of energy improvements.

LEAN leverages multiple funding sources and aligns different program rules to comprehensively serve low-income households. LEAN delivers low-income energy programs and represents low-income utility customers in legislative discussions and regulatory proceedings. Through LEAN's regular Best Practices Working Group meetings, the utilities and nonprofit agencies also test the cost-effectiveness of cutting-edge products or new program ideas.

### *LEAN's Historic Roots*

Community Action Agencies (CAAs)—which comprise almost all of LEAN's member agencies—were a critical element of President Lyndon B. Johnson's signature War on Poverty legislation of 1964. Since 1976, when Congress created the Weatherization Assistance Program, or WAP, CAAs have played the lead role in delivering WAP services: insulating walls and attics, and "air sealing," which keeps the home's warmth from leaking out through holes and cracks. In the mid-1990s, the Massachusetts Department of Housing and Community Development, the state agency that administers WAP, reduced the number of CAAs or other nonprofits that received WAP grants to 12 lead agencies. In turn, those agencies subcontracted with the remaining CAAs and other nonprofit agencies to ensure that every city and town in the state was served by WAP. This two-tiered structure remains in place today.

Beginning in the late 1980s and into the 1990s, twelve New England utility companies, including most of the electric investor-owned utilities in Massachusetts, entered into collaborative agreements to launch efficiency programs. The development of these initiatives brought together the agencies that would form LEAN. Elliot Jacobson at Action, Inc. in Gloucester and John Wells at Action for Boston Community Development (ABCD) worked in collaboration with the Conservation Law Foundation and other environmental groups to ensure that the utility companies' nascent energy efficiency programs included a strong component that would serve low-income households.

In 1996, Jacobson, who headed Action Inc.'s energy programs, decided to participate in a Boston Gas Company (now National Grid) rate case seeking to obtain greater rate-payer funding for energy efficiency for low-income utility customers. The Massachusetts Department of Public Utilities approved a joint Boston Gas/low-income intervenor proposal and "adjust[ed] the budget upwards by \$450,000" to reflect expansion of the program as recommended by the low-income intervenors, to include funding for heating system replacements and air sealing, in addition to installing insulation. Within a few years, nearly every regulated utility in Massachusetts would contract with CAAs to deliver low-income energy efficiency programs.

With the passage of Chapter 164 of the Acts of 1997 (Restructuring Act), electric industry restructuring moved forward in Massachusetts. Due to the efforts of Action, Inc. and the National Consumer Law Center, all investor-owned utilities were now required to deliver "demand side management" (efficiency) programs, with minimum funding levels fixed by law, and with the additional requirement that the low-income programs be delivered by the CAAs and other nonprofit entities that were already operating the WAP and fuel assistance programs. Ever since the Restructuring Act became law, LEAN has been the primary means by which investor-owned utility companies deliver their low-income energy efficiency programs in Massachusetts.

### *LEAN's Structure and Activities*

The core of LEAN's work is delivering the WAP- and utility-funded low-income efficiency programs, using the lead vendor and subcontractor model. LEAN also carries out other functions that benefit low-income households as consumers of energy.

1. LEAN helps to coordinate the disparate programs that provide energy efficiency services to low-income households.
2. LEAN's members deliver services that are "fuel-blind," that is, reducing the household's energy usage whether the primary heating source is natural gas, electricity, fuel oil, or propane.
3. LEAN hosts regular "Best Practices" meetings with all stakeholders to continuously improve the low-income energy efficiency programs.
4. LEAN helps contractors in the field by monitoring training needs and providing training, developing common pricing, and expanding work opportunities.

### *LEAN Supports Local Business*

Massachusetts sends about \$5 billion out of state annually for purchase of natural gas and oil to heat people's homes. Energy efficiency investments keep more of that money in state while employing local workers. For example, National Fiber in Belchertown, Massachusetts manufactures and distributes cellulose insulation throughout the Northeast. In addition to employing local workers, it boosts the local economy by purchasing about 80 percent of its raw materials throughout New England. The cellulose machines that many contractors use to blow insulation into walls and attics are made by Accu1-Direct, headquartered in Longmeadow, Massachusetts. And contractors, such as

Air-Tight Weatherization in Beverly, Massachusetts, note additional benefits of the program. Co-owner Jim Fortin's crews insulate many older drafty homes with little to no insulation, and also help improve health by reducing mildew and mold and sealing air leaks.

### *LEAN Programs Help Low-Income Families Manage Overdue Utility Bills*

In 2002, ABCD and Action, Inc. received a grant from the U. S. Department of Health and Human Services to implement an innovative program, Leveraging Assets for Self-sufficiency through Energy Resources (LASER). The LASER program was designed to help low-income households become energy self-sufficient through a holistic approach revolving around case-managed "one-stop" service delivery. LASER tested the concept of utilities offering an arrearage management program (AMP) to help low-income customers discharge their utility debts in exchange for regular monthly payments at an affordable rate. LEAN's members lobbied successfully to have the program codified in statute to apply to all companies state-wide.

AMPs now serve more than 15,000 gas and electric customers annually. Over the past five years, AMP customers annually paid about \$14 million to their utilities on monthly bills and received about \$13 million in debt forgiveness in return for making those payments. National Grid found that customers enrolled in its AMP paid approximately double the amount toward their bills than other low-income customers with arrearages; Columbia Gas reported that AMP customers paid 67 percent of the amounts billed, on average, compared to 44 percent for other customers behind on their bills.

### *Can LEAN Be Replicated in Other States?*

It is possible to create a structure like LEAN in other states. Those working to build a network should work closely with the state weatherization agency as its support is likely critical to success. A successful low-income network should make sure it has access to the experts needed to carry out its work. It is also helpful if utilities and their state utility regulators, as well as other state energy policymakers, are openly supportive. Utilities that operate energy efficiency programs need to know that they will recover expenditures they make on energy efficiency and have the opportunity to earn a profit commensurate with their other activities. And, the local agencies that hope to launch a state-wide network must deliver high-quality work. The nonprofit agencies that will have to lead the charge need to be tenacious and willing to pursue their strategy patiently.

While replicating LEAN elsewhere may not be easy, it is worth the challenge. The alternative is to leave low-income households with inefficient, unhealthy homes and unaffordable energy bills.



## INTRODUCTION

*“Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.”*

—Margaret Mead

In 2010, Nancy B., a senior living in East Boston, struggled each month to keep up with her utility bills. She had already taken advantage of budget billing, a utility program that divides a customer’s estimated annual bill into 12 equal payments based on her projected usage. Still, Nancy was paying \$250 every month for her gas bill. “I couldn’t make ends meet,” she said.

Fortunately, a neighbor told Nancy about the fuel assistance program available through Action for Community Development, Inc. (ABCD), the local community action agency that serves the greater Boston area. ABCD confirmed Nancy’s eligibility for fuel assistance but the staff also informed her that free energy efficiency services were available to help reduce her future bills. ABCD replaced all the light bulbs and the refrigerator in her two-bedroom home, reducing her electric bill by 10 percent, and installed a new, efficient-furnace, reducing her heating bill by 40 percent. Without this help, Nancy said she has no idea how she would have paid her bills. “I just prayed that things would work out for me,” Nancy said. “I don’t want anything that I’m not entitled to, but I appreciated what they did.”

Nancy didn’t need to understand the intricate web of regulations, statutes, building science, and programs that allowed ABCD to provide her family with the assistance they needed. She is likely unaware of the blend of different funding sources that helped pay her gas bill, replace her inefficient light bulbs, and install a highly-efficient new heating system: ABCD drew upon the federal Low Income Home Energy Assistance Program (LIHEAP), the federal Weatherization Assistance Program (WAP), and utility-funded energy efficiency programs. And she probably has never heard of the Low-Income Energy Affordability Network (LEAN or the Network). Yet, LEAN made it possible to combine these funding sources so that low-income families can receive assistance for all of their energy needs without applying to different programs or calling multiple agencies for help. As one weatherization worker put it: “LEAN has built a wonderful model that does so many great things for people, most of whom don’t even know LEAN exists.”

In this report, we wish to make people aware of the existence and functions of LEAN by documenting its successful history so that the knowledge may be used to keep its programs well-funded and strong. Second, we hope that by providing a general overview of what LEAN is and how it works, we can inspire others to replicate the model in other states. While this report is not a recipe for such a process, the report does highlight the factors that make LEAN stand out as an organization.

## A MODEL FOR DELIVERING ENERGY EFFICIENCY BENEFITS TO LOW-INCOME FAMILIES

Policymakers have prioritized energy efficiency in recent years as a way to combat climate change and stay the rise of energy prices. In a June 25, 2013 speech on climate change, President Obama noted that improving the efficiency of our vehicles, buildings, and appliances is one of the most important tools we have for reducing greenhouse gas emissions.<sup>1</sup> Energy efficiency also saves money. According to a study by McKinsey consultants, the U.S. could save \$1.2 trillion over ten years by implementing cost-effective energy efficiency technologies and expanding the deployment of existing energy reduction strategies.<sup>2</sup>

Despite the potential benefits, numerous barriers prevent the widespread implementation of efficiency savings, particularly in low-income households. Nationally, savings from low-income households comprise about 19 percent of the energy efficiency potential for the residential sector.<sup>3</sup> The authors of the McKinsey study note that to capture additional available energy savings, stakeholders would have to “[f]orge greater alignment across utilities, regulators, government agencies, manufacturers, and energy consumers.”<sup>4</sup>

LEAN embodies the close collaboration described in the McKinsey report. LEAN is an association of nonprofit agencies (mostly Community Action Agencies, or CAAs) that coordinate the delivery of government and utility-funded energy efficiency services to low-income utility customers throughout Massachusetts. Collectively, the Network oversees the delivery of \$100 million annually in energy efficiency services and heating system replacements. This not only helps thousands of families each year but also helps utilities to achieve their energy savings goals and the state to reach its ambitious greenhouse gas reduction targets. The Network efficiently administers a complex array of programs while ensuring rigorous quality control. It has received numerous awards for its efforts.<sup>5</sup>

*I have learned from LEAN to focus on the customer; it makes the rest of it easy.*

— Peter Wingate, energy director at Community Action of the Franklin, Hampshire, and North Quabbin Region, Inc.

The agencies that comprise LEAN act as the lead contractors who carry out energy efficiency work to thousands of low-income homes, funded by utility companies across Massachusetts and the federally funded WAP. LEAN’s members meet regularly to make policy decisions; share information; identify new challenges and opportunities in delivering energy efficiency services; and ensure a high level of quality in the work member agencies perform. As needed, LEAN invites lawyers from the Massachusetts Attorney General’s office, representatives from the Department of Public Utilities (DPU), or other key stakeholders to help inform its discussions. LEAN acts as a facilitator and convener, bringing together the people and resources necessary to efficiently and effectively provide energy services to low-income households. The collaborative approach works well: “I have learned from LEAN to focus on the customer; it



makes the rest of it easy,” says Peter Wingate, energy director at Community Action of the Franklin, Hampshire, and North Quabbin Region, Inc.

The key staff people who actively attend LEAN meetings have, on average, more than 25 years of experience serving low-income clients and delivering energy efficiency services. Since its inception in the mid-1990s, LEAN’s member agencies have delivered more than \$900 million in energy efficiency upgrades to low-income Massachusetts households.<sup>6</sup> Still, there’s more to be done: Up to 200,000 low-income homes are still in need of energy improvements.

### *Helping Achieve State Energy Policy Goals*

Beyond the impact the Network has had on individual families, LEAN has helped Massachusetts catapult ahead of other states in its energy efficiency spending and savings, leading to a significant reduction in greenhouse gas emissions. Massachusetts was one of the first states in the nation to implement a ratepayer-funded energy efficiency program.<sup>7</sup> Massachusetts has had one of the highest energy savings targets of any other state, and the American Council on an Energy-Efficient Economy (ACEEE) ranked Massachusetts as the best state for energy efficiency over the past four years (2011-2014).<sup>8</sup>

LEAN’s success in Massachusetts makes it a useful program-delivery model as states seek ways to reduce energy costs, mitigate climate change, and conserve finite sources of energy. LEAN also yields important lessons for low-income advocates, government agencies, and private utilities across the country and exemplifies the benefit of developing multi-sector partnerships to address a range of social and economic issues. LEAN administers standardized programs delivered by decentralized agencies, combines autonomy with accountability, and maximizes efficiency and social welfare.

LEAN leverages multiple funding sources and aligns different program rules to comprehensively serve low-income households. This includes strict in-process and final-inspection quality control (QC) at multiple levels on every house served. However, the Network’s successes extend beyond exemplary program delivery. LEAN serves to represent the interests of low-income utility customers. Over the years, this has resulted in an evolution and expansion of LEAN’s role in Massachusetts. LEAN not only delivers programs: it represents low-income utility customers in legislative discussions and regulatory proceedings, shaping future programs, influencing legislative and regulatory policy, and attracting additional sources of funding.

LEAN has also become an incubator for new program ideas: The U.S. Department of Energy, the Massachusetts Renewable Energy Trust, and the Massachusetts Department of Energy Resources have awarded grants to LEAN to test low-income application of advanced technologies, including solar domestic hot water, combined heat-and-power, and pellet boiler space heating systems (see page 22). Through LEAN’s regular Best Practices Working Group (Best Practices) meetings, the utilities and nonprofit agencies

Since its inception in the mid-1990s, LEAN’s member agencies have delivered more than \$900 million in energy efficiency upgrades to low-income Massachusetts households.

test the cost-effectiveness of cutting-edge products or new program ideas. Because Best Practices includes representatives from each of the state's electric and gas companies as well as LEAN's member agencies, it draws upon a broad range of technical expertise in building science and appliance technology as well as the day-to-day experience of what actually works in people's homes. The Best Practices process has resulted in LEAN regularly increasing the efficiency of the heating systems it installs and replacing incandescent bulbs with energy efficient compact fluorescents and, more recently, LEDs in some settings. The Network is also beginning to install cost-effective heat pump hot water heaters.

### *LEAN's Founding*

LEAN's story shows how a small group of thoughtful and committed individuals—Elliott Jacobson, vice president of energy services at Action, Inc. in Gloucester, Massachusetts; John Wells, vice president for property and energy services at ABCD in Boston; and a few dedicated advocates—showed up at the right places, at the right times, and changed the world for the better for low-income households struggling to pay their energy bills. Together, they created LEAN, which has weatherized well over 20,000 homes and

provided green jobs for numerous local workers in the last four years alone. LEAN has helped more than 100,000 families since its inception in 1997.

Elliott Jacobson's office at Action, Inc., in Gloucester, is filled with stacks of energy-related papers crowding every inch of the room. Here he has orchestrated the seamless integration of multiple energy efficiency programs. But he didn't follow a straight line to energy efficiency work. His first job, after graduating from the University of Wisconsin majoring in history, was helping to produce year-round arts programs in the Boston area. Jacobson negotiated corporate support and helped produce concerts to support those arts programs. After a few years, he moved to Vermont to enroll and graduate in a new master's program in environmental science. He taught at the University of Massachusetts, Amherst, and founded the environmental education center. He planned to work on a United Nations environmental project in the summer of 1975 overseeing an international group

of undergraduate/graduate students set to travel to Nairobi to study environmental science and international relations. At the last minute, the university chose an international studies professor as a more appropriate choice for the project. That summer the university instead sent him to Cape Ann in Massachusetts to create an environmental education video. While on Cape Ann, he responded to a job notice looking for someone to start a low-income energy program at Action, Inc., the anti-poverty agency based in Gloucester,



The Low-Income Energy Affordability Network has weatherized more than 20,000 homes yet up to 200,000 low-income homes still need energy improvements.

*Photo: Action, Inc.*

Massachusetts. The low-income programs Jacobson set up eventually made it possible to create LEAN.

Jacobson's passion for environmentalism led him to energy efficiency programs, while John Wells' skills in architecture poised him to become the other co-founder of LEAN. Formally trained at the University of Wisconsin (UW), Wells never expected to spend nearly his entire professional career at Massachusetts' largest antipoverty agency—ABCD. Wells came to Boston in 1981 after having obtained his master's degree in architecture from UW and working at a Milwaukee firm as junior project manager. He was hired by ABCD and got his architect license, which he retains to this day.

Wells was brought on board to work on energy issues and on the weatherization program. Through his work, ABCD participated with Boston Gas and NSTAR on early pilot programs to test the market on energy retrofit work during the 1980s. He joined the board of Community Energy Partnership (now known as the Conservation Services Group or CSG) in 1986. Jacobson was also on the board and signed the incorporation papers for CSG.

During the 1990s, Wells' primary job was on the real estate side. As ABCD expanded, many buildings were acquired for office space. By the late nineties, ABCD's energy work was undergoing a lot of restructuring. Wells sat down with Jacobson to talk about an energy delivery infrastructure, and the notion of LEAN was discussed. Wells' architectural background proved valuable in the development of energy programs—from installations of solar panels to working with micro-combined heating, his knowledge of industry standards helped set goals and accomplish clear objectives. He is currently ABCD's vice president for real estate and energy services.

Jacobson, Wells, and LEAN's other founding members occupied critical roles—as program managers and advocates—and positioned themselves to respond to changing national and state policies in order to better serve the energy needs of low-income clients.

## HISTORIC ROOTS: 1976-1995

Community Action Agencies—which comprise almost all of LEAN's member agencies—were a critical element of President Lyndon B. Johnson's signature War on Poverty legislation, The Economic Opportunity Act of 1964.<sup>9</sup> The CAAs were an integral part of Johnson's approach to poverty reduction—he wanted to empower local communities to craft antipoverty solutions. CAAs were designed as local nonprofit organizations that would operate anti-poverty programs. The Act states that CAAs provide “services, assistance, and other activities of sufficient scope and size to give promise of progress toward elimination of poverty or a cause or causes of poverty through developing employment opportunities, improving human performance, motivation, and productivity, or bettering the conditions under which people live, learn, and work . . .”<sup>10</sup>

Initially, CAAs primarily focused on job training and early childhood education programs like Head Start. In the 1970s, however, the oil crisis drove up energy prices,

prompting the U.S. Congress to create the Weatherization Assistance Program, or WAP, in 1976.<sup>11</sup> CAAs used their community experience to deliver weatherization and energy efficiency services through WAP.

WAP aligned with the agencies' mission to alleviate poverty. It created weatherization jobs for workers in the local community while simultaneously reducing energy bills for low-income households, helping those families avoid termination of utility services or loss of heat.

In the mid-1990s, and in response to significant cuts in federal funding for WAP, a two-tiered energy efficiency delivery network emerged that would later help provide the foundation for LEAN's own tiered delivery structure. The Massachusetts Department of Housing and Community Development (DHCD), the state agency that administers WAP,<sup>12</sup> reduced the number of CAAs (or other nonprofits) that received direct grants to run WAP down to 12 lead agencies. In turn, the lead agencies subcontracted with the remaining CAAs and other nonprofit agencies to ensure that every city and town in the state was served by WAP. This two-tiered lead/sub-agency structure remains in place today.

### *Evolving State Policy and the Birth of Utility Programs*

The federal WAP was launched in 1976, part of major energy legislation passed by Congress—largely in response to the Arab oil Embargo of 1973–74<sup>13</sup>—as it sought to “prevent future energy shortages,” reduce “the Nation’s dependence on imported energy supplies” and “encourage the implementation of energy conservation with respect to dwelling units.”<sup>14</sup> At that time, few states devoted their own

resources toward making residential homes more efficient. Massachusetts was one of the first states to supplement the federal WAP funds with its own budget appropriations. In fiscal years 1981 through 1989, Massachusetts devoted amounts ranging from \$400,000 to \$4 million to the state weatherization program.<sup>15</sup> This helped establish the weatherizing of low-income homes as a high priority for Massachusetts, even after the state stopped supplementing the federal WAP funds.

By 1987, New England customers were paying 25 percent more in utility rates than the national average.

Investments in energy efficiency did not stop the rise in energy prices. By 1987, New England customers were paying 25 percent more in utility rates than the national average.<sup>16</sup> Prior to 1987, utilities sought supply-side solutions to meet the demand for energy by constructing expensive power plants. As prices crept higher, however, the Department of Public Utilities, investor-owned utilities (IOUs), and stakeholders in the region began to craft a new energy policy for Massachusetts.

In 1987, the New England Energy Policy Council released a groundbreaking report, *Power to Spare: A Plan for Increasing New England’s Competitiveness Through Energy Efficiency*.<sup>17</sup> Importantly, its authors identified the adverse economic and environmental impact of pursuing supply-side solutions, noting that meeting rising demand “by building ever-larger baseload power plants has proven an unwise and uneconomic strategy . . . completed plants have caused significant rate increases and a drain on precious capital resources.”<sup>18</sup>

The report urged the region to shift from supply-side solutions to investment in energy efficiency and outlined the steps necessary to integrate energy efficiency into utility offerings. Early utility programs emphasized energy audits, consumer education, and small rebates.<sup>19</sup> The report's authors urged utilities to develop programs that engaged in comprehensive retrofits that installed all cost-effective equipment.<sup>20</sup>

Nancy Brockway and attorneys at the Conservation Law Foundation (CLF), a Boston-based environmental advocacy group and a primary contributor to *Power to Spare*, pursued litigation to implement the report's recommendations in Massachusetts.<sup>21</sup> CLF intervened in every case before public utility commissions in the Northeast that addressed constructing new power plants, transmission lines, or other supply-side solutions. CLF's attorneys pressed for efficiency over new, costly construction. Their tireless advocacy paid off.<sup>22</sup> Twelve New England utility companies, including most of the electric IOUs in Massachusetts, entered into collaborative agreements with CLF to create efficiency programs.<sup>23</sup>

In the Northeast, including Massachusetts, utilities paid CLF to staff collaboratives to help design new efficiency offerings. The resulting collaborative agreements resulted in successful general energy efficiency programs, but some low-income advocates felt that the programs did not adequately serve their clients. The new offerings focused on improving the energy efficiency of new construction and comprehensive retrofits of large commercial and industrial facilities.<sup>24</sup> The CAAs, however, wanted dedicated ratepayer-funded low-income programs. They hoped to align these new energy efficiency efforts with the existing federal weatherization program to comprehensively treat low-income households.

Sue Coakley, then an analyst at the Massachusetts Department of Public Utilities (DPU), remembers the difficulties: "The integration with weatherization wasn't easy. By then, weatherization programs were 10 years old. . . . [The programs] just had totally different requirements."

For example, under WAP, the agencies only had to prove that the energy efficiency measures installed were cost-effective based on the program's rules. While WAP grantees did not have to document after-the-fact savings, the utility companies had to demonstrate actual evidence of electricity savings.

Although the new utility energy efficiency offerings lacked a specific budget for low-income customers, the development of these initiatives brought together the advocates that would form LEAN. Jerrold Oppenheim (then at the Massachusetts Attorney General's Office) and Elliott Jacobson (Action, Inc.) supported CLF's interventions as a way to reduce the burden of energy bills on low-income households. The process helped unite the interests of the region's environmental groups with the aspirations of low-income advocates, forging a powerful coalition for low-income programs a decade later.

### *Low-Income Specific Energy Efficiency Programs*

During the 1990s, several developments galvanized a network of low-income advocates to renew their push for utility-funded energy efficiency programs specifically tailored to



meet the needs of low-income customers. On the federal level, Republican Congressman Newt Gingrich orchestrated an incredible 54-seat gain in the House of Representatives in 1994.<sup>25</sup> Many of the new members were hostile to existing social service programs. Republicans in the House halved funding for the WAP program, which prompted DHCD to cut back the number of its Massachusetts WAP-grantee agencies from 23 to 12. Congress also made deep cuts to the federal Low-Income Home Energy Assistance Program (LIHEAP), which provides financial fuel assistance to low-income households in danger of losing their utility service in the winter due to unaffordable bills.<sup>26</sup> Elliott Jacobson of Action, Inc. worried about his agency's ability to continue serving clients. "We decided we needed to attract utility dollars to keep programs running," said Jacobson.

In addition to supplementing the funding shortfall that would result from the impending weatherization cuts, blending WAP with a utility energy efficiency program would allow the CAAs to install all cost-effective energy efficiency measures while also addressing other physical needs (e.g., minor repairs needed to ensure a tight building envelope). Massachusetts-based attorneys Nancy Brockway and Roger Colton wrote of the benefits of aligning the programs in 1996:

*"Utility funds are used on cost-effective energy savings measures. In contrast, WAP dollars [can be] used as the source of financing for the non-energy savings components of the total program. WAP funds . . . can be earmarked for funding administration, outreach and intake, and major non-energy saving home repairs. The combination of WAP and utility dollars will eliminate parallel programs by the utility and the government. Instead, a single program will be created serving the combined populations of what the two programs would have served separately. The allocation of particular expenses to WAP responsibility or to utility responsibility will be an accounting function of which the low-income household is not aware."<sup>27</sup>*

Although many low-income advocates realized the need for a streamlined program, they struggled to identify a strategy to create one.

### ***Rate Case Interventions Help LEAN Expand Its Services to Low-Income Households***

The Energy Policy Act of 1992 allows federal weatherization funds to be used to create "partnerships, agreements, or other arrangements" with utility companies and others to attract non-federal dollars for low-income energy efficiency, either through state, private, or ratepayer-funded sources. The Act thus permits funds to be used to intervene before state public utility commissions.<sup>28</sup> In 1996, Jacobson decided to employ the legal strategy used by the Boston-based Conservation Law Foundation (CLF) eight years earlier and participate in a rate case seeking to obtain greater ratepayer funding for energy efficiency for low-income utility customers. Action, Inc. retained Nancy Brockway, then an attorney at the National Consumer Law Center (NCLC), to intervene on behalf of a group of low-income individuals and CAAs in a Boston Gas Company rate case.

The utility company (now part of National Grid) proposed a program for low-income customers that would include attic and wall insulation as well as other weatherization



measures, with an annual budget of \$2.6 million. The company also proposed that it would “work with U.S. Department of Energy’s subgrantees to implement and deliver the program.”<sup>29</sup> LEAN itself did not yet exist, but the low-income intervenors proposed that the Boston Gas “program specifications should state that the program will be administered via community weatherization program providers using a lead vendor for implementation through the local agencies,” and that the lead vendor have “a proven track record of delivery of weatherization assistance to low-income customers.”<sup>30</sup> Boston Gas supported this approach, proposing that a single entity (rather than multiple agencies) perform the role of lead vendor.

The Massachusetts Department of Public Utilities approved the joint Boston Gas/low-income intervenor proposal and “adjust[ed] the budget upwards by \$450,000” to reflect expansion of the program as recommended by the low-income intervenors, to “include funding for heating system replacements and air sealing, in addition to installing insulation.”<sup>31</sup> Boston Gas thus became the first company in Massachusetts to employ a DPU-approved model of operating its low-income energy efficiency program by designating a CAA (Action, Inc. of Gloucester) as a “lead vendor” which would contract with other CAAs to ensure coverage of the company’s territory.<sup>32</sup> However, starting in 1994, and as a result of negotiations in which attorney Nancy Brockway represented LEAN, Massachusetts Electric Company (also now part of National Grid) had voluntarily been contracting with the CAAs in its service territory to implement a program specifically designed for low-income customers—the Appliance Management Program.<sup>33</sup> This program replaced older appliances with more efficient models.

Between the voluntary Massachusetts Appliance Management Program and the DPU-approved Boston Gas program, the seeds that would grow into LEAN were planted at two of the larger utility companies in the state. Within a few years, nearly every regulated utility in Massachusetts would contract with CAAs to deliver low-income energy efficiency programs.

### *Restructuring Act Formally Recognizes and Provides Dedicated Funding for Low-Income Energy Efficiency*

As the CAAs and NCLC attorney Nancy Brockway continued intervening in rate cases before the DPU, other advocates pursued legislation to codify the role of CAAs in administering utility energy efficiency programs in the state. The opportunity to exert legislative influence arose as Massachusetts began restructuring the utility industry, first at the DPU and later in the legislature.<sup>34</sup>

In the mid-1990s, public utility commissions across the country were examining ways to foster competition within the electric (and sometimes, gas) industries through restructuring. Restructuring generally involved splitting the function of producing or generating energy supplies from delivering energy to end-use customers via transmission and distribution lines. The theory was that independent companies could compete to generate supply at a lower cost and consumers could purchase their utility supply from the cheapest source that met the consumer’s needs.

Legislators and stakeholders debated the provisions of the restructuring act fiercely as low-income advocates pressed the case for their clients. They wanted to ensure that low-income customers did not experience expensive rate fluctuations in the new market-driven environment. To safeguard their interests, low-income advocates pushed the state legislature to formalize the CAA's role in delivering efficiency programs and to set a budget for low-income utility efficiency programs.

With the passage of Chapter 164 of the Acts of 1997 (Restructuring Act), electric industry restructuring moved forward in Massachusetts: the existing, regulated electric utilities were required to sell off their generation plants to independent companies. Due to the efforts of Action, Inc.—including Jacobson and NCLC attorney Jerrold Oppenheim—the restructuring legislation formally recognized LEAN in all but name. The law required that:

*the low-income residential demand side management and education programs shall be implemented through the low-income weatherization and fuel assistance program network and shall be coordinated with all electric and gas distribution companies in the commonwealth with the objective of standardizing implementation.*<sup>35</sup>

*Massachusetts has developed a unique collaborative that works towards combining utility and government funds. The program approach maximizes cost effective deep savings in income eligible homes.*

— Craig Brown, director of Conservation Services of Action Inc., in Gloucester, Massachusetts.

Oppenheim drafted and lobbied for this law and a panoply of other low-income protections with the counsel of Allan Rodgers, who was director of the Massachusetts Law Reform Institute.

All investor-owned utilities were now required to deliver “demand side management” (efficiency) programs, with minimum funding levels fixed by law, and with the additional requirement that the low-income programs be delivered by the CAAs and other nonprofit entities that were already operating the weatherization (WAP) and fuel assistance programs. Moreover, the concept of “standardizing implementation” of the low-income energy efficiency programs was also enshrined into law. Finally, the 2008 Green Communities Act,<sup>36</sup> a broader-ranging energy bill, further mandated that no less than 10 percent of electric efficiency expenditures and 20 percent of gas expenditures be devoted to the low-income sector. LEAN was effectively created by the Restructuring and Green Communities Acts, and given an ample endowment.<sup>37</sup>

As noted in a paper written in 2002 by attorney Jerrold Oppenheim and Theo MacGregor (who was director of the Electric

Power Division of the Massachusetts Department of Public Utilities when the Restructuring Act passed in 1997) shortly after the Act passed, two of the largest electric companies entered into negotiations to coordinate their programs with LEAN. A third company took until 2000 to fully coordinate its program. All but one of the major natural gas companies also began coordinating low-income efficiency programs through LEAN.<sup>38</sup> Ever since the Restructuring Act became law, LEAN has been the primary means by which investor-owned utility companies deliver their low-income energy efficiency programs in Massachusetts.

LEAN has also leveraged other energy-related benefits for low-income households because it is recognized as a well-respected advocate for those households. Part of the network's mission is to "be at the table" whenever energy programs or services that could affect low-income families are discussed. "Massachusetts has developed a unique collaborative that works towards combining utility and government funds. The program approach maximizes cost effective deep savings in income eligible homes," notes Craig Brown, director of Conservation Services of Action Inc., in Gloucester, Massachusetts.

## LEAN'S STRUCTURE AND ACTIVITIES

### *Two-tiered System Results in Effective Program Delivery*

Since its founding, LEAN has been led by Action Inc.'s Elliott Jacobson and ABCD's John Wells. Each of LEAN's member CAAs is a "lead vendor" for one or more utilities. The CAA/lead vendor contracts with the utility to deliver its low-income energy efficiency programs in the cities and towns served by that utility. In larger utility service territories, those lead vendors in turn subcontract with other CAAs and nonprofit entities that also deliver energy efficiency services to low-income households. The lead vendors are:

- **Action for Boston Community Development (ABCD)** in Boston, lead for NSTAR. NSTAR has a large service territory where it provides gas and electricity service, and ABCD sub-contracts with 11 CAAs and nonprofits to ensure coverage of the entire area.
- **Action, Inc.** in Gloucester, lead for National Grid. National Grid has a large, non-contiguous service territory where it provides gas and electricity service, and Action sub-contracts with 21 CAAs and non-profits to ensure coverage of the entire area.
- **Citizen for Citizens (CFC)** in Fall River, lead for Liberty Gas. Liberty has a small service territory, which CFC covers itself.
- **Greater Lawrence Community Action Council (GLCAC)**, lead for Columbia Gas. Columbia has three non-contiguous service regions centered in Brockton, Lawrence, and Springfield. GLCAC contracts with seven CAAs<sup>39</sup> to ensure coverage of the entire area.

## One Family's Story

Tom Sullivan, a resident of the West Roxbury section of Boston, takes care of his 80-year-old father and his father's home, a house built on farmland in the 1850s. His father suffers from dementia and Tom and his sister have worked to keep him at home instead of moving him to a nursing home. However, the family struggled to pay for heat. The house never had insulation and its primary heating source is oil. "My parents have lived here 46 years, paying outrageous oil prices," says Tom. "They must have paid 20 to 30 percent of their disposable income on oil."

Then, Tom's sister found out about the energy efficiency program available through the community action program ABCD and applied. Based on the improvements that ABCD made to Tom's house, the family can expect to cut its use of fuel oil in half.

- **Housing Assistance Corporation (HAC)**, lead for the Cape Light Compact (CLC), which provides some electricity services on Cape Cod and Martha’s Vineyard. HAC, based in Hyannis, covers the entire territory itself.
- **Montachusett Opportunity Council (MOC)**, lead for Unitil/Fitchburg Gas and Electric. Because Unitil has a small service territory centered on Fitchburg, MOC itself covers the whole area.

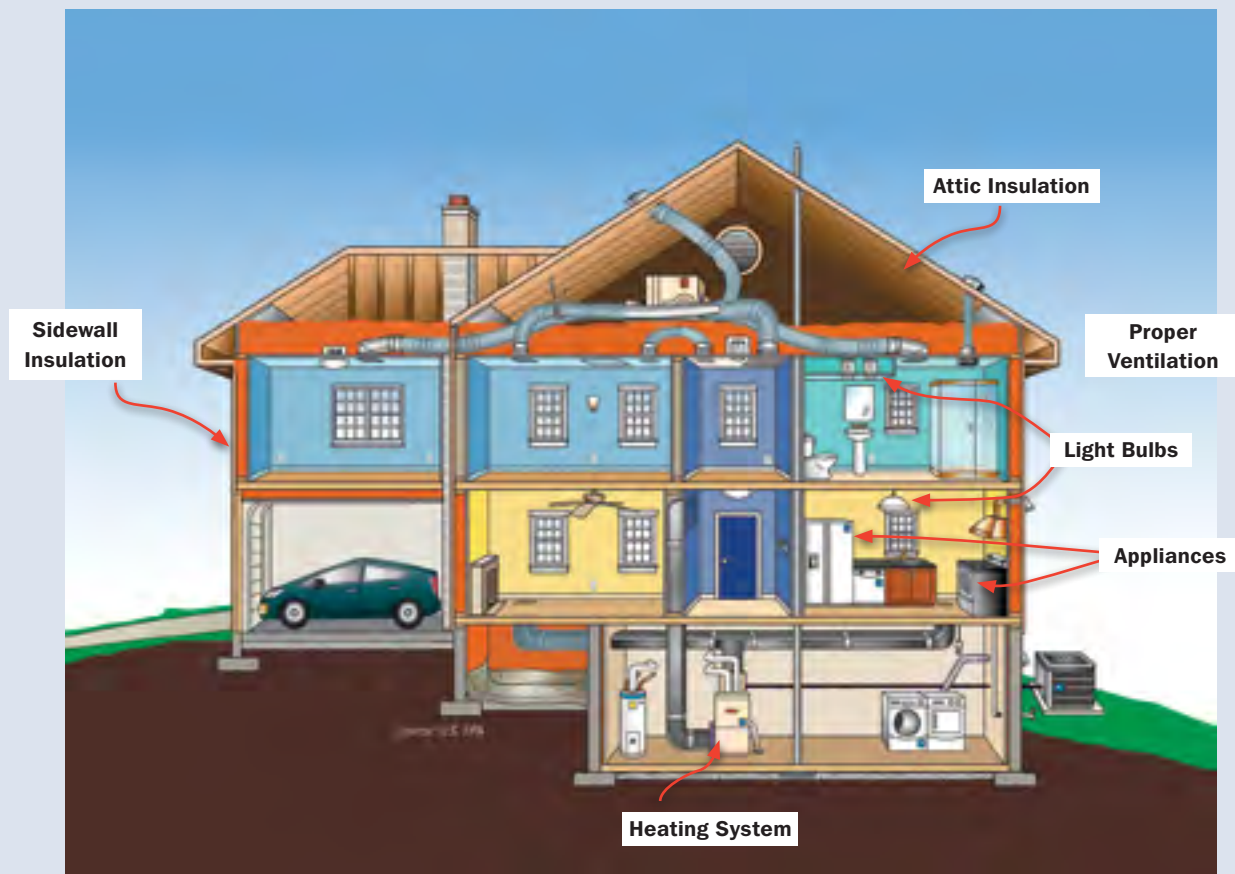
Two of the state’s utilities have slightly different arrangements for delivery of their low-income energy programs. Berkshire Gas, which serves a large area in western Massachusetts, uses the **Berkshire Community Action Council** to cover the western part of its territory and **Community Action of the Hampshire, Franklin, and North Quabbin Regions (CA)** to cover the eastern part. Western Massachusetts Electric Company (WMECO), whose parent company Northeast Utilities (NU) recently merged with NSTAR, has the most complex arrangement. NU/NSTAR contracts with Boston-based ABCD as its lead vendor. ABCD in turn contracts with CA, which is based in western Massachusetts, to oversee delivery of WMECO’s low-income programs in the four counties of western Massachusetts. A total of four CAAs<sup>40</sup>, one of which is CA itself, actually provide the energy efficiency services to low-income households in this large region of the state.

### *Central Coordination Drives Efficiency*

The core of LEAN’s work is delivering the utility-funded low-income efficiency programs, using the lead vendor and subcontractor model. But LEAN also carries out a number of other important functions that benefit low-income households as consumers of energy.

1. **LEAN helps to coordinate the disparate programs that provide energy efficiency services to low-income households**, including the utility-funded programs, WAP, and Heating Emergency Assistance Retrofit Task Weatherization Assistance Program (HEARTWAP)<sup>41</sup> as well as one-time and specially-funded programs.<sup>42</sup> Each program has its own rules. Integrating the programs in a way that minimizes the burden on the household and maximizes the benefits each household may receive can be challenging. LEAN shares information about each program’s often-changing rules and requirements, and, as needed, invites in experts who keep LEAN’s members fully up-to-date on all available programs. This information is also shared with utilities through Best Practices, a group that includes utility company energy efficiency staff and LEAN representatives and that seeks to continuously improve the design and delivery of the low-income energy efficiency programs.
2. **By coordinating all of the programs and funding streams, LEAN’s members often can deliver services that are truly “fuel-blind,”** that is, being able to reduce the household’s energy usage whether the primary heating source is natural gas, electricity, fuel oil or propane (see graphic on page 17).
3. **LEAN hosts regular “Best Practices” committee meetings with all partners.** The goal of the Best Practices group is to continuously improve the low-income energy efficiency programs. During Best Practices meetings, the utilities, CAAs, and other

## LEAN Coordinates Different Energy Efficiency Programs to Improve a Home



Source: US EPA

nonprofit agencies share their expertise about cutting-edge efficiency technologies, screen new measures for cost-effectiveness (for example, deciding that it is now cost-effective to install LED bulbs rather than compact fluorescents), and discuss rule changes and efficient ways to deliver their services. This group, for example, has approved heat pump water heaters as cost-effective and regularly updates the types of air conditioners and refrigerators that should be installed in light of changing federal efficiency standards and availability of new products in the market. Best Practices also designed and distributed, via program administrators, simple but comprehensive consumer education materials that provide both energy efficiency advice and a plain-language explanation of all low-income utility services and protections.



4. **LEAN helps contractors in the field by monitoring training needs and providing training, developing common pricing, and expanding work opportunities.** John Wells notes, “The Best Practices Group has been really effective. They keep things consistent. They make sure that contractors receive the same pricing across the state. They all have the same work rules. It makes things really simple for contractors.”
5. **LEAN’s member agencies help low-income households manage utility bills.** The network has successfully advocated to codify and increase to 25 percent the percentage value of the low-income discount rates<sup>43</sup> and to expand eligibility standards,<sup>44</sup> making more families eligible<sup>45</sup>; piloted the offering of Arrearage Management Programs (see page 20), and leveraged significant additional funding to address the needs of low-income energy consumers.<sup>46</sup>
6. **LEAN’s structure provides flexibility that allows for a quick response to rapidly changing circumstances,** such as funding available through the economic stimulus enacted by Congress in response to the Great Recession (see page 21).

*LEAN has proven to be a capable and effective partner for Northeast Utilities in delivering energy efficiency services to low-income households.*

— Tilak Subrahmanian,  
Northeast Utilities  
Vice President of  
Energy Efficiency

LEAN’s member agencies rely heavily on the network’s superstructure to help them get their work done. Peter Wingate, energy director of the CAA based in Greenfield, said, “The collaboration between lead vendors has helped to ensure that production is high, quality is fantastic, and goals are met.”

LEAN also helps DHCD, the state weatherization agency, to do its job more effectively, especially in the current environment in which federal WAP funding has been slashed. Utility funding helps DHCD carry out its weatherization mission. DHCD Energy Conservations Unit Manager Dave Fuller notes that LEAN brings the skills of “well-trained, well-intentioned local people” to the table.

And utility companies also benefit. “LEAN has proven to be a capable and effective partner for Northeast Utilities in delivering energy efficiency services to low-income households,” says Northeast Utilities Vice President of Energy Efficiency Tilak Subrahmanian. “LEAN has helped NU, and Massachusetts as a whole, meet—and even exceed—our collective low-income residential savings goals.”



## *LEAN Supports Local Business*

Massachusetts sends about \$5 billion out of state annually for purchase of natural gas and oil to heat people's homes. Energy efficiency investments keep more of that money in state while employing local workers.

For example, National Fiber in Belchertown (a Western Massachusetts town of 13,000 people) manufactures and distributes cellulose insulation throughout the Northeast. In addition to employing local workers, it boosts the local economy by purchasing about 80 percent of its raw materials throughout New England. The cellulose machines that many contractors use to blow insulation into walls and attics are made by Accu1-Direct, headquartered in Longmeadow, Massachusetts.

And contractors, such as Air-Tight Weatherization, LLC located in Beverly, Massachusetts, note additional benefits of the program. Co-owner Jim Fortin is pleased that the work he does improves peoples' lives. Much of the housing stock that Fortin's crews improve includes older homes with little to no insulation and drafty windows. "I receive letters and calls from grateful customers, many of them elders or families with young children, and it shows them that someone cares," he says. Additionally, the work that Fortin's employees perform helps improve health by reducing mildew and mold and sealing air leaks.



Crew member seals air leaks in a basement.  
*Photo: ©2012: Advantage Weatherization, Inc.*

## *LEAN Programs Help Low-Income Families Manage Overdue Utility Bills*

In 2002, ABCD and Action, Inc., applied for and received a grant from the U. S. Department of Health and Human Services to develop and implement an innovative program, Leveraging Assets for Self-sufficiency through Energy Resources (LASER). The LASER program was designed to help low-income households become energy self-sufficient through a holistic approach revolving around case-managed "one-stop" service delivery. The objective was to reduce customers' arrearages (past due bills) and overall debt, including to utilities, and to use CAAs as resources to connect clients to all available benefits and resources. Case managers provided instructions and support for clients to better manage their everyday finances, plan for the future, and make good energy-use decisions, including referral to state and federal weatherization and energy efficiency programs.

The idea for LASER built upon earlier efforts by Ron Grosse to rationalize collection procedures at Wisconsin Public Service Corp., where he was a credit and collections manager; the OnTrack social worker program for those just above LIHEAP income

guidelines at Brooklyn Union Gas; and the NU-START arrearage management program developed for hardship customers of Connecticut Light & Power by Sara Ellison. The latter became the basis for a rate case settlement between LEAN and CL&P's affiliate Western Massachusetts Electric Co., which was then replicated in another LEAN settlement with Boston Edison Co. (now NSTAR).

The LASER program began with 150 clients each in the ABCD and Action Inc., territories. It soon expanded to six CAAs across the state, each with 150 clients participating. The program was designed to foster a collaborative working partnership, with the utilities serving LASER clients. This partnership developed a unique and important service out of small pilots that two of the utilities had begun: an arrearage management program (AMP) to help low-income customers discharge their utility debts in exchange for regular monthly payments at an affordable rate.<sup>47</sup>

### *Arrearage Management Programs*

In the mid 2000s, LEAN's member agencies lobbied the Massachusetts legislature to require the utilities to offer AMPs for low-income customers behind on their utility bills.<sup>48</sup> AMPs offer a chance for a fresh start. As the customer makes regular, on-time payments on his or her current utility bill, the company forgives part of the prior debt. If the customer continues making timely payments under the plan, the arrearage eventually disappears. While the customer is on the plan, the utility postpones disconnections and collection efforts.

Initially, LEAN's member agencies piloted AMPs on a smaller scale, allowing some flexibility in program design to each utility. The CAAs screened and enrolled clients in the utility's AMP. After the pilot period, the Best Practices Working Group set up to oversee AMP implementation decided that the utilities were best suited to expand and administer the program.

The cooperative effort of all parties has yielded tremendous benefits for utility companies, low-income customers, and the state of Massachusetts: by helping customers to reduce their overdue bills, customers avoid terminations. What's more, due to the incentives provided, low-income customers pay a larger percentage of their current bills.

By 2008, as a result of advocacy by the CAAs and their utility partners, the AMPs were expanded to cover every income-eligible household that had a debt to an electric company of at least \$100, or to a gas company of \$300 or more, that was at least 60 days old.<sup>49</sup> By signing up



Carol, a retired disabled widow with NCLC attorney Charlie Harak outside her all-electric home in Billerica, Massachusetts. Harak helped resolve Carol's overdue utility bill and got her enrolled in National Grid's Arrearage Management Program so she can keep current on her electric bills. *Photo: Beverlie Sopiép*

for the AMP, an eligible customer agrees to pay a monthly bill that has been calculated based on a prior year's energy usage and divided by 12, after deducting expected federal fuel assistance (LIHEAP) payments. By thus leveling the bills across a full year, winter bills become more affordable. Each time a customer pays a monthly bill on time, the utility forgives one-twelfth of the debt owed until the debt disappears. As long as the customer is enrolled in the program, the household cannot be disconnected.

Over the past five years, the AMPs have served more than 15,000 gas and electric customers annually. The program benefits the utilities as well as its customers. These customers, on average, paid \$14 million annually to their utilities on monthly bills and received over \$13 million in debt forgiveness in return for making payments. National Grid found that customers enrolled in its AMP paid approximately double the amount toward their bills than other low-income customers with arrearages. Columbia Gas reported that AMP customers paid 67 percent of the amounts billed, on average, compared to 44 percent for other customers behind on their bills.<sup>50</sup> "Our JD Power survey is up and our customers like us better," says NSTAR's Low-Income Programs Manager Kathy Orrick. "I believe part of that is due to the AMP program."

### *LEAN's Structure Leverages Federal Funds*

On February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act (ARRA), commonly known as the Federal Stimulus or Recovery Act. With an estimated price tag of \$800 billion, ARRA was intended to provide a major economic stimulus by creating jobs, assisting individuals and sectors of the economy in greatest need, and, more broadly, creating demand for goods and services to offset massive declines in private sector spending and business activity.

ARRA provided \$5 billion for WAP, which represented an eight-fold national increase over prior, annual appropriations. ARRA funding was spread over a three-year expenditure period, with a scheduled end date of September 30, 2012. But in Fiscal Year 2013, WAP funding decreased with only \$68 million being appropriated under the FY13 Continuing Resolution (CR), Pub. L. 112-175.

During ARRA, total LEAN funding from all sources (federal and Massachusetts utility) more than doubled. LEAN, in close coordination with the state weatherization agency, quickly ramped up the number of contractors employed throughout the network and its ability to serve a much larger number of homes. As a result, Massachusetts has been widely credited with running one of the most successful ARRA-funded WAP programs in the country.<sup>51</sup>

When the ARRA funding for WAP ended in 2012, LEAN was again nimble. The member agencies worked with the state to revise the WAP rules so that LEAN's members could more easily blend the shrinking federal funds with the expanding utility funding of energy efficiency, allowing LEAN to continue delivering the full range of energy efficiency services to low-income households.

## Fostering Energy Efficiency Innovation

LEAN members were successful in obtaining a Sustainable Energy Resources for Consumers (SERC) grant, funded by the U.S. Department of Energy through the ARRA federal economic stimulus. The SERC grants allowed for the testing of the cost effectiveness of three different technologies in homes or facilities that serve low-income households: super-insulating aerogel, combined heat and power engines, and solar domestic hot water (DHW) heaters. For example, 2,800 square feet of solar DHW collectors are expected to reduce energy consumption by 50 percent at an 184-unit public housing building in Boston (see photo of tenants and officials from ABCD and the Commonwealth of Massachusetts at the ribbon-cutting celebration in 2012). And Woburn is also using less energy through DHW solar in a public apartment complex for low-income seniors (see video).



*Photo: Courtesy of Boston Housing Authority*

### *Can LEAN Be Replicated in Other States?*

LEAN's successes have been noted by many across the country who deliver or study low-income energy efficiency programs. Elliott Jacobson has attended a number of conferences to explain its history and structure and to offer advice to those who would want to replicate similar structures. He often advises that LEAN is not an easy model to copy, and that the particular circumstances that helped bring it into existence in Massachusetts are unlikely to be the same in other states. The individuals that comprise LEAN's leadership possess a unique and complementary blend of characteristics. Jacobson's ability to adapt to developing situations and emerging opportunities has enabled LEAN to be at the forefront of new funding sources, weather changes in political climates, and build support among various factions. John Wells brings a granular knowledge of building science with keen insight into program management, enabling him to streamline operations among an array of programs. Jerrold Oppenheim has overseen a legal strategy that establishes LEAN as a locus for all low-income energy efficiency programs and low-income energy policymaking.

Although the exact personalities who created LEAN do not exist elsewhere, it is still entirely possible to create a structure like LEAN in other states.<sup>52</sup> The advantages of doing so are more than worth the effort.



First, a LEAN-type structure can significantly increase the amount of funding available to help low-income households in reducing their energy consumption and, therefore, their energy bills. LEAN combines funds from the U.S. Department of Energy (DOE) weatherization program, utility-funded energy efficiency programs, and special grants. Second, replicating a network like LEAN can lead to better standards and higher quality work as agencies across a state work with and learn from each other. This can lead to a “virtuous circle” where the network gains enhanced credibility as an entity that delivers high-quality, high-value services to low-income households, which leads to more funding . . . and so on. Third, such a network can leverage its reputation to become a respected voice on a broader range of energy issues affecting low-income households in a given state: the design of the state’s fuel assistance program, discount rates, and arrearage management programs.

There are also a number of ingredients that are essential for those thinking of building a low-income energy efficiency network. First, “you have to find people who are willing to devote all their time to this project,” notes Eliot Jacobson. There needs to be a critical mass of individuals who are familiar with all of the relevant energy programs, who are skilled at managing programs and the work of energy auditors and contractors, who can negotiate contracts with utility companies and state agencies, and who can both carefully monitor the work performed and provide transparent accounting. These individuals must have energy work as their prime responsibility and not be in charge of other demanding programs. Many states may already have the right people in place, within the DOE-funded weatherization program.

Second, those working to build the network should work closely with the state weatherization agency, as its support is likely critical to success. WAP provides the basis upon which other funding sources, such as utility funding, can be piggy-backed. Even in an environment where utility funding surpasses WAP funding (as is currently true in Massachusetts), the WAP rules set a solid foundation upon which other programs can be layered. Moreover, DOE’s rules specifically allow that funds may be used for so-called “leveraging activities,”<sup>53</sup> which include any efforts “to increase the amount of weatherization assistance that the State obtains from non-Federal sources.”<sup>54</sup> DOE funding can be made available to help the network get off the ground if the network plans to “leverage . . . non-federal sources,” such as utility funding.

Third, and related to the availability of leveraging funds, a successful low-income network should make sure it has access to the experts needed to carry out its work. This includes lawyers who can intervene in utility proceedings where efficiency budgets and program designs are approved or energy experts who can help design programs that seamlessly blend utility and DOE funding.

Fourth, it is helpful if utilities and their state utility regulators, as well as other state energy policymakers, are openly supportive. Utilities that operate energy efficiency programs need to know that they will recover expenditures they make on energy efficiency and have the opportunity to earn a profit commensurate with their other activities. Each state has its own rules for determining cost-effectiveness of energy efficiency

measures and the means by which utilities can recover their costs and earn profits. It is important for utilities to know that any new approaches they take to deliver energy efficiency services to low-income households will not be undermined by subsequent utility commission actions. As Jacobson advises, it is important to attend almost every meeting and proceeding where the state's low-income energy efficiency policies and budgets are discussed.

Fifth, the local agencies that hope to launch a state-wide network must deliver high-quality work. No state weatherization office or utility company is going to lend its support or provide funding for expanded low-income energy efficiency programs and advocacy unless the local agencies are seen as trusted partners.

And finally, Action Inc.'s Jacobson notes, "People have to *believe* in it." Those who go down this road must understand that the effort will take time and that numerous forums and stakeholders will need to be engaged. Utility companies and their regulators, state weatherization agencies, and other state energy policymakers, possibly state legislatures, and energy contractors: each stakeholder will have its own views and its own level of interest or disinterest in helping to create a better means to help low-income households address their energy needs. And each may need to be fully engaged by those proposing a structure similar to LEAN's. The nonprofit agencies that will have to lead the charge need to be tenacious and willing to patiently pursue their strategy.

The benefits, however, are clear. "LEAN's member agencies are skilled in energy efficiency materials and installation techniques, are compassionate for the families they serve, and have been flexible in meeting NU's needs as our programs evolve over time," says Northeast Utilities Vice President of Energy Efficiency Tilak Subrahmanian. "Most of all, our customers benefit greatly by seeing reduced energy bills and increased comfort."

However, currently only a handful of states integrate the federal WAP funding with utility-funded energy efficiency programs or with any other potential funding sources. Other states consign their low-income citizens to relying entirely on WAP, which has seen its funding drastically cut and can serve only a relatively small number of households each year. Even those served will generally receive something far less than whole-house energy efficiency.

While replicating LEAN elsewhere may not be easy, it is worth the challenge. The alternative is to leave low-income households with inefficient, unhealthy homes and unaffordable energy bills.



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24. *Id.*
25. Peter Ferrara, "The Case for Newt Gingrich," *The American Spectator* (Dec. 28, 2011).
26. Dan Morgan & Eric Pianin, "Doing the Dirty Work of Deficit Reduction; Appropriations Panel Must Make Sure Budget Ax Falls Where It's Aimed," *Washington Post* (July 9, 1995); Interview with Elliott Jacobson (Oct. 4, 2012).
27. National Consumer Law Center, *A Guide to Low-Income Energy Efficiency* (1996), p. 93-94.
28. Public Law 102-486, §142(a), 106 Stat. 2842, adding 42 U.S.C. §6864(a) ("The Secretary shall . . . provide financial assistance . . . for . . . partnerships, agreements, or other arrangements with utilities, private sector interests, or other institutions, under which non-Federal financial assistance would be made available to support programs which install energy efficiency improvements in low-income housing . . . Financial assistance . . . may be used for . . . **the presentation of arguments before State or local agencies.**" (Emphasis added).
29. *In Re: Boston Gas Company*, MA DPU 96-50 (Dec. 2, 1996), p. 175.
30. *In Re: Boston Gas Company*, MA DPU 96-50 (Dec. 2, 1996), p. 176.
31. *In Re: Boston Gas Company*, MA DPU 96-50 (Dec. 2, 1996), pp. 184, 190.
32. Following the favorable Boston Gas decision, CAAs began intervening in all subsequent rate cases where low-income energy efficiency programs were at issue. Interview with Elliott Jacobson (Oct. 4, 2012).
33. Theo MacGregor & Jerrold Oppenheim, "Coordination between Utility and DOE Low-Income Weatherization: What do Public Utility Commissioners Need to Know?" (2002), 1st appendix, "Massachusetts: A Case Study", p. 7.
34. *Id.*, p. 8.
35. Mass. Gen. Laws ch. 25, §19(c).
36. Chapter 169 of the Massachusetts Acts of 2008.
37. The Restructuring Act also included, at the urging of LEAN's founders, the legal mandate that electric and gas companies offer discount rates to their low-income customers. Acts of 1997, ch. 164, §193, adding Mass. Gen. Laws ch. 164, §1F(4)(i). In the ensuing years since the law passed, discount rates have provided hundreds of millions of dollars of benefits to low-income households.
38. Theo MacGregor & Jerrold Oppenheim, "Coordination between Utility and DOE Low-Income Weatherization: What do Public Utility Commissioners Need to Know?" (2002), 1st appendix, "Massachusetts: A Case Study," p. 13.
39. The seven CAAs are: Community Action of Franklin; Hampshire and North Quabbin Regions; Citizens for Citizens; Self Help, Inc.; South Middlesex Opportunity Council; South Shore Community Action Council; Springfield Partners for Community Action; and Valley Opportunity Council.
40. Berkshire Community Action Council; Community Action of the Hampshire, Franklin and North Quabbin Regions; Springfield Partners for Community Action; and Valley Opportunity Council.
41. HEARTWAP (Heating Emergency Assistance Retrofit Task Weatherization Assistance Program) is funded by a set-aside from the fuel assistance program and funds repair or replacement of poorly operating or inoperative heating systems.
42. For example, there have been special programs to help low-income households replace old, inefficient and unhealthy wood stoves and to install combined heat-and-power systems.

43. Under Mass. Gen. Laws ch. 164, § 1F(4), households who are income-eligible for payments under the LIHEAP fuel assistance program are also eligible to get a lower rate on their electric and gas bills, and the percentage value of the discount was increased to (approximately) 25% due to the efforts of LEAN's members.
44. Households initially had to have income less than 200% of poverty to be eligible for the discounts, but now are eligible up to 60% of median income, which is a higher dollar amount than 200% of poverty in Massachusetts for almost all households.
45. Petition of Fitchburg Gas and Electric Light Company et. al. MA DPU 10-41 (Nov. 2, 2010), p.17.
46. For example, in 2002 and 2005, Massachusetts received "Residential Energy Assistance Challenge" (REACH) grants of \$1,000,000, which LEAN agencies used to operate a "Leveraging Assets for Self-sufficiency through Energy Resources" (LASER) program. The goal of the program was to assist low-income households in becoming more energy self-sufficient. One of the programs it piloted was an Arrearage Management Program (AMP) in which companies provided credits against a customer's arrearage for each month that the customer paid the current bill. This pilot formed the basis for the state law (Acts of 2005, ch. 140, § 17) that now requires each utility to operate an AMP.
47. This grant, called the "Residential Energy Assistance Challenge" or REACH, provided \$1,000,000 for a three-year program. It was renewed in 2005 for another \$1,000,000.
48. See Acts of 2005, ch. 140, § 17.
49. See NCLC's report *Helping Low-Income Utility Customers Manage Overdue Bills through Arrearage Management Programs* (Sept. 2013), available at: [http://www.nclc.org/images/pdf/energy\\_utility\\_telecom/consumer\\_protection\\_and\\_regulatory\\_issues/amp\\_report\\_final\\_sept13.pdf](http://www.nclc.org/images/pdf/energy_utility_telecom/consumer_protection_and_regulatory_issues/amp_report_final_sept13.pdf).
50. Drawn from reports provided by the electric and gas companies to the AMP Best Practices Group.
51. National Consumer Law Center, *Low-Income Weatherization: Stimulus-Funded Program Shines But Storm Clouds Are On The Horizon* (Nov. 2012), available at <http://www.nclc.org/issues/low-income-weatherization.html>.
52. For those contemplating the creation of a LEAN-type network, a useful resource is *WAP Income Generation and Leveraging—A State Perspective*, available at: [http://www.waptac.org/data/files/website\\_docs/wap\\_basics/doe-leveraging-manual.pdf](http://www.waptac.org/data/files/website_docs/wap_basics/doe-leveraging-manual.pdf).
53. 10 CFR § 440.18(d)(14).
54. 10 CFR § 440.14(c)(6)(xiv).

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