

Early Results of New York's Public Benefits Program New York Energy SmartSM

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ABSTRACT

This paper summarizes early results¹ of New York's public benefits program. The program is administered by the New York State Energy Research and Development Authority (NYSERDA) as the **New York Energy SmartSM** program, under agreement with the New York State Public Service Commission. Results are presented on: (1) program implementation, including budget status, and implementation process; (2) progress indicators, including customers served, program allies participating, measures installed; and (3) outcomes to date toward the program's public policy goals, including electricity energy and demand savings, air emission reductions, and jobs created. In addition, program modifications that resulted from evaluation findings are highlighted, along with lessons learned to provide helpful insights to other states and jurisdictions offering similar programs.

Background

The **New York Energy SmartSM** program, funded by a Statewide System Benefits Charge (SBC) was initiated in 1998. The public benefits program was initially funded at approximately \$234 million for three years, with NYSERDA administrating approximately \$175 million (representing about 74% of the total), and the remaining \$59 million (26%) being used to fund ongoing obligations of New York's six investor-owned electric utilities.²

On January 26, 2001 the New York State Public Service Commission (PSC) extended the public benefits program³ for five additional years and increased funding to \$150 million per year. The PSC expanded the scope of the original program by adding several new strategic objectives, including (1) peak load reduction initiatives, and (2) non-electric energy efficiency measures in certain instances, as part of a comprehensive service offering. The PSC continues to support market development programs and has significantly increased funding of such initiatives. The **New York Energy SmartSM** program offers a balanced portfolio of energy service programs, including (1) demand management and efficiency initiatives; (2) low-income energy affordability programs designed to ease the burden of energy payment by improving energy efficiency; (3) providing information to customers to support smart energy use and aggregated

¹ Results are cumulative through December 31, 2000, unless otherwise noted.

² Utility-managed programs are not evaluated as part of the **New York Energy SmartSM** program evaluation.

³ State of New York Public Service Commission. January 26, 2001. *Order Continuing and Expanding the System Benefits Charge for Public Benefit Programs*. CASE 94-E-0952 - In the Matter of Competitive Opportunities Regarding Electric Service.

buying; and (4) research and development programs targeting new product and technology innovations and demonstration and development of renewable energy resources.

Evaluation Framework and Methodology

Program Portfolio and Goals

The **New York Energy SmartSM** program is comprised of over 35 individual program initiatives designed to serve markets and customers in a manner consistent with what is known about markets and their operation. Program logic reflects existing market barriers, market infrastructure needs, and the existing influence of market actors and information networks on energy decision-making. Programs work individually within designated niche markets, as well as together as part of the larger portfolio of programs serving complementary functions. Five broad program areas comprise the portfolio of **New York Energy SmartSM** programs. These include, Energy Services Industry programs; Market Transformation programs (consisting of commercial, industrial, and residential market interventions); Technical Assistance programs; Low-Income programs; and Research and Development programs (consisting of renewable, strategic, energy efficiency, and environmental program interventions).

While each individual program intervention has its own specific objectives, the overall **New York Energy SmartSM** program portfolio is designed to meet two broad public policy goals established by the PSC: (1) to promote competitive markets for energy efficiency services in New York, and (2) to provide direct benefits to electricity ratepayers, or be of clear environmental or economic benefit to the people of New York State. Progress toward these goals is being monitored by the evaluation efforts of NYSERDA and its evaluation assistance contractors, GDS Associates, Inc., and Oak Ridge National Laboratory.

Program Design and Delivery Model

NYSERDA is using an innovative program design and delivery approach that maximizes its ability to achieve the State's key goals while keeping implementation costs and administrative expenses to a minimum. Many of NYSERDA's energy efficiency and R&D programs are designed in-house, through consultation with its SBC Advisory Group, and local/national energy efficiency industry experts. Additionally, NYSERDA's program delivery and implementation is carried-out by third party contractors or directly by end-use customers, competitively procured through Requests for Proposals (RFPs) and Program Opportunity Notices (PONs) solicitations. In cases where additional information about a market is required before a program can be properly designed (*i.e.*, information needed on key market actors, potential market barriers, existing baseline penetration of targeted product/service), third party contractors, and in many cases the program implementor(s), often perform the needed market research. NYSERDA staff has responsibility for program design, administration of all third party implementation contractors, and provides program evaluation support to the SBC Advisory Group.

Evaluation Model

New York's evaluation of the **New York Energy SmartSM** program, involves the use of internal evaluation staff; evaluation assistance contractors, and an eighteen-member SBC Advisory Group. The SBC Advisory Group, comprised of numerous energy and environmental stakeholders from academia, industry, non-profit organizations, and consumer advocate groups, serves as the independent program evaluator,

guiding the evaluation effort.

New York's evaluation model has involved the use of evaluation techniques that contribute to specific intervention, program area, portfolio and market effects, and causality assessments and results. Due to limited evaluation resources, all of NYSERDA's third party contractors implementing programs are required to collect and report data on their activities to NYSERDA. In some instances, implementation contractors are conducting baseline and market assessment work to inform program development and design. The teaming arrangement between NYSERDA, its evaluation assistance contractors, the SBC Advisory Group, and implementation contractors has enabled a dynamic and flexible approach to evaluation. Moreover, due to the expertise and interests of the parties involved, evaluation results are reported regularly⁴ and easily understood for what they represent.

Process Summary

Program Implementation Status

Solicitations Released. NYSERDA has issued a total of 64 solicitations for **New York Energy SmartSM** program implementation and incentive awards. Of these, a total of 36 solicitations, 18 RFP's (Request for Proposals) and 18 PON's (Program Opportunity Notices) have been issued to competitively select and hire contractors for program design or implementation. Overall, 390 proposals were received and 123 (about 32%) have been (or are soon expected to be) awarded contracts. In addition, a total of 28 solicitations have been issued offering financial incentives. To date, 22 have closed and six remain open.⁵ The solicitations that have closed have yielded more than 629 applications for projects or funding, 87% of which have been approved for funding.

Solicitation Cycle-Time. As part of its process evaluation, NYSERDA tracks the cycle time of solicitations from the initial program approval to the signing of contracts. NYSERDA has established a task force to examine aspects of the solicitation process and to identify opportunities that will streamline the process in order to provide more efficient service to implementation contractors, and better service to energy customers. Several recommendations have already been instituted, and are beginning to show progress toward improved efficiency.

Progress Summary

Funds Awarded

Awarded funds represent funds that have been contracted or will soon be contracted as a result of pending applications or management approval of projects. It is a more immediate measure than committed funds which include open solicitations for which incentive applications have not yet been received.⁶ Table

⁴ Evaluation results are reported quarterly and available on NYSERDA's website at www.nyserda.org, and summer peak demand reductions and expenditures are tracked monthly.

⁵ Incentive offerings open at the time of this analysis are for Standard Performance Contracting, New Construction, the Loan Fund, Technical Services, Peak Load Reduction, and Emergency Generation.

⁶ For these reasons awarded funding has been used to calculate electric and energy savings as well as to estimate the non-energy benefits associated with these savings.

1 shows funds awarded by major program area. As of December 31, 2000 over 76% of the first (initial) three-year program budget has been awarded. Table 2 summarizes the anticipated aggregated outcomes for the three-year **New York Energy SmartSM** program for funds awarded to date, and for the full subscription of available program funds. The anticipated outcomes from funds awarded to date include electricity savings of over 722 million kWh annually and reduction in peak demand by over 140 MW. The anticipated electricity savings from full subscription of the first three years of program funds is estimated (based on current program experience) to be over 881 million kWh annually and 200 MW of reduced peak demand. This is equivalent to serving the average annual electricity needs of approximately 146,000 residential households.⁷ Anticipated air pollutant emissions reductions and consumer savings are shown in Table 2.

Table 1. Funds Awarded for Programs Reporting Energy Savings

New York Energy Smart SM Program Area	1 st Three-Year Budget (\$ Millions)	Funds Awarded (\$ Millions)	% of Budget Awarded
Energy Services Programs	\$43.55	\$41.65	95.6%
Market Transformation Programs	\$58.5	\$38.28	65.4%
Technical Assistance Programs	\$16.1	\$12.9	80.1%
Low-Income Programs	\$13.7	\$5.2	38%
Research & Development Programs	\$10.9	\$10.9	100%
TOTAL For Programs Listed	\$142.8	\$108.9	76.3%

Table 2. Summary of Anticipated Outcomes

Outcomes		Anticipated from Funds Awarded	Anticipated from Full Subscription of Budget
Annual Electricity Savings*		722.7 million kWh	881.6 million kWh
Demand Reduction (MW)		140.2 MW	200.5 MW
tBtu Savings - all fuels, including electricity**, oil, and natural gas		10.1 tBtu	12.5 tBtu
Annual Energy Bill Reduction - all fuels		\$88.2 million	\$108.5 million
Environmental Benefits (emission reductions)	NO _x (tons per year)	708	866
	SO ₂ (tons per year)	1,178	1,456
	CO ₂ (tons per year)	520,483	640,239
Economic Benefits Jobs Created (jobs created or sustained per year)		1,700	2,100

* including clean generation from wind and PV

** tBtu savings at the generation source

The economic benefits from improving the efficiency of energy use and reducing the amount of money leaving the State to pay for imported energy, is estimated to create over 2,100 jobs in New York annually.⁸ Table 3 shows demand savings attributable to **New York Energy SmartSM** programs for which

⁷ This was calculated using an average annual residential household electricity consumption of 6,000 kWh.

⁸ These jobs are expected to be in New York's service and retail trade sectors and will be supported annually, for as long as implemented energy efficiency measures remain in effect.

energy savings data is available for funds awarded.

Table 3. Annual Demand Savings From Programs Reporting Energy Savings

Program Area	3-Year Budget (\$ Millions) of Programs Reporting Energy Savings	From Funds Awarded		From Full Subscription of 1 st 3 Year Funds	
		kWh (in millions)	Demand Savings (MW)	kWh (in millions)	Demand Savings (MW)
Energy Services Industry	\$43.55	307	64.5	324.9	67.9
Market Transformation	\$58.5	62.15	16.65	169	61.1
Technical Assistance	\$16.1	281.2	58	306.1	66.8
Low-Income Programs	\$13.7	4.7	0.5	13.8	4.8
Research and Development	\$10.9	67.7	0.4	67.7	0.4
Portfolio Total	\$142.8	722.75	140.05	881.5	201

Other Fuel Savings. Some of the **New York Energy SmartSM** programs provide energy audits and design assistance that identify energy savings for fuels other than electricity. More than 2.4 Tbtu of natural gas savings and 751,000 mmBtu of oil savings are expected to be realized, based on the savings potential identified.

Environmental and Economic Benefits. Air emission reductions are expected to result from the electric savings, natural gas and oil savings, and clean electricity generation taking place under the **New York Energy SmartSM** program. Reductions in nitrogen oxide (NOx), sulfur dioxide (SO₂), and carbon dioxide (CO₂) emissions are presented in Table 4 for programs that are currently operational and report energy savings. These reductions are based on annual electricity savings of 655 million kWh, natural gas and oil savings of approximately 3.2 tbtu's, and clean generation (from wind and PV) of 68 million kWh. Collectively, the annual CO₂ reduction is equivalent to removing about 100,000 automobiles from New York's roadways for one year.⁹

Table 4. Emission Reductions: Projected for Funds Awarded and Full Subscription (in tons)

Primary Pollutant	Projected From Electricity Savings		Projected From Oil and Natural Gas Savings		Projected From Clean Generation: Wind & PV		Projected All Sources	
	Funds Awarded	Full Sub- scription	Funds Awarded	Full Sub- scription	Funds Awarded	Full Sub- scription	Funds Awarded	Full Sub- scription
NOx	491	610	165	205	51	51	708	866
SO ₂	989	1,229	86	125	102	102	1,178	1,456
CO ₂	288,896	358,930	202,730	251,452	29,856	29,856	520,483	640,239

⁹ Statewide tonnage caps on sulfur dioxide and nitrogen dioxide emissions from electricity generation sources limit the impacts of reduced electricity use on actual emission of these pollutants. However, reduced electricity use does result in lower environmental compliance costs for generation sources.

The emission reductions expected once budgets are fully expended, are also shown in Table 4, labeled as projected from full subscription. These emission reductions are based on projected annual electric savings of 814 million kWh, 3.5 tBtu of oil and natural gas savings, and 68 million kWh of clean generation. The combined annual CO₂ emission reductions are equivalent to removing about 128,000 automobiles from the road annually for as long as savings accrue.

Customers Served

Table 5 reports the estimated number of customers served by the **New York Energy SmartSM** program with a description of either the contributing individual programs and or service or benefit provided. For purposes of this discussion, customers are defined as those individuals who are directly receiving funding support for energy efficiency measures or services; and or any individual whose purchasing practices are believed to have been impacted by the programs offered. Over the three month period between September 30, 2000 and December 31, 2000, the number of customers served by the **New York Energy SmartSM** portfolio increased 21.3% (49,690 customers) from 232,784 to 282,474 customers.

Table 5. Customers Served or Impacted by New York Energy SmartSM

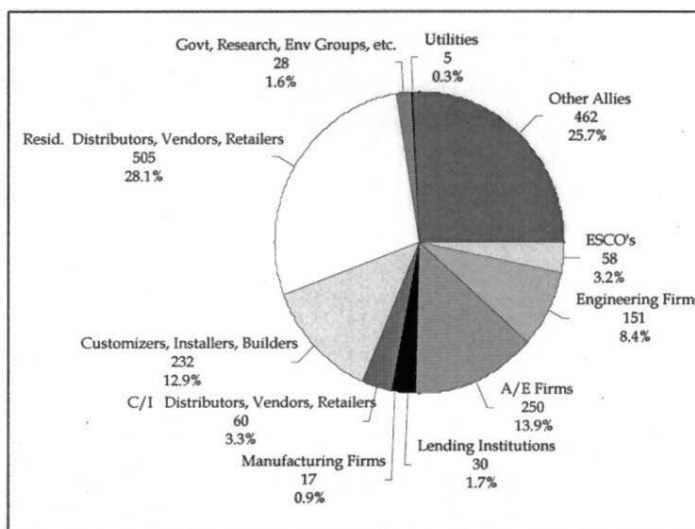
Program	No. of Customers	Description of Contributing Programs or Customer Count
Energy Services Industry Programs	403	Number of participating facilities that will receive incentives for implementing efficiency measures in customer facilities or that will receive co-funding for Comprehensive Energy Audits.
Market Transformation Programs	274,017	C/I New Construction; Loan Fund; Premium Efficiency Motors; Innovative Opportunities: Geothermal Heat Pump; Innovative Opportunities: Residential; Residential Appliance & Lighting; Energy Star [®] Marketing Campaign; Keep Cool.
Technical Assistance	693	Number of participating facilities receiving 50% co-funding for energy audits, and the number receiving cofunding to identify peak reduction measures and costs.
Low-Income Programs	7,350	A total of 3,460 units (within 75 multifamily buildings and 271 small homes) have been considered for electric measures. More than 3,400 low-income residents have received information on improving energy efficiency in the home. Applications for an additional 3,890 units have been approved, bringing the total number of participating units to 7,350.
Research & Development Programs	11	Customers in the PV on Buildings program. The participants receive about \$5000 per kW. The size of the projects range from 40 to 260 kW.
Portfolio Total	282,474	

Program Allies

Nearly 1,800 allies are currently participating in the **New York Energy SmartSM** program. Program allies are organizations or individuals that have a material interest in the **New York Energy SmartSM** program, including implementation contractors (assisting in the development of programs, outreach, and other program activities), and contractors performing facility audits or selling and installing measures. The percentage of participating allies, by type, is presented in Figure 1. Over the time period from September 30, 2000 to December 31, 2000, the total number of allies served by the **New York Energy SmartSM**

portfolio increased by just under 80% from 1,028 to just under 1,800. This increase is attributable to increases in program activity including targeted outreach activities, as well as a large number of customizers, builders, and installers who were targeted through the activities of the New Construction program. This ally segment alone witnesses an increase of over 300% over the time frame between September 2000 to December 2000 from 60 served customers to over 230. Approximately 87% of this increase (150 allies) were from increased activity in the New Construction.

Figure 1: New York Energy SmartSM Program Allies



External Funding

The New York Energy SmartSM program has attracted significant external funding, including matching funds and new private investment, as illustrated in Table 6 for those programs that are currently operational and are known to have external contributions. The combined private sector investment, based on current program activity, is \$426 million. The ratio of external spending to New York Energy SmartSM program funding is approximately 3.5 to 1, meaning that for every \$1 of New York Energy SmartSM funds spent, \$3.5 is spent or invested by program participants.

Table 6. External Funding Contribution for Currently Operational Programs

New York Energy Smart SM Program Areas	[1] Funds Awarded (\$ million)	[2] Anticipated External Spending (\$ million)	[3] Ratio of External Spending to New York Energy Smart SM Funds [2] ÷ [1]
Energy Services Industry Programs	\$41.6	147	3.5:1
Market Transformation Programs	\$35.87	\$60.62	1.68:1
Technical Assistance Programs	\$12.3	\$135.64	11:1
Low-Income Programs	\$4.2	\$1.3	0.3:1
Research & Development Programs	\$29.1	\$81.7	2.8:1
Total	\$123.1	\$426.3	3.5:1

Progress Toward Policy Goals

Table 7 presents a cumulative summary of the progress the New York Energy SmartSM programs have made toward the two public policy goals established by the PSC. Significant progress includes increased private investment in energy efficiency, as well as increases in the number of participating allies, including energy service companies, technical assistance providers, and residential vendors, distributors, and associated retailers.

Table 7. Cumulative Summary of Progress Toward Goals

PUBLIC POLICY GOALS	
1. PROMOTE COMPETITIVE MARKETS FOR ENERGY EFFICIENCY SERVICES	
<ul style="list-style-type: none"> • The New York Energy SmartSM program is providing a strategically balanced portfolio of over 35 programs that seek to overcome market barriers to increased supply and demand for energy efficiency products and services. • NYSERDA is enhancing the growth of the energy services market. – Since program inception, NYSERDA has worked with more than 58 ESCO's. – Over 150 technical assistance providers have participated. – A network of over 1,800 market allies are participating to promote and support market adoption of energy efficiency products and services in New York. – Over 500 residential distributors, vendors and retailers of energy efficiency products are participating in NYSERDA's programs. • Programs are increasing consumer demand for energy efficiency services (survey-based results). 	<ul style="list-style-type: none"> • The number of customers that will receive reduced interest financing for the installation of energy efficiency measures through the New York Energy SmartSM Loan Fund program has increased by over 29%. – The Residential Appliances and Lighting program issued a catalog providing discounted prices on compact fluorescent bulbs and lighting fixtures. The ENERGY STAR[®] Lighting Solutions Catalog offer (December 2000) will run through April 2001. Results show that by the end of February 2001, gross sales exceeded \$460,000, for sales of over 35,000 CFL bulbs, 1,100 replacement lamps, 1,200 interior fixtures, 120 exterior fixtures, and 960 torchiere lamps. – Through the Keep Cool program, residential customers are eligible to receive a \$75 coupon toward the purchase of a new ENERGY STAR[®] model air conditioner. As of December 31, 2000, over 670 coupons have been turned in for these purchases. This effort is increasing demand for ENERGY STAR[®] air conditioners and helping reduce summer peak demand, especially in the New York City area.
2. PROVIDE DIRECT BENEFITS TO ELECTRICITY RATEPAYERS, OR BE OF CLEAR ENVIRONMENTAL OR ECONOMIC BENEFIT TO THE PEOPLE OF NEW YORK STATE.	
<ul style="list-style-type: none"> • The New York Energy SmartSM program is helping to reduce energy burden and enhance economic and environmental benefits for ratepayers in New York State. See Table S-1. • As of December 31, 2000, more than 1,600 energy-efficient refrigerators, 9,500 compact fluorescent lights (CFL's), and 5,200 hard-wired fluorescent fixtures have been installed within individual units recognized as low-income through the efforts of the Low-Income Direct Installation program. Direct installation of energy efficiency measures such as these are helping to reduce the energy burden of low-income households, as well as provide ancillary health, safety, and comfort benefits. • Through December 31, 2001, private sector investment in the State, identified through the portfolio of New York Energy SmartSM has exceeded \$420 million based on funding awarded. • The Renewable Energy Program has successfully installed renewable generation capacity in New York State, and continues to reduce barriers to renewable investments and installations. 	<ul style="list-style-type: none"> • The seven-turbine, 11.5 mW Madison Wind Project was completed on October 6, 2000. During the months of October, November, and December the plant produced a total of 5,355 MWh of electricity. • A 7.5 MW Wind Project with a NYSERDA funding contribution of \$2million in the town of Fenner, New York has recently been approved to be expanded by 22.5 MW with an additional \$3 million of NYSERDA funds for a total contribution of \$5 million to this project. When complete, total generating output for the Fenner Wind project is expected to be 30 MW. • Four projects, totaling over \$600,000 have been approved through a solicitation for the Wind Prospecting Development program. These projects will help to lay the groundwork for further wind development by collecting and analyzing site specific data on wind resources, interconnection costs, and environmental impacts for 15 to 22 sites in New York State.

Evaluation of Market Effects

In addition to the significant progress the New York Energy SmartSM programs have achieved toward policy goals, the programs are also beginning to display signals or market effects that support their role in creating more lasting changes in market behaviors. Programs have shown progress in influencing specific barriers as well as market behaviors. While some programs focus more on immediate impacts, their influence extends itself to longer-term strategies. While no single program may be entirely changing market behaviors, the culminating effects of numerous interventions with varying degrees of influence do impact market behaviors, as evidenced by some of the programmatic and portfolio examples provided below.

Low-Income Programs. The portfolio of low-income programs offered by NYSERDA are providing services to low-income consumers, building owners, and State operated buildings including education and awareness of energy consumption behaviors, and energy products and services; direct installation of energy-efficient products; coordination with the federally funded and State administered Weatherization Assistance Program (WAP); and energy management related services. As described in Sidebar 1, several **New York Energy SmartSM** programs are working in parallel and together to provide these services while changing market behaviors.

Energy Efficiency Services Programs. In the past few years, electricity demand in New York State has been increasing at a much faster rate than increases in supply. This demand, encouraged by increased economic activity as well as increased electric consumption from end-uses including computers and information technologies, could potentially outstrip supply if not countered.

Peak Reduction Interventions. As of late, energy efficiency services programs have focused on reducing peak electric loads for a variety of electric consumers. NYSERDA is funding emergency, short-term, as well as permanent load reduction strategies in an effort to reduce electricity demand, especially in the summer months 2001, as evidenced in Sidebar 2.

Market Interventions. The portfolio of market-based programs, including commercial and industrial (C/I) and residential interventions, have been showing signs of market development through observed market effects. For example, implementation of the **New York Energy SmartSM** Residential

Sidebar 1: Low-Income Coordination

Direct Installation. Work under the Low-Income Direct Installation program is progressing. As of December 31, 2000, total number of individual low-income units that have been considered for electric reduction measures, is up to 3,460. As of December 31, 2000, more than 1,600 refrigerators, 9,500 CFLs, and 5,200 hard-wired fluorescent fixtures have been installed within individual units. An additional 2,500 common area and outdoor lighting fixtures have been installed in low-income buildings.

Public Awareness. In a targeted effort to inform low-income persons and State and community-based organizations of the services and options available to them under the low-income programs offered by NYSERDA, a competitive solicitation was designed under the title Low-Income Public Awareness Campaign. The solicitation was completed for the Low-Income Public Awareness program in December 2000. Contract negotiations are underway and the program will soon commence.

Publicly Assisted Housing. In October 2000, NYSERDA signed a contract for implementation of the Technical Assistance for Low-Income Publicly Assisted Housing program. This program will increase affordability of housing for low-income residents by improving energy efficiency and energy management in the State's portfolio of publicly-assisted housing. By March 2001, more than 60 buildings (representing over 31,000 units) had been entered into the program. Three audits were recently completed and financing packages are being developed. The **New York Energy SmartSM** contribution to the planned work is expected to range from 5-50% of the total costs.

Sidebar 2: Peak Load Reduction Strategies

The Program Opportunity Notice (PON) for the Peak-load Reduction program was released in January, 2001. This \$12.4 million program will co-fund short-duration load-curtailement measures, permanent demand reduction efforts, and equipment and software necessary for critical dispatch of emergency generation. The emergency generation component of the program will facilitate customer participation in the New York Independent System Operator's (NY ISO) Emergency Demand Response Program (EDRP).

Proposals for the Enabling Technology for Price Sensitive Load Management program were reviewed in February 2001. The projects selected will fund communications technologies that will enable end-use customers to participate in the NY ISO's emergency curtailment and price-responsive load programs that are expected to be in place by June 1, 2001.

The Cooling Recommissioning program, a peak reduction program initiated in the summer of year 2000 has 180 projects, 73 completed engineering studies, and 55 projects in the measures installation stage.

Appliances and Lighting program, ENERGY STAR® Public Awareness Campaign, and Residential Keep Cool program have, through a coordinated effort, helped to inform consumers about the benefits of energy-efficient products and services, increase consumer demand for such products, foster the infrastructure for delivering these products, and shown progress in reducing peak electricity demand. Sidebar 3 provides a discussion of how these programs have interacted to begin to change market behaviors, and advance the overall residential market for energy efficiency products and services.

Sidebar 3: New York's Portfolio of Integrated Residential Interventions

The residential sector of New York State is becoming more aware of energy efficiency products and services, as well as demanding more of these services, as a result of the portfolio of integrated interventions that have been designed to target upstream, midstream and downstream market actors within this sector. For example, the New York Energy SmartSM Residential Keep Cool program encourages customers to turn in their old room air conditioners by offering them a \$75 coupon toward the purchase of a new ENERGY STAR® unit. NYSERDA will build on experience gained last summer through this program and also work with the Long Island Power Authority (LIPA) to expand delivery of the bounty program. LIPA has committed up to \$2 million for NYSERDA's Keep Cool contractors to implement the program on Long Island. A coordinated effort is seen as mutually beneficial since LIPA will leverage the existing infrastructure and program design established by NYSERDA, and NYSERDA will be able to offer a statewide program.

Through the Residential Appliances & Lighting program, customers were provided discounted prices on compact fluorescent bulbs and lighting fixtures through the ENERGY STAR® Lighting Solutions Catalog. The catalog was developed in conjunction with the Wisconsin Energy Conservation Corporation (WECC), Good Earth, Phillips, Harmony, and General Electric Lighting. By leveraging existing efforts, NYSERDA was able to develop and mail the catalog to customers for less than the cost of a 33-cent stamp. The offer began in December 2000 and will run through April 2001. By the end of February 2001, gross sales reached \$460,862, consisting of approximately 35,000 compact fluorescent bulbs, 1,100 replacement lamps, 1,200 interior fixtures, 120 exterior fixtures, and 960 torchiere lamps. The cost of these lighting products was discounted between 30%-70%. To date, \$229,549 of SBC funding has been used to buy down the prices and lower the costs to end-use consumers. Demand for lighting products promoted through the Lighting Catalog have far exceeded expectations.

In addition to these two examples of downstream targeted interventions, the Residential Appliances & Lighting program is continuing to expand through the use of circuit riders and marketing materials, its number of retail ENERGY STAR® partners. This midstream intervention has been successful in training retailers on how to more effectively promote ENERGY STAR® products, as well as educate consumers about their benefits. To date, over 500 individual retail stores, 40 contractors/remodelers, and 10 manufacturers have partnered with the program. Each of these partners are developing and using their expertise to inform consumers by promoting the benefits of ENERGY STAR® products.

Lessons Learned in Evaluation Activities To Date

As a result of NYSERDA's evaluation and administrative experiences to date, several modifications and enhancements have been made to the **New York Energy SmartSM program**. A brief summary of these modifications is described in the following text.

- The existing **New York Energy SmartSM** targeted outreach effort has been expanded to market and promote all programs with a single and consistent Statewide message about program opportunities for all customers. For example, several of the **New York Energy SmartSM** Technical Assistance programs are bundled into a single program opportunity notice (PON) or request for proposal (RFP) to better tailor programs to customers and provide a single point of entry for program services.
- Several of the programs are being expanded to provide greater depth in services, meaning that customers are eligible to receive more comprehensive services and more money is being provided

for certain programs to reach more customers.¹⁰

- NYSERDA's program application and contracting processes have been streamlined to provide faster service to customers without compromising the integrity and rigor of the competitive solicitation and contracting process. NYSERDA is committed to shorten the total elapsed time for proposal solicitation review and contracting to no more than six months.¹¹
- New programs have been added to the **New York Energy SmartSM** portfolio, to address peak reduction and enable price sensitive loads to participate in New York's electricity market. In addition, non-electric measures have been added to the programs to provide more comprehensive and attractive financing packages to customers to promote fuel-switching, and other combined heat and power measures.
- NYSERDA is establishing a more systematic program orientation for market allies, so that allies are introduced to all the programs and are encouraged to introduce their customers to the programs as a value-added service.
- Programs will continue until specified criteria for well-functioning markets for efficiency services are established, based on evaluations of need, conducted every two years. NYSERDA has created a program evaluation plan that addresses the need to link SBC expenditures to long-term market changes, in addition to tracking of electricity use, demand reductions, and customer energy savings.

In addition to these program modifications, identified through the evaluation effort in New York, the following lessons learned are presented to show some of the broader issues that have arisen in New York's evaluation effort, and that are transferrable to other evaluation activities, planned or underway, in other States. Additionally, Sidebar 4 discusses the success NYSERDA has had in integrating its evaluation activities with program design, solicitation, and implementation phases of administering public benefits programs in New York, based on these lessons learned.

- Listen to your stakeholders and manage their participation. Listening to stakeholders helps program managers and evaluators to better understand customers needs in order to meet them in the best manner possible. Managing participation encourages program managers to treat customers in a more comprehensive manner, making referrals to other programs, and maintaining a longer-lasting relationship that might otherwise be the case.
- Foster your evaluation strengths and eliminate weaknesses by establishing responsibility early, and seeking clarification often. This requires knowing what policy makers and users of evaluation information require and value most from you. Know what you do well and play to your strengths.
- Know your budgetary limitations. As is often the case, evaluation resources are limited. Only plan for what you expect to realistically deliver. Also, be consistently clear about what can and cannot be accomplished so as to keep expectations in line with what can be delivered.

¹⁰ While the **New York Energy SmartSM** program has been credited with good breadth of market coverage across market actors and sectors, it has been recognized that funding was insufficient to provide the depth necessary to transform markets effectively over a relatively short period of time.

¹¹ NYSERDA has programs with open enrollment that allow projects to be approved on a continuous basis. Individual projects are completed quickly but the date of the solicitation may extend beyond six months.

Conclusions

The information and lessons learned that are reported in this paper are intended to help guide and inform similar efforts in other states and jurisdictions. New York's experience to date has been very positive. Reporting evaluation results and information about programs on a regular and consistent basis, and in a manner easily understood and valued by decision makers, has contributed to the extension of New York's public benefits program.