
SECTION 3. THE LOW-INCOME ENERGY AFFORDABILITY PROGRAM

PROGRAM GOALS AND OBJECTIVES

Low-Income Energy Affordability Program Goals

A primary goal of the Low-Income Energy Affordability Program is to improve energy affordability. This involves: fostering energy-efficient building design and installation of efficient lighting and appliances in low-income housing; conducting a Low-Income Forum on Energy to coordinate low-income activities with related agencies and operating a related Public Awareness campaign; and aggregating low-income customers to secure lower prices for electricity and fossil fuels (*e.g.*, natural gas). Specific objectives of the Low-Income Energy Affordability Program are to:

- Reduce the energy burden of low-income consumers through improved energy efficiency, energy management strategies, and specific aggregation strategies.
- Coordinate with community-based organizations and existing public assistance programs to implement market-based energy procurement and efficiency strategies.
- Leverage private and public funds and build on the successes of existing initiatives with weatherization and other community-based organizations.
- Provide a comprehensive all-fuels approach to reduce the energy burden of low-income customers and support the viability of low-income multifamily buildings by supplementing federal weatherization program funds and expanding the scope of services to include the installation of electric reduction measures and electric-to-gas conversions.
- Implement specific aggregation strategies to increase the market power and self-sufficiency of low-income consumers who may not be served in the competitive energy marketplace.
- Inform low-income energy customers and State and community-based service providers of the services and options available to them (*e.g.*, Developing printed materials that inform low-income consumers on purchasing and using energy efficiently, and improve the linkages among parties that help low-income and special-needs New Yorkers address energy affordability).

Through the initial three-year public benefits funding allocation, NYSERDA's Low-Income Energy Affordability Program served customers in the Central Hudson Gas and Electric, Inc., Con Edison, and Orange and Rockland Utilities, Inc., service areas.¹

¹ New York State Public Service Commission. In the Matter of Competitive Opportunities Regarding Electric Service., Opinion No. 98-3. *Opinion and Order Concerning System Benefits Charge Issues*. Issued and effective January 30, 1998. Cases 94-E-092 *et al.*

In January 2001, the PSC extended the duration of the **New York Energy SmartSM** public benefits program, increased funding, and extended the program statewide so that all investor-owned electric-utility territories could be served by NYSERDA’s comprehensive portfolio of low-income initiatives. Figure 3-1 presents a map of the State’s electric utility territories. NYSERDA currently promotes and implements its low-income initiatives within all of the territories identified on the map with the exception of the Long Island Power Authority, dual franchise, and municipal territories.

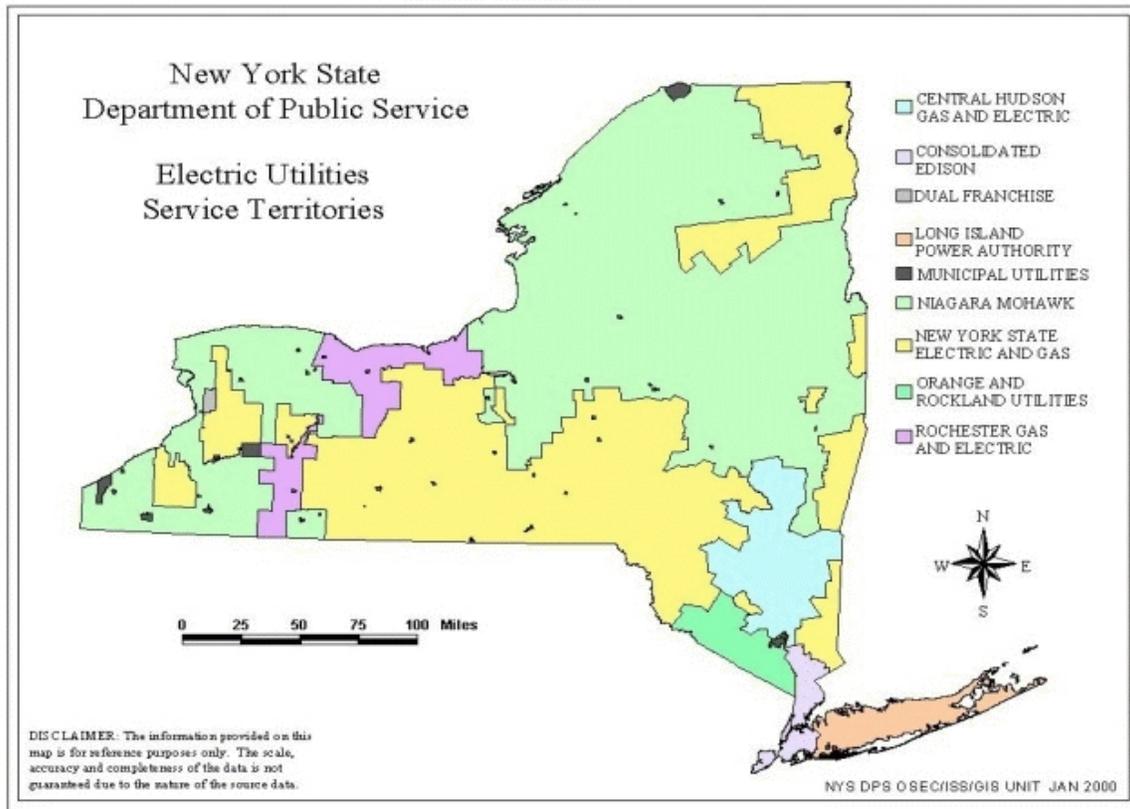
The Low-Income Energy Affordability Program serves households with incomes of up to 80% of SMI. This significantly expands the eligible population beyond those served by the federally-funded energy assistance programs, including HEAP and WAP, which cap eligibility at 60% of SMI in New York.² Table 3-1 presents the income guidelines for households with incomes between 60% to 80% SMI. The Low-Income Energy Affordability Program coordinates efforts with WAP when necessary to ensure a comprehensive, all-fuels approach. The higher income threshold for the Low-Income Energy Affordability Program allows it to serve households that would otherwise be unserved.

Table 3-1. Income Guidelines for 60% to 80% of New York State Median Income, 2002						
Median Income Household of four \$59,760	80% of State Median Income for household size of:					
	single person	two person	three person	four person	five person	six person
	\$24,864	\$32,512	\$40,160	\$47,808	\$55,456	\$63,104
Median Income Household of four \$59,760	60% of State Median Income for household size of:					
	single person	two person	three person	four person	five person	six person
	\$18,648	\$24,384	\$30,120	\$35,856	\$41,592	\$47,328

Based on data from the Administration for Children and Families, Office of Community Services, Division of Energy Assistance. In accordance with 45 CFR 96.85, 60 percent of each state’s estimated median income for a 4-person family is multiplied by the following percentages to adjust for family size: 52% for one person, 68% for two persons, 84% for three persons, 100% for four persons, 116% for five persons, and 132% for six persons. For family sizes greater than six persons, add 3% to 132% for each additional family member and multiply the new percentage by the state’s dollar amount for 4-person families. Source: <http://www.acf.dhhs.gov/programs/liheap/im99-06.htm#ATTACHB>

² Appendix B of this report identifies how many households in the State have incomes between 60% to 80% SMI, by county.

Figure 3-1. New York’s Electric Utility Territories



The income segment identified in Table 3-1 is also known as the “working poor”. While there is a perception that as income increases, so does the “ability to pay” for expenses, such as household energy use, this has been found to be untrue among working poor households. The stability of income is much more important to these households than their ability to pay.³ Many working poor households have low-paying jobs. Such jobs have considerable income fluctuations due to the variability in available work hours.⁴

³ Fisher, Sheehan, & Colton. March/April 2002. FSC’s Law & Economic Insights. *“Deferred Payment Plan Policies and the Working Poor”*.

⁴ Three times as many working poor families (as compared to non-poor families) are in service occupations (11.5% vs. 4.1%) and laborer occupations (11.5% vs. 4.1%), while nearly twice as many working poor (compared to non-poor) families have workers who are in operator/transportation occupations (18.9% vs. 11.1%). These occupations are marked by lower wages and unpredictable hours. Persons working in these occupations often face periods of lost wages. A factor contributing to the instability of income for working poor families also includes the absence of paid vacation or sick leave. Lack of paid leave directly affects the ability of working poor families to keep current with payment obligations, especially on deferred payment arrangements. For example, a person who works 35 hours a week on hourly wages may lose three days of work due to a sick child missing school and requiring care. Without leave time, the sick child translates into lost wages for the employee. Data from the U.S. Department of Labor shows that absence rates in occupations where the working poor tend to work are from 50% to 60% higher than the absence rates in occupations populated by their higher income counterparts. Absence rates for higher income occupations are lower because time missed from work covered by paid leave is not counted as an “absence”. (Extracted from, Fisher, Sheehan, & Colton. March/April 2002. FSC’s Law & Economic Insights. *“Deferred Payment Plan Policies and the Working Poor”*).

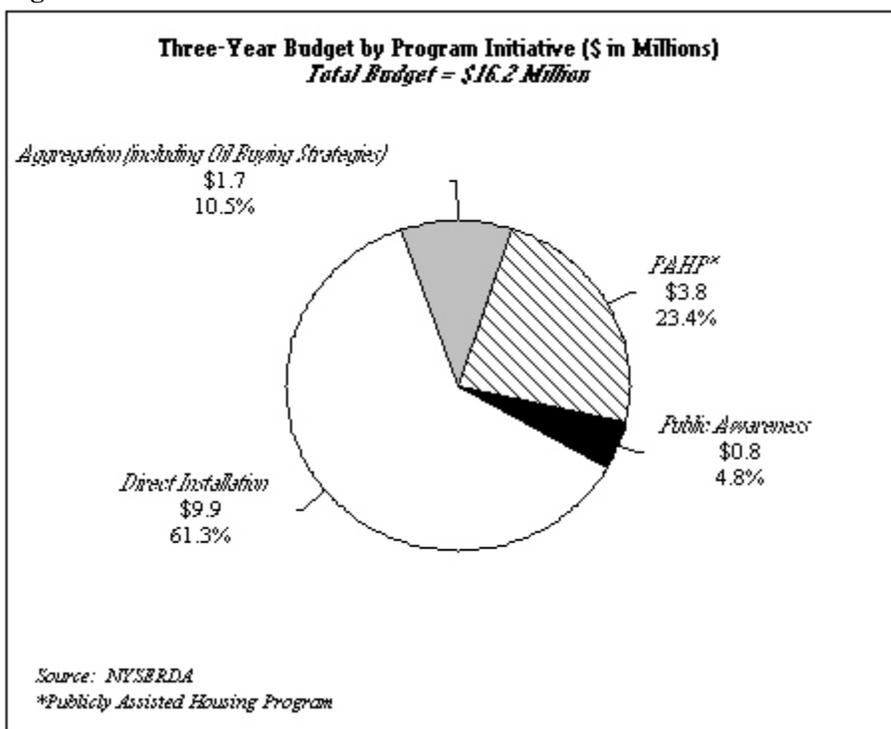
NYSERDA views the working poor population as an important customer of the Low-Income Energy Affordability Program. Working poor households often have a high energy burden, yet do not qualify for most energy assistance programs based on their income.

PROGRAM INITIATIVES

The Low-Income Energy Affordability Program, under the initial three-year public benefits funding allocation of \$16.2 million, included five program initiatives. A breakdown of funding for each initiative is shown in Figure 3-2.

The Direct Installation program comprised over 61% of the Low-Income Energy Affordability Program budget for the first three years of program operation. The Publicly Assisted Housing Program was funded with just over 23% of the total budget, and the Low-Income Aggregation, Oil Buying Strategies, and Public Awareness Programs were funded with just over 15% of the total budget. The five Low-Income Energy

Figure 3-2.



Affordability initiatives are briefly described below.⁵

Direct Installation Program

The Low-Income Direct Installation program was designed to extend the existing service infrastructure of the federal Weatherization Assistance Program (WAP) by offering electric reduction measures, including energy-efficient lighting, appliances, and electric-to-gas conversions for low-income

⁵ For further program description, refer to Appendix A of this report as well as the New York Energy SmartSM Program Evaluation and Status Report, Report to the System Benefits Charge Advisory Group, Interim Report. September 2000.

customers.⁶ The goal was to reduce energy burden of low-income households while providing information and related services to the low-income community regarding energy use and efficiency. This program ended in April of 2002.⁷

The Direct Installation program introduced electric reduction measures into housing that was being weatherized by the State’s weatherization subgrantee agencies. An initial goal of the program was to coordinate efforts with the weatherization agencies and to “fill a gap” by providing energy efficiency measures, that at the time, were not supported by the Federal Department of Energy (U.S. DOE) WAP rules and regulations. By adding such measures to the typical weatherization project addressing building shell and heating load in low-income multifamily buildings and 1-4 family homes, **New York Energy SmartSM** funds created an expanded scope of work and increased the total dollar investment in such low-income properties. The Direct Installation program promoted and added energy-efficient refrigerators, hard-wired fluorescent lighting fixtures, and compact fluorescent bulbs to weatherization work scopes, thereby enabling a greater reduction of energy burden than would have been possible under the WAP protocol. These efficiency measures, promoted and installed by the Direct Installation program, are identified in Table 3-2 along with their average cost for multifamily and 1-4 family home installations.

Table 3-2. List of Electric Reduction Measures for the Direct Installation Program			
End-Use	Electric Reduction Measure	Average Program Cost	
		<i>Multifamily >4 units</i>	<i>1-4 Family Homes</i>
In-Unit Lighting	Screw-in compact fluorescent bulbs	\$13-\$15 per bulb	\$13-\$15 per bulb
	Hard-Wired fluorescent fixtures	\$70-\$115 per fixture	\$80-\$125 per fixture
	Compact fluorescent torchiere lamps	\$75	\$85
	Dimmer switches	n/a	n/a
Common Area Lighting	Screw in compact fluorescent bulbs	\$13-\$15 per bulb	\$13-\$15 per bulb
	Hard-Wired fluorescent fixtures	\$85-\$115 per fixture	n/a
	Controls (occupancy sensors, etc.)	\$105	\$115
	LED exit signs	\$140	n/a

⁶ A case study on the Direct Installation Program may be found in the New York Energy SmartSM Program Evaluation and Status Report, Report to the System Benefits Charge Advisory Group, Interim Report. September 2000

⁷ The Direct Installation program ended in April 2002 because (1) many of the energy efficiency measures installed through the program are now eligible under weatherization, and NYSERDA did not want to compete with or duplicate such services, and (2) AMP, formerly PAHP, also installs energy efficiency measures in multifamily buildings. The Direct Installation program would have competed with, and overlapped with the services provided by the AMP program if continued.

Table 3-2. List of Electric Reduction Measures for the Direct Installation Program			
End-Use	Electric Reduction Measure	Average Program Cost	
		<i>Multifamily >4 units</i>	<i>1-4 Family Homes</i>
	Power Packs - emergency lighting	\$100	n/a
Outdoor Lighting	High pressure sodium, or high intensity discharge fixtures	\$150-\$200 per fixture	\$150-\$175 per fixture
	Controls (photo-cells, motion detectors, etc.)	\$80	\$90
Refrigeration	Removal of second, low-use or unnecessary refrigerators	n/a	n/a
	High efficiency refrigerator installations	\$350	\$640

N/a- Not available

Source: Association for Energy Affordability (AEA). Direct Installation Project. Draft Final Report. June 20, 2002.

As a result of providing additional **New York Energy SmartSM** funding to support electric reduction measures and by coordinating such delivery through the WAP infrastructure, there was more coordinated and comprehensive treatment of low-income homes and multifamily buildings. The Direct Installation Program provided a comprehensive training plan to support the implementation of the program. Training was provided by the program implementation contractor, the Association for Energy Affordability (AEA). Training included technical support in classroom and field settings both regionally and locally. In addition, the Lighting Research Center at Rensselaer Polytechnic Institute provided training on lighting technologies to Direct Installation contractors. The goal of the training plan⁸ was to enable key WAP subgrantee managers and their field staff to be able to integrate cost-effective electric reduction measures, such as those identified in Table 3-2, into their weatherization work scopes.

To successfully achieve the goals and objectives of the Direct Installation effort, coordination among WAP subgrantee agencies was necessary. AEA partnered with 23 WAP agencies. These agencies, identified in Figure 3-3, served as local partners and identified multifamily buildings and small homes that were eligible to receive Direct Installation electric reduction measures and referred them to AEA for inclusion in the program. The role of each of the agencies identified in Figure 3-3 was dependent upon the measure to be installed, the type of residence, and the location of the agency.

⁸ The training curriculum included: technical familiarity with the Direct Installation Program approved energy-efficient electric equipment, data collection methodology and equipment, metering procedures, decision making protocols, construction management, health and safety issues, and proper management including the incorporation of the program within the existing WAP, procurement, inventory, invoicing and reporting procedures.

The Direct Installation program served 10,235 low-income households and installed 158,519 measures, including compact fluorescent bulbs, hard-wired fixtures, common area lighting, outdoor lighting, and refrigerators. The installation of these measures has resulted in 4.5 MW of peak load reduction, 11.5 million kWh in electricity savings, and \$2.1 million in electric bill savings. These measures have also resulted in a 25% reduction in electric energy costs for participating households. Environmental benefits as a result of the Direct Installation Program include 8.6 tons of nitrogen oxides (NO_x), 17.4 tons of sulfur dioxide (SO₂), and 5,069 tons of carbon dioxide (CO₂); per year. These emissions reductions equate to about 1,000 cars taken off of the road. In addition, 222 building owners, along with over 10,000 residents, were educated on how to reduce their electricity use. A total of \$8,508,755 in **New York Energy Smart**SM funds were spent on the program with \$20,471,000 invested by building owners and WAP agencies.

Figure 3-3. Participating WAP Agencies

- Albany County Cooperative Extension (ACCE)
- Bronx AEA, formerly Banana Kelly C.I.A. (BAEA)
- Community Environmental Center, Inc. (CECI)
- Community Action Commission to Help the Economy, Inc. (CACH)
- Community Action of Greene County, Inc. (CAGC)
- Corporation for Youth Energy Corp. (COYO)
- Crown Heights Jewish Community Council (CHTS)
- Dutchess County Community Action Agency (DUTC)
- Harlem Community Development Corporation (HCDC)
- H.A.N.A.C.
- Housing Conservation Coordinators, Inc. (HCCS)
- Margert Community Corporation (MARG)
- Northfield Community L.D.C.of Staten Island, Inc. (NLDC)
- Northern Manhattan Improvement Corporation (NMIC)
- Northwest Bronx Community & Clergy Coalition (NWBC)
- Opportunity Development Association (ODAS)
- People’s Firehouse, Inc. H and CDC (PEFI)
- Regional Economic Community Action Program, Inc. (RECAP, Inc.)
- Sunset Park Redevelopment Committee (SUPA)
- Ulster County Community Action Committee, Inc.(UCCA)
- Westchester Community Opportunity Program, Inc. (WCOP)
- Westhab, Inc. (WHAB)

Low-Income Public Awareness Program

Many resources currently exist to assist low-income residents of New York with their energy needs. Use of these services offers low-income residential customers many benefits, including energy and dollar savings, and health, safety, and comfort benefits. However, a convenient method to inform and directly enroll in these programs does not exist. This lack of a convenient entry point for the end-user necessitates that a clear message be established and marketed to the target population. The Low-Income Public Awareness Program was designed to inform customers of the energy services and options available to them throughout the State. A key component is LIFE.

The purpose of this initiative was to design and implement a public awareness campaign that would result in measurable improvements in the enrollment of low-income residents in energy efficiency and energy management programs statewide. Applicable programs included: all NYSERDA, State, Federal,

utility, and community-based low-income energy efficiency programs, including weatherization, offered in New York. The program sought to increase awareness of low-income energy assistance programs available in New York; increase participation in low-income energy assistance programs; and increase knowledge of eligibility guidelines used by agencies that offer assistance.

The program included television and other advertising methods to promote the use of a toll-free phone number, 1-866-HELP-4-NY. Advertising addressed some of the more typical barriers to using available services. These include pride, the assumption of ineligibility, and the feeling that others have greater need. When consumers called, they were asked a series of questions used to identify programs for which they might be eligible. Callers to the hotline were provided with referral information directing them to potential programs or sources of assistance, and some received a follow-up mailing of that information. To be eligible for services, the caller had to be a New York resident and have a household income that fell below 80% of SMI. This program ended in April 2002.

A total of 16,585 referrals were made through the 1-866-HELP-4-NY hotline with an average rate of over 1,300 referrals per month. Approximately 72% of callers were referred to over 115 separate services. These 115 services represented utility programs, public benefits programs, community action efforts, and federal assistance programs, among others. The majority of referrals were made to HEAP and the Weatherization Referral and Packaging Program (WRAP). In a survey conducted to determine the impact of the program, it was found that about 56% of survey respondents were either “very satisfied” or “satisfied” with the hotline and services and 79% of survey respondents said they would recommend the 1-866-HELP-4-NY hotline number. Advertising for the Low-Income Awareness Program resulted in over 300 million impressions, with 76% of impressions located in the New York City area.

Low-Income Forum on Energy

The LIFE Steering Committee was formed in 1998 and was charged with designing and implementing a public forum for the discussion of issues facing New York’s low-income customers as the State prepared to move to full retail electricity competition.

Since the first conference in 1999, the LIFE Steering Committee planned and implemented a second statewide conference in 2000 and two sets of Regional meetings (2000 and 2001). The LIFE Steering Committee is now poised to move beyond conference planning and take full advantage of the wealth of information and policy discussions that are occurring due to this one-of-a-kind process. NYSERDA has made a commitment to underwriting the LIFE process for the next five years. Through a competitive solicitation process, Community Power Network of New York State, Inc. was selected to provide administrative support and conference management services to the LIFE Steering Committee. The LIFE Steering Committee consists of representatives from State government agencies, community-based

organizations, and investor-owned electric and gas utilities. Organizations or individuals interested in helping low-income households obtain safe, affordable, and reliable sources of energy are also invited to participate. Representatives on the Steering Committee are presented in Figure 3-4.

The LIFE process in New York has been one of the largest and most comprehensive public forums dedicated to discussing the issues facing the low-income population in the changing energy environment. The forum includes nearly 300 organizations that are actively engaged in addressing

low-income energy issues and can function as resources for each other and for the State as it addresses the energy needs of low-income consumers. The process encourages multi-party involvement through open dialogue thereby presenting the opportunity for identifying collaborative approaches for increasing the energy affordability of the State's low-income customers. The LIFE database includes over 3,900 names of organizations and individuals interested in low-income energy issues. The database enables these stakeholders to be tracked and invited to LIFE conferences, thereby creating opportunities for them to meet and share ideas and approaches with individuals throughout the State who are dealing with similar issues. Input provided through the LIFE dialogue is captured in conference reports and available to the public. Conference reports are also shared with policy makers and program implementors.

In total, the Statewide 11 regional LIFE conferences in 1999 and 2000 attracted 600 participants representing over 250 organizations. Between 2001 and 2002 six subsequent regional meetings discussing region-specific low-income energy issues were held across the State. Over 300 attendees, representing 191 organizations, participated in these six regional meetings. Participation in these meetings included community-based organizations (23.7%); community action groups/weatherization groups (18.6%), utilities (17.4%); local government (16.8%); State government (13.8%); legislature (1.5%); ESCOs (1.2%); and other groups (6.9%).

Publicly Assisted Housing Program

PAHP was designed to lower energy costs for publicly-assisted housing residents by improving energy efficiency and energy management. On May 24, 2002, NYSERDA's contract with Hamilton, Rabinovitz & Alschuler, Inc. (HR&A), which was competitively selected to implement PAHP, expired. In

Figure 3-4. LIFE Steering Committee Participants

- Con Edison
- National Fuel Gas (NFG)
- New York State Consumer Protection Board (CPB)
- Association for Energy Affordability, Inc. (AEA)
- New York State Electric and Gas (NYSEG)
- New York State Energy Research and Development Authority (NYSERDA)
- New York State Office of the Aging (OFA)
- NYS Office of Temporary and Disability Assistance (OTDA)
- Niagara Mohawk Power Corp. (NIMO)
- Public Service Commission (PSC)
- Public Utility Law Project (PULP)
- Rochester Gas and Electric (RG&E)
- KeySpan Energy
- Weatherization Assistance Program (WAP)

accordance with NYSERDA's policies and procedures, NYSERDA issued a competitive solicitation to procure a new implementation contractor to continue PAHP through June 2006. HR&A was again selected to continue the Publicly Assisted Housing Program. Several improvements and changes were made to the program and PAHP was renamed the Assisted Multifamily Program (AMP).

PAHP projects incorporate design, selection, and installation of energy-efficient equipment into the State's portfolio of publicly-assisted housing. The purpose of PAHP/AMP is to improve energy and resource efficiency in eligible multifamily buildings, reduce energy bills for tenants and building owners, and provide increased safety benefits to building occupants. The program supports and promotes:

- Complete energy assessments that establish a scope of recommended energy improvements with associated life cycle costs and savings;
- The process by which the necessary financing is assembled to complete the energy efficiency work, utilizing loan programs, capital improvement programs, utility incentives and NYSERDA grant monies – includes capital planning and coordination with housing regulatory authorities;
- Bulk purchase of energy-efficient appliances;
- Training and certification of boiler mechanics responsible for large heating plants;
- Use of new replacement technologies for electric resistance heat; and,
- Providing construction oversight to assure energy efficiency and three years of energy monitoring following construction.

PAHP/AMP provides a unique combination of technical assistance and financial packaging to improve the fiscal health of a project. A comprehensive building audit identifies and recommends energy and resource measures for implementation and financial specialists consolidate available loans, incentives, and grants with owner equity to fund the improvements. Typical recommendations include envelope improvements, such as added insulation and weatherstripping, replacement of older appliances, lighting, heating equipment, and domestic hot water systems, and the introduction of building-wide energy management systems. In some instances, recommendations also include advanced technology options such as heat recovery ventilation systems, combined heat and power, and electric-to-gas conversions. The PAHP/AMP audit also recommends measures such as smoke/carbon monoxide detectors and emergency lighting as required to promote the health and safety of building occupants. PAHP/AMP eligible buildings include residential buildings larger than four units that satisfy one or more of the following criteria:

- Be financed by Low-Income Housing Tax Credits;

- Be guaranteed by State of New York Mortgage Agency mortgage insurance;
- Be subject to regulatory oversight by New York State Division of Housing & Community Renewal (DHCR) or the U.S. Department of Housing and Urban Development (HUD) in a low-income housing management portfolio;
- At least 25% of tenants receive Section 8, Senior Citizens Rent Increase Exemption or other portable subsidies;
- Be subject to support/regulation by the New York City Department of Housing Preservation and Development or local housing agency;
- Receive financing from the New York State Housing Finance Agency or the New York City Housing Development Corporation (or equivalent public financing, *e.g.*, the Mitchell-Lamas); and
- Received tax Abatement/Rent Stabilization if the building is located in a low-income census tract.

PAHP/AMP has approved over 1,123 multifamily buildings for assistance representing over 71,540 low-income households. Through June 30, 2002, over \$13.3 million in public benefits funding have been committed toward 10,220 of these households. NYSERDA expects that these initial projects will yield a payback of 3.8 years for the energy-efficiency investments of \$1,307 per unit. NYSERDA expects to leverage over \$28.5 million through the PAHP program for a total-to-NYSERDA investment ratio of 3 to 1. Approximately 75% of the projects are funded and supervised through federal, State, or local housing management agencies, with the remaining 25% privately owned and financed. While the program serves all of New York, about 54% of the buildings identified for program participation are located in New York City.

Low-Income Aggregation Pilot Program

The Low-Income Aggregation Pilot program is designed to improve the energy affordability of low-income customers by aggregating⁹ these customers to secure lower prices through the bulk purchase of electricity, natural gas, fuel oil, and propane. The program supplies referrals and provided education on energy efficiency services to low-income customers in an effort to reduce electric demand. A key component of the program is to identify and develop approaches to overcome the regulatory and market barriers that may be preventing low-income consumers from accessing the deregulated energy market (*e.g.*, barriers that are preventing ESCOs from entering the residential market and willingness to serve the low-income population). The process of aggregating residential customers is not a simple endeavor. A great deal of expertise is required to understand the markets, the target population, and aggregation

⁹ Through the process of aggregation, low-income energy customers are able to pool their purchasing power, thereby exerting the same market influence as larger energy customers.

protocol. Additional expertise needed includes: (1) the ability to determine load characteristics for the customer base, (2) ability to negotiate contracts and review technical proposals, and (3) the ability to develop and review contracts. There are market barriers that affect customers that would comprise an aggregated group and the aggregator.¹⁰ Across the State there has been limited interest in, or attempts made toward, the aggregation of low-income energy customers. NYSERDA’s Aggregation Program consists of a series of pilot projects, each of which attempts to understand how aggregation can work in the State. The three pilot projects resulting from the original solicitation are described in Table 3-3 and the progress of each is discussed in Section 4 of this report.

Table 3-3. The Low-Income Aggregation Pilot Program, Description and Costs	
Pilot Project	Description
<p>Navigant Consulting Inc. (NCI) and Community Power Network Hudson Valley Energy Savers (HVES) Project</p> <p><i>Total Budget: \$593,050</i></p> <p><i>(Includes \$262,500 to establish Revolving Fund and Customer Incentives)</i></p>	<p>NCI proposed to create a locally owned and operated not-for-profit “BuyCo” to provide safe, affordable, and reliable energy to low-income customers and other small and under-served customers. The “BuyCo”, named Hudson Valley Energy Savers, would seek to provide oil and propane initially, followed by electricity and natural gas pending changes in retail market conditions, to customers in the Hudson Valley region. The project design is unique in that the HVES would use a community-based organization for its outreach mechanism and would be locally owned and operated. The pilot aggregation project sought to demonstrate an approach that would:</p> <ul style="list-style-type: none"> • Provide services to 250 households; • Meet the diverse needs of low-income customers; • Utilize a wide range of solutions; • Partner with local oil vendors to develop a sustainable tool; • Develop a market-based approach to secure heating fuel on behalf of low-income customers; and • Provide a sustainable basis for meeting low-income oil heat and related energy needs over a longer term, and determine viability of expanding approach on a regional or Statewide basis.

¹⁰ Colton, Roger. March/April 2000. “Aggregation and the Low-Income Consumer”. www.leapnext.com

Table 3-3. The Low-Income Aggregation Pilot Program, Description and Costs

Pilot Project	Description
<p>EME Group and Citizens Conservation Services</p> <p><i>Total Budget: \$424,374</i></p>	<p>The EME Group and Citizens Conservation Services pilot aggregation project was designed to link public housing authorities and their residents (including those identified as Section 8), publicly assisted properties and their residents, and suppliers of energy and efficiency services together. The objectives of the pilot were to:</p> <ul style="list-style-type: none"> • Aggregate approximately 2,250 households and procure competitive prices for electricity and natural gas; • Develop and maintain a website to facilitate commodity supply; • Allow residents to maintain their savings through accurate adjustments to utility allowances in U.S. Housing and Urban Development properties; • Inform and offer access to residents and property managers on the variety of energy efficiency incentives offered by NYSERDA; • Promote energy performance contracting where appropriate; and • Incorporate data collection, analysis and monitoring, and evaluation resources to meet the needs of low-income residents, property managers, energy and efficiency services providers, and NYSERDA program managers.
<p>Association for Energy Affordability, Inc. (AEA)</p> <p><i>Total Budget: \$499,805</i></p>	<p>The purpose of the AEA pilot was to design, implement, and monitor a residential low-income aggregation pilot project to help improve the energy affordability of individual low-income households, low-income buildings and communities, and increase the affordability of safe, healthy, and comfortable low-income housing and communities in the context of retail competition in the gas and electric industry. The project sought to design and test a customer aggregation strategy that would include partnerships with nonprofit organizations, local departments of social services, multi-family building owners, and small-business customers located in or serving low-income communities, in order to:</p> <ul style="list-style-type: none"> • Aggregate 1,000 households • Arrange for the bulk purchase of natural gas and electricity at competitive or discounted prices while ensuring consumer protections; • Inform low-income residential and small use customers to make informed energy supply and usage decisions in the competitive and deregulated energy marketplace; • Coordinate energy efficiency and conservation services with weatherization programs, NYSERDA programs, and other public and privately funded energy efficiency initiatives, including the installation of advanced metering equipment and other technologically advancements, where appropriate, in participating buildings; and • Manage and leverage services with public benefits funded projects and utility low-income programs.

The Low-Income Aggregation program is designed to:

- Overcome barriers that prevent low-income customers from participating in the retail electric and gas markets.
- Overcome barriers preventing ESCO willingness and ability to serve the low-income residential market.
- Develop infrastructures to be utilized when retail market conditions allow.
- Aggregate customers into a buying pool to procure the most attractive commodity pricing offers. (At least 51% of participants must be under 80% of State Median Income).
- Provide energy efficiency education and referrals to available programs to assist in reducing their energy use overall.
- Provide education to participants on the concept and availability of retail choice.

The rationale for these projects is rooted in the difficulties that low-income customers face in effectively participating in the changing energy markets and accessing efficiency services including lack of market power; insufficient credit and poor access to credit markets; the absence of aggregators or other mediating institutions in the marketplace serving the State's 2.7 million low-income households; generally energy-inefficient housing; and inadequate knowledge of available opportunities.

These initial aggregation pilot projects are being conducted in the Con Edison, Orange & Rockland, and Central Hudson service territories.

The Low-Income Oil Buying Strategies Pilot Program

The goal of the Low-Income Oil Buying Strategies Pilot program is to determine an effective approach to the procurement of home heating fuel on behalf of low-income customers.¹¹ Projects will take into consideration the timing of purchase, financing mechanisms, and combine with offering energy efficiency incentives, such as cleaning and tuning services for home heating systems. Individual projects will attempt to lower fuel oil costs and inform participants on energy efficiency practices and measures. The Pilot Program is designed to: move traditionally 'cash on delivery' households to automatic delivery customers; enable Program participants to purchase oil at reduced prices; enable Program participants to receive free cleaning and tuning of heating systems; enable Program participants to receive services to increase financial stability (*e.g.*, budget payments, family development, Energy Savings Individual

¹¹ Consistent with the principles articulated in the Public Service Commission's January 30, 1998 Opinion and Order Concerning System Benefits Charge Issues (Order No. 98-3), the goal of the low-income programs is to address and minimize the energy affordability problems of low-income households. According to NYSERDA's *Proposed Plan for Public Benefit Programs Funded by System Benefits Charge* (May 8, 1998), energy affordability relates to more than just electricity use. Therefore, SBC strategies include efforts to reduce the usage and cost of all forms of energy in low-income households.

Development Accounts, etc.); engage oil industry in program design and delivery resulting in sustainable models; and work with local Department of Social Services in testing methods for more efficient use of HEAP payments.

NYSERDA is conducting a number of pilot projects aimed at developing and implementing innovative approaches to securing low-cost home heating fuel on behalf of low-income residents. These projects will incorporate the cleaning and tuning of participants’ heating systems, with referrals to additional sources of energy efficiency services (*i.e.*, WAP and Assisted Home Performance with ENERGY STAR® Program). These projects work closely with the local Department of Social Services to allow participation of residents receiving assistance payments from HEAP. These projects also consider local oil dealers as integral partners in developing an approach that not only provides benefits to program participants, but makes good business sense and will ultimately result in a sustainable model. Projects also address improving the financial stability of participant households through family development, budget counseling, and financial literacy education. Households must be geographically located in an area of the pilot project and the household’s income must be below 80% of SMI.

The Low-Income Oil Buying Strategies initiative has funded three pilot projects. These projects are identified in Table 3-4, and the progress of each is discussed in Section 4 of this report.

Table 3-4. Oil Buying Strategies Pilot Projects

Project Sponsor/Location	Funding	Description
Dutchess County Community Action Agency, Inc. (DCCAA)	<p><u>Total Budget:</u> \$350,000</p> <p><i>(Includes \$177,300 to establish oil revolving fund and \$22,300 for clean and tune services and other incentives.)</i></p>	<p>DCCAA proposed to design, implement, and monitor a comprehensive approach to permanently reduce the energy burden faced by low-income households that heat with oil. The goals of the project are to: maximize the market potential of targeted low-income customers; arrange for the immediate bulk purchase of fuel oil (a pre-payment program that includes automatic delivery and a budget plan); educate the targeted customers to make informed energy supply and usage decisions in the new market; coordinate with existing programs; and provide access to household budget management and counseling. This project will expand upon DCCAA’s existing oil buying program “the Fuel Survivors Club”. Through NYSERDA funding, a minimum of 250 additional low-income households will be enrolled in the Program.</p>

Table 3-4. Oil Buying Strategies Pilot Projects

Project Sponsor/Location	Funding	Description
Tompkins Community Action, Inc. (TCA)	<p><u>Total Budget:</u> \$482,082</p> <p><i>(\$350,000 NYSEERDA)</i></p> <p><i>(\$132,082 TCA and other sources leveraged funding)</i></p> <p><i>(Includes \$50,885 for oil revolving fund and \$75,385 for clean and tune services and other incentives).</i></p>	<p>TCA proposed a project to reduce low-income consumers energy burdens with a three-pronged strategy. 1.) TCA will work with oil vendors to provide safe, affordable, and reliable energy to low-income customers at a discounted price. TCA will negotiate a discounted price (wholesale plus a mark-up that is below retail) that includes automatic delivery and a budget plan. 2.) The project will also employ a financial development plan system, an individual development account that will be used to provide incentives for each participating household to purchase ENERGY STAR® products and services. 3.) Program participants will be enrolled in financial literacy courses which will include an energy efficiency education component. This project aims to significantly increase the financial stability of program participants resulting in lasting effects beyond the current heating season. A minimum of 100 customers will be enrolled in the program..</p>
Regional Economic Community Action, Inc. (RECAP)	<p><u>Total Budget:</u> \$349,847</p> <p><i>(Includes \$140,214 for oil revolving fund and \$13,750 for clean and tune services.)</i></p>	<p>RECAP proposed to design, implement, and monitor a comprehensive approach to permanently reduce the energy burden faced by low-income households that heat with oil. The goals of the project are to:</p> <ul style="list-style-type: none"> • Maximize the market potential of these low-income customers; • Arrange for the bulk purchase of fuel oil to support a pre-payment program that includes automatic delivery and a budget plan; • Provide clean and tunes of participants' heating systems. • Educate the targeted population to make informed energy supply and usage decisions in the new market; • Coordinate with existing programs, and provide access to household budget management and counseling • Enroll a minimum of 200 low-income households.

COORDINATION OF THE LOW-INCOME PROGRAM PORTFOLIO

Coordination of the **New York Energy SmartSM** Low-Income Energy Affordability initiatives with other entities has been ongoing. The following more fully describes these coordination activities.

- NYSERDA coordinates the design and delivery of its **New York Energy SmartSM** Low-Income Energy Affordability initiatives with utilities, not-for-profit organizations, and CBOs, which results in greater synergistic benefits than the programs would have achieved by operating alone. These include HEAP, WAP, and public benefits funded utility-run programs.¹²
- By bringing together utility, ESCO, CBO, government, and community action representatives into one common dialogue, the LIFE process is providing the commonality by which each of these stakeholders can begin working together, collaborating and coordinating their efforts to achieve their individual goals for low-income customers.
- Through the Low-Income Awareness Program, over 16,500 referrals were made to low-income energy assistance programs. Over 25% of the referrals were made to electric and gas utility-run programs across the State. In addition, referrals were also made to community-based organizations and other statewide entities that sponsor energy assistance programs.
- NYSERDA is working closely with DHCR to ensure coordination between the various public-benefits-funded low-income programs and DHCR-administered programs, including WAP. Coordination efforts to date have resulted in a better understanding of the programs and target audience of each respective organization, thereby reducing duplicity, leveraging limited resources and maximizing the benefits to the State's low-income households. Specific items resulting from NYSERDA/DHCR's working relationship include:
 - Home Performance with ENERGY STAR[®] Training and Building Performance Institute Certification offered to WAP subgrantees at reduced up-front costs.
 - Development of administrative processes to aid in the referrals between WAP and NYSERDA's Assisted Multifamily Buildings Program and to streamline income verification, auditing, and financial packaging services.
 - Development of a "Jointly-Funded" Participation Agreement for building owners receiving assistance through both NYSERDA and WAP.
 - Development of auditing protocols for jointly-funded projects to streamline process and reduce duplication, *i.e.*, NYSERDA will ensure that all WAP-eligible buildings participating in AMP will receive an EA-QUIP audit.
 - DHCR staff have been and continue to be involved in the development of the Assisted Home Performance with ENERGY STAR[®] Program and the Weatherization Network Initiative.
 - DHCR, based on input received from NYSERDA and the WAP network, has revised the WAP Policy and Procedures Manual to incorporate changes that will aid subgrantees in participating in SBC-funded programs.

¹² For a summary of the HEAP, WAP, and public benefits funded utility-run low-income programs, refer to Appendix D.

- NYSERDA has engaged DHCR staff and WAP subgrantees in the training and use of the first release of the Targeted Residential Energy Assessment Tools (TREAT) software.
- NYSERDA provided technical and financial assistance for building operators in DHCR’s Energy Management Practices (EMP) training sessions in 2001 and 2002.
- NYSERDA is supporting DHCR in verifying the 1999 Housing and Vacancy Survey data for direct meter conversions.
- NYSERDA and DHCR have established appropriate links between each website(s), and will coordinate future relevant web site content.
- NYSERDA serves on the WAP’s Policy Advisory Council.
- NYSERDA has established a relationship with the NYS Office for Temporary and Disability Assistance (OTDA) and local Department(s) of Social Services (DSS) to ensure coordination between SBC-funded low-income projects and HEAP. In addition, NYSERDA serves on the HEAP Block Grant Advisory Council/Interagency Task Force. Specifically, these discussions /will lead to the following:
 - Assuring that low-income households receiving HEAP assistance will be able to participate in SBC-funded aggregation or oil-buying programs.
 - Enlist local DSS offices to provide outreach on SBC-funded low-income programs, where applicable.
 - Information exchange and the piloting of models and approaches to be used in the development of future endeavors which may more actively involve HEAP funding.
 - NYSERDA support of a research effort, in close coordination with OTDA, to determine the current cost per unit of energy relating to HEAP payments made to non-regulated vendors on behalf of low-income customers.
 - Determine the potential collaboration opportunities with OTDA’s Emergency Furnace Replacement Program which may increase the number of households which receive assistance, as well as stretch limited program dollars to ensure a year-round program.
- NYSERDA is working with Rochester Gas and Electric’s (RG&E) to develop a coordinated low-income program that complies with the PSC Order in Case 98-G-1589.
- NYSERDA is on Con Edison’s Aggregation Program Team and the OTDA/HEAP Interagency Working Group.
- From a comprehensive, whole building, fuel neutral approach, by carrying out public benefits funded electric load reduction measures in conjunction with shell and heating system measures co-funded by the WAP and the building owner, the reduction in the total energy cost for these buildings has been much greater than would have occurred if either WAP or the Direct Installation Programs had completed their work separately in different buildings. A key lesson from the Direct Installation

Program is that there are great advantages in developing methods to insure low-income program coordination at the level of the building or home.

- NYSERDA will work with other State administrative agencies to implement the policy recommendations of the 2002 State Energy Plan¹³ relating to coordination of low-income programmatic efforts, including:
 - A recommendation that the State encourage all agencies to consider the effectiveness, efficiency, and coordination of their low-income energy assistance programs, including the **New York Energy SmartSM** Program, WAP, HEAP, and other State programs that offer incentives, assistance, and information services to improve the efficiency of energy use and reduce the energy burden of low-income households.
 - A recommendation that the State consider consolidating low-income energy assistance programs where opportunities exist to improve administrative efficiencies and customer service.

NEW PROGRAM INITIATIVES

Approximately \$103.5 million has been allocated for the **New York Energy SmartSM** Low-Income Program between 2002 to 2006, and across three major program areas including energy efficiency, community-based, and energy awareness initiatives, as shown in Table 3-5.

Table 3-5. Low-Income Energy Affordability Funding, 2002-2006	
Program Funding Allocation	Total (net of evaluation and administration costs)
Energy Efficiency Initiatives	\$89,897,461
Community-Based Initiatives	\$11,560,000
Energy Awareness Initiatives	\$2,000,000
Total	\$103,457,461

Source: NYSERDA

Over the next four years the Low-Income Program, through the implementation of its Energy Efficiency, Community-Based, and Energy Awareness initiatives, will:

- Assist low-income clients with lowering their energy costs as energy markets are restructured in New York;
- Assist low-income customers in securing competitive prices for natural gas, fuel oil, propane, and electricity while supplying energy efficiency services that reduce demand;
- Identify and address administrative, regulatory and statutory barriers to residential aggregation and will champion the creation of community-based, permanent mechanisms to facilitate low-income customer awareness and access to competitive energy prices;

¹³ New York State Energy Plan and Final Impact Statement. June 2002.

- Support activities that encourage the selection and installation of energy-efficient equipment in the State's portfolio of public and publicly-assisted housing. The program will facilitate the replacement of electric-resistance heating within these buildings;
- Reduce the energy burden on New York's residents by providing a more comprehensive approach for the delivery of energy efficiency services to homeowners and renters of small homes;
- Target 1-4 family residences of lower income households between 60% and 80% of state median income that are not eligible for assistance through the WAP;
- Provide energy efficiency services including energy audits, financing and installing energy efficiency measures;
- Implement cost-effective electric reduction measures in previously weatherized small homes (as defined by the Division of Housing and Community Renewal as weatherized after September 30, 1993) whose owners have an income of less than 60% state median income and are currently ineligible for WAP;
- Ensure WAP auditors receive specific training on electric measures included in the program. Installation protocols and guidelines have been developed for the WAP agencies, and technical assistance is available to them on an ongoing basis;
- Coordinate all ongoing and future program efforts with the existing group of low-income service providers including: State agencies, Statewide advocates, the State legislature, community based organizations, utilities, and energy service companies;
- Continue sponsorship of LIFE, and participation in the three working groups addressing the numerous public policy issues that impact the economic self-sufficiency of low-income consumers;
- Conduct training programs for low-income service providers to enable them to continue to offer their constituencies the information and services necessary to ensure their health, comfort and safety;
- Continue to develop materials on energy efficiency and education targeted at low-income customers;
- Provide training and certification to boiler mechanics responsible for large heating plants;
- Promote the bulk purchase of energy-efficient appliances; and
- Establish innovative financing mechanisms to fund energy efficiency in the State's public housing stock.

These efforts are discussed in greater detail in Section 5 of this report.