

**NEW YORK ENERGY \$MARTSM PROGRAM
EVALUATION AND STATUS REPORT**

QUARTER ENDING MARCH 31, 2009

REPORT TO THE PUBLIC SERVICE COMMISSION

**FINAL REPORT
MAY 2009**



**NEW YORK STATE
ENERGY RESEARCH AND
DEVELOPMENT AUTHORITY**

NYSERDA



Table of Contents

1 INTRODUCTION.....	1-1
1.1 Organization of the Report.....	1-2
2 PORTFOLIO-LEVEL REPORTING.....	2-1
2.1 Budget and Spending Status	2-1
2.2 Portfolio Level Findings	2-3
2.2.1 Progress Toward Goals	2-3
2.2.2 Summary of Program Benefits.....	2-5
2.2.3 Solicitations Update.....	2-7
3 COMMERCIAL/INDUSTRIAL PROGRAMS.....	3-1
3.1 Commercial/Industrial Evaluation Activities.....	3-1
3.1.1 Completed Evaluation Activities	3-1
3.1.2 Evaluation Activities in Progress and Planned	3-1
3.2 Summary of C/I Evaluation Results	3-1
3.2.1 Progress Toward Non-Energy Goals	3-1
3.2.2 Energy, Peak Demand, and Fuel Savings	3-2
3.3 Existing Facilities Program (EFP)	3-4
3.3.1 Progress Toward Goals.....	3-5
3.3.2 Energy, Peak Demand and Fuel Savings	3-5
3.3.3 Cost-Effectiveness	3-6
3.4 New York Energy \$mart SM Business Partners	3-7
3.4.1 Progress Toward Goals	3-7
3.4.2 Energy, Peak Demand and Fuel Savings	3-8
3.4.3 Cost-Effectiveness	3-9
3.5 New York Energy \$mart SM Loan Fund and Financing Program	3-10
3.5.1 Progress Toward Goals.....	3-10
3.5.2 Energy, Peak Demand and Fuel Savings	3-10
3.6 Energy Smart Focus Program	3-11
3.6.1 Progress Toward Goals.....	3-11
3.6.2 Energy, Peak Demand and Fuel Savings	3-11
3.6.3 Sector Highlights	3-11
3.7 New Construction Program.....	3-13
3.7.1 Progress Toward Goals.....	3-13
3.7.2 Energy, Peak Demand and Fuel Savings	3-14
3.7.3 Cost-Effectiveness	3-14
3.8 FlexTech Technical Assistance Program.....	3-16
3.8.1 Progress Toward Goals.....	3-16
3.8.2 Energy, Peak Demand and Fuel Savings	3-16
3.8.3 Cost-Effectiveness	3-17
4 RESIDENTIAL AND LOW-INCOME PROGRAMS	4-1
4.1 Residential and Low-Income Evaluation Activities	4-1
4.1.1 Completed Evaluation Activities	4-1
4.1.2 Evaluation Activities in Progress and Planned	4-1

4.2	Summary of Residential and Low-Income Evaluation Results	4-1
4.2.1	Progress Toward Non-Energy Goals	4-1
4.2.2	Energy, Peak Demand, and Fuel Savings	4-1
4.3	Single Family Home Performance Program	4-5
4.3.1	Progress Toward Goals	4-5
4.3.2	Energy, Peak Demand and Fuel Savings	4-5
4.3.3	Cost-Effectiveness	4-6
4.4	Multifamily Building Programs	4-8
4.4.1	Progress Toward Goals	4-8
4.4.2	Energy, Peak Demand and Fuel Savings	4-8
4.4.3	Other Evaluation Findings	4-10
4.4.4	Cost-Effectiveness	4-10
4.5	Market Support Program.....	4-11
4.5.1	Progress Toward Goals	4-11
4.5.2	Energy, Peak Demand and Fuel Savings	4-11
4.5.3	Cost-Effectiveness	4-12
4.6	Communities and Education Program	4-14
4.6.1	Progress Toward Goals	4-14
4.7	EmPower New York SM	4-14
4.7.1	Progress Toward Goals	4-14
4.7.2	Energy, Peak Demand and Fuel Savings	4-14
4.7.3	Cost-Effectiveness	4-15
4.8	Buying Strategies and Energy Awareness Program	4-16
4.8.1	Progress Toward Goals	4-16
5	RESEARCH AND DEVELOPMENT PROGRAMS	5-1
5.1	Research & Development (R&D) Program Evaluation Activities	5-1
5.1.1	Completed Evaluation Activities	5-1
5.1.2	Evaluation Activities in Progress and Planned	5-1
5.2	Summary of R&D Evaluation Results	5-2
5.2.1	Progress Toward Non-Energy Goals	5-2
5.2.2	Energy, Peak Demand, Fuel Savings, and Clean Generation	5-2
5.3	Public Benefit Power Transmission and Distribution Research	5-4
5.3.1	Progress Toward Goals	5-4
5.4	Clean Energy Infrastructure	5-5
5.4.1	Progress Toward Goals	5-5
5.4.2	Clean Energy Generation	5-5
5.5	Power Systems Product Development	5-6
5.5.1	Progress Toward Goals	5-6
5.6	DG-CHP Demonstration	5-8
5.6.1	Progress Toward Goals	5-8
5.6.2	Energy, Peak Demand and Fuel Savings	5-8
5.7	Demand Response and Innovative Rate Research	5-9
5.7.1	Progress Toward Goals	5-9
5.7.2	Energy, Peak Demand and Fuel Savings	5-10
5.8	Electric Transportation.....	5-11
5.8.1	Progress Toward Goals	5-11
5.9	Environmental Monitoring, Evaluation, and Protection (EMEP).....	5-12
5.9.1	Progress Toward Goals	5-12
5.10	Industrial Process and Product Innovation Program.....	5-14
5.10.1	Progress Toward Goals	5-14

5.11 Municipal Water and Wastewater Efficiency5-16
 5.11.1 Recent Program Accomplishments.....5-16
 5.11.2 Long-Term Program Accomplishments5-18
 5.11.3 Program Impact Evaluation5-18
 5.12 Next Generation and Emerging Technologies5-19
 5.12.1 Progress Toward Goals5-19

APPENDIX A: BENEFIT/COST DEFINITIONS AND INPUTS.....A-1

LIST OF TABLES

Table 2-1. Financial Status of New York Energy \$martSM Program through March 31, 2009
 (\$ million)2-1
 Table 2-2. Individual Programs – Financial Status through March 31, 2009 (\$ million).....2-2
 Table 2-3. Cumulative Program Benefits from Installed Measures.....2-6
 Table 2-4. Solicitations Issued in 1st Quarter 20092-7
 Table 3-1. C/I Program Cumulative Annual Electricity Savings through March 31, 2009 and Progress
 toward Five-Year Goals3-2
 Table 3-2. C/I Program Cumulative Peak Demand Savings through March 31, 2009 and Progress
 toward Five-Year Goals3-3
 Table 3-3. C/I Program Cumulative Annual Fuel Savings through March 31, 20093-4
 Table 3-4. Existing Facilities Program – Program Outputs3-5
 Table 3-5. C/I Program Cumulative Annual Fuel Savings through March 31, 20093-6
 Table 3-6. EFP Net Savings from July 1, 2006 through Year-End 2008.....3-6
 Table 3-7. EFP Participant and Program Cost from July 1, 2006 through Year-End 20083-6
 Table 3-8. EFP Present Value of Benefits from July 1, 2006 through Year-End 20083-7
 Table 3-9. EFP Benefit-Cost Ratios through Year-End 2008.....3-7
 Table 3-10. New York Energy \$martSM Business Partners Program – Goal and Achievement3-7
 Table 3-11. New York Energy \$martSM Business Partners Cumulative Annual Energy and Peak
 Demand Savings (through March 2009)3-8
 Table 3-12. Commercial Lighting Net Savings through from July 1, 2006 through Year-End 2008.....3-9
 Table 3-13. Commercial Lighting Participant and Program Costs from July 1, 2006 through Year-End
 2008.....3-9
 Table 3-14 Commercial Lighting Present Value of Benefits from July 1, 2006 through Year-End
 2008.....3-10
 Table 3-15. Commercial Lighting Benefit/Cost Ratios through Year-End 20083-10
 Table 3-16. New York Energy \$martSM Loan Fund and Financing Program – Goals and Achievements
 for Commercial/Industrial Projects3-10
 Table 3-17. Loan Fund Cumulative Annual Energy and Peak Demand Savings (through March 2009)3-11
 Table 3-18. Energy Smart Focus Program – Goal and Achievement3-11
 Table 3-19. New Construction Program – Goals and Achievements3-14
 Table 3-20. New Construction Program Cumulative Annual Energy and Peak Demand Savings
 (through March 2009)3-14
 Table 3-21. NCP Net Savings from July 1, 2006 through Year-End 2008.....3-15
 Table 3-22. NCP Participant and Program Costs from July 1, 2006 through Year-End 2008.....3-15
 Table 3-23. NCP Present Value of Benefits from July 1, 2006 through Year-End 20083-15
 Table 3-24. NCP Benefit-Cost Ratios.....3-15
 Table 3-25. NCP Benefit-Cost Ratios with Prospective Benefits.....3-15
 Table 3-26. FlexTech Technical Assistance Program – Goal and Achievement.....3-16

Table 3-27. FlexTech Technical Assistance Program Cumulative Annual Energy and Peak Demand Savings (through March 2009).....	3-16
Table 3-28. FlexTech Net Savings from July 1, 2006 through Year-End 2008	3-17
Table 3-29. FlexTech TA Participant and Program Costs from July 1, 2006 through Year-End 2008..	3-17
Table 3-30. FlexTech TA Present Value of Benefits from July 1, 2006 through Year-End 2008.....	3-17
Table 3-31. FlexTech TA Benefit-Cost Ratios from July 1, 2006 through Year-End 2008.....	3-17
Table 4-1. Residential and Low-Income Program Cumulative Annual Electricity Savings through March 31, 2009 and Progress toward Five-Year Goals.....	4-2
Table 4-2. Residential and Low-Income Program Cumulative Peak Demand Savings through March 31, 2009.....	4-3
Table 4-3. Residential and Low-Income Program Cumulative Annual Fuel Savings through March 31, 2009 and Progress toward Five-Year Goals.....	4-4
Table 4-4. Single Family Home Performance Program – Goals and Achievements.....	4-5
Table 4-5. Single Family Home Performance Program Cumulative Annual Energy and Peak Demand Savings (Through March 2009)	4-6
Table 4-6. Single Family Home Performance Net Savings from July 1, 2006 through Year-End 2008..	4-7
Table 4-7. Single Family Home Performance Program and Participant Costs from July 1, 2006 through Year-End 2008	4-7
Table 4-8. Single Family Home Performance Present Value of Benefits from July 1, 2006 through Year-End 2008	4-7
Table 4-9. Single Family Home Performance Benefit-Cost Ratios from July 1, 2006 through Year-End 2008.....	4-7
Table 4-10. Multifamily Performance Program – Goals and Achievements.....	4-8
Table 4-11. Multifamily Building Programs Cumulative Annual Energy and Peak Demand Savings (through March 2009)	4-9
Table 4-12. Number of Units Participating in MPP According to Status	4-10
Table 4-13. Assisted Multifamily Program Net Savings from July 1, 2006 through Year-End 2008....	4-10
Table 4-14. Assisted Multifamily Program Participant and Program Costs from July 1, 2006 through Year-End 2008	4-10
Table 4-15. Assisted Multifamily Program Present Value of Benefits from July 1, 2006 through Year-End 2008	4-11
Table 4-16. Assisted Multifamily Program Benefit/Cost Ratios from July 1, 2006 through Year-End 2008.....	4-11
Table 4-17. Market Support Program – Goals and Achievements	4-11
Table 4-18. Market Support Program Cumulative Annual Energy and Peak Demand Savings (through March 2009).....	4-12
Table 4-19. New York Energy \$mart SM Products and Marketing Participant Program Net Savings from July 1, 2006 through Year-End 2007 ¹	4-13
Table 4-20. New York Energy \$mart SM Products and Marketing Participant and Program Costs from July 1, 2006 through Year-End 2007.....	4-13
Table 4-21. New York Energy \$mart SM Products and Marketing Program Present Value of Benefits from July 1, 2006 through Year-End 2007	4-13
Table 4-22. New York Energy \$mart SM Products and Marketing Benefit/Cost Ratios from July 1, 2006 through Year-End 2007.....	4-13
Table 4-23. Communities and Education Program – Goals and Achievements	4-14
Table 4-24. EmPower New York SM Program – Goal and Achievement	4-14
Table 4-25. EmPower New York SM Program Cumulative Annual Energy and Peak Demand Savings (through March 2009)	4-15
Table 4-26. EmPower Net Savings from July 1, 2006 through Year-End 2008.....	4-15
Table 4-27. EmPower Participant and Program Costs from July 1, 2006 through Year-End 2008.....	4-16
Table 4-28. EmPower Present Value of Benefits from July 1, 2006 through Year-End 2008	4-16

Table 4-29. EmPower Benefit/Cost Ratios	4-16
Table 4-30. Buying Strategies and Energy Awareness Program – Goals and Achievements	4-17
Table 5-1. R&D Program Electricity Savings and Clean Generation through March 31, 2009	5-3
Table 5-2. R&D Program Cumulative Peak Demand Savings through March 31, 2009.....	5-3
Table 5-3. R&D Program Cumulative Annual Fuel Savings through March 31, 2009.....	5-4
Table 5-4. Public Benefit Power Transmission and Distribution Research Program – Goals and Achievements.....	5-4
Table 5-5. Clean Energy Infrastructure Program – Goals and Achievements	5-5
Table 5-6. Clean Energy Infrastructure Program Cumulative Annual Clean Generation (through March 2009)	5-6
Table 5-7. Power Systems Product Development Program – Goals and Achievement.....	5-6
Table 5-8. DG-CHP Demonstration Program – Goals and Achievements	5-8
Table 5-9. DG-CHP Program Cumulative Annual Energy and Peak Demand Savings (through March 2009)	5-9
Table 5-10. Demand Response and Innovative Rate Research Program – Goals and Achievements	5-9
Table 5-11. Demand Response and Innovative Rate Research Program Cumulative Annual Energy and Peak Demand Savings (through March 31, 2009)	5-11
Table 5-12. Electric Transportation Program – Achievements.....	5-11
Table 5-13. Environmental Monitoring, Evaluation, and Protection Program – Goals and Achieve- ments	5-12
Table 5-14. Industrial Process and Product Innovation Program – Goals and Achievements.....	5-14
Table 5-15. IPPI Solicitations	5-15
Table 5-16. IPPI Contracts by Project Type	5-15
Table 5-17. Municipal Water and Wastewater Efficiency Program Goals achieved from July 1, 2006 through March 31, 2009	5-16
Table 5-18. Project and Funding Status through March 31, 2009 ¹	5-18
Table 5-19. Next Generation and Emerging Technologies Program – Goals and Achievements	5-19

1

Introduction

This report provides an update on the progress of the **New York Energy \$martSM** Public Benefits Program (Program) toward meeting its stated goals. It contains evaluation results on Program activities through the quarter ending March 31, 2009. The last full annual report on progress (through December 31, 2008) was issued in March 2009.¹

The 13-year Program, funded by a System Benefits Charge (SBC) and administered by the New York State Energy Research and Development Authority (NYSERDA), was initiated in 1998 by order of the New York State Public Service Commission² (the Commission) and embodies three funding cycles.³ The Program portfolio consists of numerous initiatives promoting energy efficiency and demand management, facilitating renewable energy development, providing energy services to low-income New Yorkers, and conducting research and development. The activities pursued by the Program include disseminating information to increase consumer energy awareness, marketing, providing financial incentives, developing and testing new products, commercializing new technologies, and gathering data and information.

Over the past year, several changes arising from the Commission's Energy Efficiency Portfolio Standard (EEPS) proceeding have augmented NYSEDA's **New York Energy \$martSM** Program portfolio and evaluation efforts. The Commission's June 23rd EEPS Order called for an increase in SBC collections and a ramp up of program efforts by NYSEDA and the State's six investor-owned electricity transmission and distribution utilities to meet the State's "15-by-15" electricity reduction goal.⁴ NYSEDA complied with the Commission's Order by submitting a Supplemental Revision to the SBC Operating Plan incorporating approximately \$80 million per year in additional funds for five new or expanded programs as well as general awareness, administration, and evaluation associated with those

¹ New York State Energy Research and Development Authority, *New York Energy \$martSM Program Evaluation and Status Report, Final Report*, March 2009.

² Case 94-E-1052, *et. al.*, In the Matter of Competitive Opportunities Regarding Electric Service, Opinion 98-3, issued January 30, 1998.

³ The most recent cycle was initiated with the New York State Public Service Commission order in Case 05-M-0900, In the Matter of the System Benefits Charge III, *Order Continuing the System Benefits Charge (SBC) and the SBC-funded Public Benefits Programs*, issued and effective December 21, 2005.

⁴ The "15-by-15" goal refers to a 15% reduction in electricity use from 2015 forecast levels.

programs.⁵ The Operating Plan amendment was approved by the New York State Department of Public Service (DPS) on March 12, 2009.⁶ As these expanded and new efforts commence, NYSERDA will include their progress in monthly, quarterly and annual reports to the Commission.

The June 23rd Order further specified that evaluation funding shall be set at 5% of program budgets for the new and expanded programs, and increased from 2% to 5% for the remainder of NYSERDA's existing **New York Energy \$mart**SM SBC funded Program. DPS Staff's August 2008 evaluation plan guidelines for program administrators served as the basis for NYSERDA's development and submittal of detailed evaluation plans for the five new/expanded programs in late 2008,⁷ and for most of the existing SBC programs in early 2009. When the enhanced evaluation activities commence, NYSERDA will also begin to report on their progress in monthly, quarterly and annual reports to the Commission.

1.1 Organization of the Report

This report was prepared by NYSERDA staff with contributions from a team of independent third-party evaluation contractors. The evaluation contractors work closely with NYSERDA's program implementation staff and contractors, customers, and market and trade allies to develop an understanding of the Program offerings and to conduct independent assessments of the Program's impacts and progress toward the established public policy goals. The evaluation functions covered by the specialty contractor teams are: impact evaluation; market characterization and assessment; and process assessment and evaluation management. This report is divided into the following sections:

- Section 1 Introduction
- Section 2 Portfolio-Level Reporting
- Section 3 Commercial/Industrial Programs
- Section 4 Residential and Low-Income Programs
- Section 5 Research and Development Programs

⁵ Expanded programs are New Construction, FlexTech and EmPower New York. New programs are Industry and Process Efficiency and CFL Expansion. The total EEPS funding included in the Operating Plan was approximately \$260 million over three and one quarter years.

⁶ NYSERDA, System Benefits Charge Supplemental Revision for **New York Energy \$mart**SM Programs (2008-2011), As Amended August 22, 2008 and Revised March 12, 2009.

⁷ Expanded programs are New Construction, FlexTech and EmPower New York. New programs are Industry and Process Efficiency and CFL Expansion.

2

Portfolio-Level Reporting

2.1 Budget and Spending Status

This section presents financial data for the **New York Energy \$martSM** Program from 1998 through March 31, 2009.¹ Of the \$1.87 billion, 13-year budget, \$1.68 billion is allocated to four major program areas: Commercial/Industrial (C/I), Residential, Low-Income, and Research and Development (R&D), and a general awareness campaign. The percentage of each program area budget spent to date is: 57.7% for C/I, 78.5% for Residential, 59.8% for Low-Income, and 44.7% for R&D. Budgets and spending are presented in Table 2-1 along with costs for program administration, evaluation, Environmental Disclosure², and the New York State Cost Recovery Fee³. Table 2-2 shows the budget and spending for individual **New York Energy \$martSM** programs.

Table 2-1. Financial Status of New York Energy \$martSM Program through March 31, 2009 (\$ million)

	Total 13-Year Budget ¹	Funds Spent			
		SBC I & SBC II ²	SBC III ³	Total Spent	% of Budget Spent
Commercial/Industrial	634.0	247.1	118.8	366.0	57.7%
Residential	312.8	165.4	80.0	245.4	78.5%
Low-Income	318.6	86.6	104.0	190.6	59.8%
Research and Development	388.3	105.9	67.6	173.5	44.7%
General Awareness ⁴ (Marketing)	31.0	15.9	6.2	22.0	71.0%

¹ New and expanded programs approved on March 12, 2009 and the associated administration and evaluation budgets are not included here, but will be reflected in the 2nd Quarter 2009 report.

² This program provides electricity commodity suppliers with data for informing customers about the fuel mix and associated environmental impacts of their electricity sources.

³ The New York State Cost Recovery Fee is assessed for services to public authorities. The fee is determined by the New York State Division of Budget and imposed and collected by the Department of Taxation and Finance.

	Total 13-Year Budget ¹	Funds Spent			
		SBC I & SBC II ²	SBC III ³	Total Spent	% of Budget Spent
Program Areas Total	\$1,684.6	\$620.9	\$376.6	\$997.5	59.2%
Program Administration	128.4	59.8	39.9	99.8	77.7%
Metrics and Evaluation	34.4	14.5	7.9	22.4	65.1%
Environmental Disclosure	1.9	0.8	-0.8	<0.1	2.5%
NYS Cost Recovery Fee	25.4	9.2	7.4	16.5	65.0%
Other Costs Total	\$190.1	\$84.3	\$54.4	\$138.7	73.0%
Total New York Energy SmartSM	\$1,874.7	\$705.2	\$431.0	\$1,136.2	60.6%

¹ Reflects reallocation of funding among programs as approved by the Public Service Commission.

² SBC I: July 1, 1998 through June 30, 2001; SBC II: July 1, 2001 through June 30, 2006.

³ SBC III: July 1, 2006 through June 30, 2011.

⁴ General Awareness previously included in Residential Program Area.

Totals may not sum exactly due to rounding. Source: NYSERDA.

Table 2-2. Individual Programs – Financial Status through March 31, 2009 (\$ million)

Program	Budget	Funds Spent			
	Total Budget ¹	SBC I & SBC II ²	SBC III ³	Total Funds Spent	% of Budget Spent
Commercial/Industrial					
Existing Facilities ^{4,5}	308.0	135.4	43.9	179.3	58.2%
New York Energy SmartSM Business Partners	43.9	21.1	6.8	27.9	63.7%
Loan Fund and Financing ⁵	43.7	12.3	19.6	31.9	73.0%
Energy Smart Focus	18.9	4.8	6.2	11.1	58.5%
New Construction Program	164.4	53.1	35.2	88.3	53.7%
FlexTech Technical Assistance	55.2	20.4	7.2	27.6	50.0%
Total Commercial & Industrial	\$634.0	\$247.1	\$118.8	\$366.0	57.7%
Residential & Low-income					
Single Family Home Performance	107.5	47.4	34.2	81.6	75.9%
Multifamily Building Performance	44.5	18.3	15.4	33.7	75.9%
Market Support Residential	148.9	96.5	25.6	122.1	82.0%
Communities and Education	11.9	3.2	4.8	8.0	66.5%
Subtotal Residential	\$312.8	\$165.4	\$80.0	\$245.4	78.5%
Single Family Home Performance	78.3	22.3	19.5	41.7	53.3%
Multifamily Building Performance	160.0	45.4	45.6	91.0	56.9%
EmPower New York	63.7	14.3	35.5	49.8	78.1%
Buying Strategies & Energy Awareness	16.6	4.7	3.4	8.1	48.6%
Subtotal Low-Income	\$318.6	\$86.6	\$104.0	\$190.6	59.8%
Total Residential and Low-Income	\$631.3	\$252.0	\$184.0	\$436.0	69.1%

Program	Budget	Funds Spent			
	Total Budget ¹	SBC I & SBC II ²	SBC III ³	Total Funds Spent	% of Budget Spent
Research and Development					
Public Benefit Power Transmission and Distribution	10.0	0.0	0.4	0.4	4.2%
Clean Energy Infrastructure (includes closed program: End Use Renewables)	91.1	19.0	26.0	45.0	49.4%
Distributed Energy Resources: Power Systems Product Development & DG-CHP Demonstrations	149.2	34.0	21.0	55.0	36.8%
Demand Response and Innovative Research	10.0	0.0	<0.1	<0.1	0.1%
Electric Transportation	5.0	0.0	0.7	0.7	13.2%
Environmental, Monitoring, Evaluation, & Protection	39.1	17.7	6.0	23.8	60.8%
Industrial and Municipal Process Efficiency	15.0	0.0	2.3	2.3	15.2%
Next Generation and Emerging Technologies	42.7	18.3	7.3	25.5	59.7%
Wholesale Renewable Energy Market	22.7	16.5	2.6	19.1	83.9%
Other	0.4	0.4	0.0	0.4	100.0%
Regional Greenhouse Gas Initiative	3.0	0.0	1.4	1.4	47.5%
Total Research and Development	\$388.3	\$105.9	\$67.6	\$173.5	44.7%
General Awareness (Marketing)	31.0	15.9	6.2	22.0	71.0%
Total New York Energy \$martSM Programs	\$1,684.6	\$620.9	\$376.6	\$997.5	59.2%

¹ Reflects reallocation of funding among programs as approved by the Public Service Commission.

² SBC I: July 1, 1998 through June 30, 2001; SBC II: July 1, 2001 through June 30, 2006.

³ SBC III: July 1, 2006 through June 30, 2011.

⁴ The Peak Load Management and Enhanced Commercial / Industrial Performance programs have been combined into the Existing Facilities Program.

⁵ Transfer of \$18.3 million from Existing Facilities to Loan Fund and Financing per approval by the Public Service Commission as of January 27, 2009.

Totals may not sum exactly due to rounding. Source: NYSERDA.

2.2 Portfolio Level Findings

2.2.1 Progress Toward Goals

Overall, the New York Energy \$martSM programs are performing well toward their five-year goals⁴ in the areas of energy savings, demand reduction, and other key metrics. This section discusses general progress toward these goals. Sections 3, 4, and 5 contain more detailed information. In summary:

⁴ Five-year goals were specified in the *System Benefits Charge Proposed Plan for New York Energy \$martSM Programs (2006-2011)*, March 2, 2006. These goals were set at the program level, and included energy savings, demand reductions and other important metrics. The five-year goals cover the time period from July 1, 2006 through June 30, 2011.

- The C/I programs are showing good progress toward their individual electricity and demand savings goals. Progress on the majority of programs has met or exceeded expected levels at this point in the five-year measurement period.
- Within the C/I program area, twelve different five-year goals have been set for metrics other than energy and peak demand savings. These metrics capture progress in key areas such as the number of customers served, allies participating, and dollars leveraged. The programs are making good progress toward these non-energy goals.
- The Residential and Low-Income programs are making good progress toward their individual electricity and fuel savings goals. The Multifamily Building Performance Program has been significantly revised, and is therefore experiencing a lag in achieving, but most of the other programs are performing at expected levels.
- Twenty-six long-term goals have been set for important non-energy metrics in the Residential and Low-Income areas, including the number of customers participating, outreach efforts and people affected, and dollars leveraged. Overall, the programs are making progress toward these goals.
- Almost 40 long-term non-energy goals have been set for the R&D portfolio. These goals address metrics such as solicitations released, projects funded, information dissemination, co-funding, and technology transfer. In general, the programs are tracking well toward these long-term non-energy goals.

Beyond the above stated goals, programs are also making excellent progress toward the following overarching public policy goals.

- Goal 1: Improve New York's energy system reliability and security by reducing energy demand and increasing energy efficiency, supporting innovative transmission and distribution technologies that have broad application, and enabling fuel diversity, including renewable resources.
 - Together, the **New York Energy \$martSM** programs are saving approximately 3,320 GWh of electricity annually.
 - 1,305 MW of peak demand reduction has been installed, including 715 MW from permanent measures and 585 MW from curtailable measures.
 - More than 100 GWh of clean, renewable energy is being generated annually, enough to power more than 17,000 homes per year.
- Goal 2: Reduce the energy cost burden of New Yorkers by offering energy users, particularly the State's lowest income households, services that moderate the effects of energy price increases and volatility and provide access to cost-effective energy efficiency options.
 - The **New York Energy \$martSM** programs are saving customers more than \$600 million annually on their energy bills.

- In total, 80,500 low-income households have been served. On average, each household's energy bill has been reduced by \$325 per year.
- The **New York Energy \$martSM** Program has achieved a benefit/cost ratio of 1.8 under the most conservative Total Resource Cost Test scenario.⁵
- Goal 3: Mitigate the environmental and health impacts of energy use by increasing energy efficiency, encouraging the development of support services for renewable energy resources, and optimizing the energy performance of buildings and products.
 - The emission reductions from the **New York Energy \$martSM** Program energy savings are more than 2,800 tons of nitrogen oxide, 5,100 tons of sulfur dioxide, and almost 2.2 million tons of carbon dioxide annually, the equivalent of removing almost 440,000 cars from the road.
- Goal 4: Create economic opportunity and promote economic well-being by supporting emerging energy technologies, fostering competition, improving productivity, stimulating the growth of New York energy businesses, and helping to meet future energy needs through efficiency and innovation.
 - The **New York Energy \$martSM** programs have led to the creation or retention of approximately 4,700 jobs.
 - Over the past 33 months, NYSERDA has worked with 23 companies to expand their renewable energy businesses (20) and renewable energy product manufacturing (3) in New York.

2.2.2 Summary of Program Benefits

Table 2-3 shows the cumulative **New York Energy \$martSM** Program benefits through March 31, 2009, and through the last four calendar years. Cumulative annual electric savings have reached nearly 3,320 GWh. Peak demand reduction efforts have led to a total reduction of 1,305 MW that consists of permanent and curtailable demand reductions. Renewable energy generation now amounts to 106 GWh.

⁵ NYSERDA, *New York Energy \$martSM Program Evaluation and Status Report, Final Report*, March 2009.

Table 2-3. Cumulative Program Benefits from Installed Measures

Benefits	Through Year-End 2005	Through Year-End 2006	Through Year-End 2007a	Through Year End 2008	Through March 31, 2009
Electricity Savings from Energy Efficiency and On-Site Generation (Annual GWh)	1,950	2,350	3,060	3,180	3,320
Renewable Energy Generation (Annual GWh)	103	105	106	106	106
Peak Demand Reduction (MW)	1,040	1,113	1,200a	1,240	1,305b
Permanent Measures (MW)	445	495	650	670	715
Curtable ¹	595	618	550b	570	585
Net Fuel Savings (Annual MMBtu)	4,000,000	4,049,000	4,660,000	5,220,000	5,540,000
Annual Energy Bill Savings to Participating Customers (\$ Million)	\$275	\$330	\$570	\$620	\$605
Jobs Created and Retained per Year ²	3,100	3,700	4,700	4,700	4,700
NO _x Emissions Reductions (Annual Tons)	1,750	2,060	2,570	2,690	2,800
SO ₂ Emissions Reductions (Annual Tons)	3,170	3,800	4,720	4,930	5,100
CO ₂ Emissions Reductions ³ (Annual Tons)	1,400,000	1,600,000	2,000,000	2,100,000	2,200,000
Equivalent number of cars removed from NY roadways	275,000	320,000	400,000	420,000	440,000
<p>a Savings for the New York Energy SmartSM Products Program are estimated based on market data, survey research, and deemed savings values. Savings for this program were last fully captured in 2006. An update, completed and applied in Quarter 1 2009, added electricity, demand, and fuel savings for 2007 appliances only. Once necessary market-level data are available, appliance savings for 2008, as well as lighting savings for 2007 and 2008 will be analyzed and applied.</p> <p>b Does not include 9.8 MW of renewable energy generation capacity.</p> <p>¹ Curtable MW have decreased due to a reassessment of the impact of the Enabling Technologies Program. MW enabled under the SBC2 program Enabling Technologies for Price Responsive Load were not required to persist beyond the period of the contract. As such, the MWs available have steadily declined since the program's close.</p> <p>² Figures in this row represent the net additional jobs created through year-end. Results from 2004 through 2007 have been restated based on new analysis conducted in 2009.</p> <p>³ These emission reductions are associated with both electric and fossil fuel saving measures. Under a cap-and-trade system, the total number of emission allowances is determined by regulation. Regulated entities can purchase allowances and collectively emit up to the cap that is currently in place. Therefore, in the near term, electric efficiency projects may not decrease the overall amount of emissions going into the atmosphere. However, electric efficiency projects will reduce end-users' responsibility or footprint associated with emissions from electricity production.</p>					

2.2.3 Solicitations Update

Table 2-4 shows Requests for Proposals (RFPs) and Program Opportunity Notices (PONs) released during the first quarter of 2009. Only new solicitations released during the first three months of 2009 are included here. Additional solicitations released prior to the first quarter of 2009 could still be open.

Table 2-4. Solicitations Issued in 1st Quarter 2009

Solicitation Number	Solicitation Name	Solicitation Release Date	Solicitation Closing Date
R&D Program Area			
PON 1257	Heating and Cooling	1/12/09	3/5/09
PON 1260	Clean Energy Business Growth & Development	1/16/09	Round 1: 3/4/09 Round 2: 8/5/09 Round 3: 6/2/10 Round 4: 11/3/10
PON 1276	Industrial Process & Product Innovation	2/2/09	4/22/09
PON 1276A	Industrial Process & Product Innovation	2/2/09	9/22/09

3

Commercial/Industrial Programs

3.1 Commercial/Industrial Evaluation Activities

3.1.1 Completed Evaluation Activities

Cost-effectiveness analysis was completed in the first quarter for the Existing Facilities, Small Commercial Lighting, New Construction and FlexTech programs.

3.1.2 Evaluation Activities in Progress and Planned

In the coming quarters, NYSERDA expects to complete the following evaluation projects:

- Impact evaluation of the largest energy-saving projects across the portfolio of programs, including projects in Peak Load Management, Enhanced Commercial/Industrial (C/I) performance, New Construction, and FlexTech Technical Assistance programs
- Year-end impact evaluation database review for the New Construction program

3.2 Summary of C/I Evaluation Results

3.2.1 Progress Toward Non-Energy Goals

Across the C/I programs, nine logic-model driven goals were set for other key metrics besides energy savings, such as the number of customers receiving assistance, funds leveraged, and allies participating. The programs are performing well with respect to these non-energy goals. Specifically, 33 months into the five-year measurement period:

- Two of the nine goals have been exceeded
- Another four of the nine goals have reached or exceeded 50% progress
- Progress on the remaining three goals is at 50% or less

3.2.2 Energy, Peak Demand, and Fuel Savings

Table 3-1 shows the electricity savings achieved by the C/I programs as well as progress toward the five-year goals that have been established for selected programs. Table 3-2 shows peak demand savings and progress toward several program-specific goals in that area. Table 3-3 shows other fuel savings.

Table 3-1. C/I Program Cumulative Annual Electricity Savings through March 31, 2009 and Progress toward Five-Year Goals

Program	Energy Savings (GWh)				
	Savings achieved through		July 1, 2006 through March 31, 2009	Five-Year Goal through June 30, 2011	Progress Toward Five-Year Goal (% achieved)
	June 30, 2006 (Cumulative)	March 31, 2009 (Cumulative)			
Existing Facilities Program	837.0a	1,273.4	436.4	427	102%
Con Edison ¹	286.0a	377.0	91.0	N/A	N/A
Business Partners Program	54.1	82.7	28.6	80	36%
Con Edison	4.3	9.2	4.9	N/A	N/A
Loan Fund and Financing	49.6	121.7	72.0	N/A	N/A
Con Edison	0.5	29.6	29.1	N/A	N/A
New Construction Program	188.1b	315.3	127.2	210	61%
Con Edison	41.1b	92.4	51.3	N/A	N/A
FlexTech TA	644.1	865.2	221.1	400	55%
Con Edison	115.2	227.0	111.8	N/A	N/A
Overlap Removed²	126.7	218.0	91.2	N/A	N/A
Con Edison C/I Total	447.2	735.2	288.1	N/A	N/A
Statewide C/I Total	1,646.3	2,440.3	794.0	N/A	N/A

Note: N/A means not applicable (i.e., a goal has not been set for this program).

a Savings reported previously included projects funded through the Con Edison Power Savings Partners Program. These savings have been removed to more accurately reflect accomplishments.

b These savings were adjusted following an extensive clean-up of the program database, which resulted in a change to the program realization rate applied.

¹ The original Peak Load Management Program, now a component of the Existing Facilities Program, had a goal of 55 GWh in Con Edison and has achieved 56% of the goal as of 1st quarter 2009. ECIPP did not have a goal for permanent reduction in Con Edison territory, thus combining the two programs results in the five-year goal not being applicable.

² Overlap factors were updated in Q1 2008.

Table 3-2. C/I Program Cumulative Peak Demand Savings through March 31, 2009 and Progress toward Five-Year Goals

Program	Peak Demand Savings (MW)				
	Savings Achieved through		July 1, 2006 through March 31, 2009	Five-Year Goal through June 30, 2011	Progress Toward Five-Year Goal (% achieved)
	June 30, 2006	March 31, 2009			
Existing Facilities Program Permanent Con Edison ¹	175.0a 82.1a	251.1 105.0	76.5 22.9	110 N/A	70% N/A
Existing Facilities: Callable Con Edison	421.1a 188.3a	475.3 217.7	54.2 29.4	240 125	23% 23%
Business Partners Program Con Edison	11.8 1.0	20.1 2.2	8.3 1.2	16 N/A	52% N/A
Loan Fund and Financing Con Edison	14.3 0.5	60.2 11.5	45.8 10.9	N/A N/A	N/A N/A
New Construction Program Con Edison	41.0b 11.3b	78.3 29.3	37.3 18.0	24 N/A	155% N/A
FlexTech TA Con Edison	120.9 30.6	172.6 48.3	51.7 17.7	80 N/A	65% N/A
FlexTech TA: Callable	10.2	12.5	2.4	N/A	N/A
Overlap Removed²	24.5	47.9	23.4	N/A	N/A
Con Edison C/I Total	130.1	426.4	301.0	N/A	N/A
Statewide C/I Total	774.4	1,024.8	252.8	N/A	N/A

Note: N/A means not applicable (*i.e.*, a goal has not been set for this program).

a Savings reported previously included projects funded through the Con Edison Power Savings Partners Program. These savings have been removed to more accurately reflect accomplishments.

b These savings were adjusted following an extensive clean-up of the program database, which resulted in a change to the program realization rate applied.

¹ The original Peak Load Management Program, now a component of the Existing Facilities Program, had a goal of 45 MW of permanent reduction in Con Edison and has achieved 26% of the goal as of 1st quarter 2009. ECIPP did not have a goal for permanent reduction in Con Edison territory, thus combining the two programs results in the five-year goal not being applicable.

²Overlap factors were updated in Q1 2008.

Table 3-3. C/I Program Cumulative Annual Fuel Savings through March 31, 2009

Program	Fuel Savings (MMBtu)	
	Savings Achieved through	
	June 30, 2006	March 31, 2009
Existing Facilities Program	3,252	-61,873
Con Edison	420	1,215
Loan Fund and Financing	137,239	891,147
Con Edison	4,941	66,836
New Construction Program	0	9,567
Con Edison	0	0
FlexTech Technical Assistance ¹	3,164,000	3,306,000
Con Edison	800,846	892,620
Overlap Removed	158,200	165,000
Con Edison C/I Total	806,207	960,671
Statewide C/I Total	3,146,291	3,958,193

Note: There were no five-year goals for fuel savings.

¹The methodology to assess impacts focuses on developing samples based on electricity savings, rather than fuel, resulting in a less than optimal sample for fuel-savings projects and fluctuation over time in the calculated impacts. Also, the program recommends on-site generation, which would result in an increase in fuel use, offsetting fuel reductions achieved.

3.3 Existing Facilities Program (EFP)

The Existing Facilities Program (EFP) promotes energy efficiency and demand management. This new program is a consolidation of two precursor NYSERDA programs -- the Peak Load Management Program (PLMP) and the Enhanced Commercial and Industrial Performance Program (ECIPP)¹. Building upon the success of these two programs, the July 1, 2008 merger provides a less complicated, more accessible program presentation to potential customers in the marketplace. EFP targets sectors of customers that include commercial and industrial businesses, healthcare facilities, universities and colleges, State and local governments, and mission critical facilities such as data centers and communications facilities.

The EFP offers incentives for a variety of energy projects, which include: Pre-Qualified measures, Performance-based Energy Efficiency measures, Demand Response-Load Management, Interval Meters, and Combined Heat and Power.

¹ The Enhanced Commercial/Industrial Performance Program combined two early programs – Commercial/Industrial Performance and Smart Equipment Choices

3.3.1 Progress Toward Goals

Since EFP is the product of merging the PLMP and ECIPP programs, continued tracking of the original individual program goals is no longer possible.² NYSERDA, however, does track program outputs that approximately parallel the former goal activities: a count of EFP customer projects and the leveraged funds for the entire program are listed in Table 3-4.

Table 3-4. Existing Facilities Program – Program Outputs

Output	Value
Customer projects	6,713
Leveraged Funds (\$ million)	\$561 million

3.3.2 Energy, Peak Demand and Fuel Savings

Cumulative annual savings for EFP, as a single program, are a combination of the savings achieved under PLMP and ECIPP³. Results from projects with signed contracts prior to July 1, 2008 will be reflected under the earlier separate programs. Thus Table 3-5 lists cumulative annual peak demand and electricity savings from ECIPP plus the PLMP components: the Dispatchable and Emergency Generator Initiative (DEGI), Load Curtailment/Shifting (LC/S), Interval Meters (IM), Permanent Demand Reduction Efforts (PDRE), and the discontinued Cooling Recommissioning element. Realization rates and net-to-gross ratios are applied to adjust the program-reported savings based on the most recent Measurement and Verification (M&V) and Attribution evaluation studies. Net savings in the rightmost column are the total savings being claimed by the program after these evaluation activities.

² Although the goals for PLMP (750 customers receiving assistance) and ECIPP (3,300-3,500 customer projects) are similar, they are not the same metric; consequently the goals cannot be merged. As for the ECIPP leveraged funds goal (\$400-\$450 million), again the data merge does not permit continued tracking of this information.

³ The Enhanced Commercial/Industrial Performance Program combined two former programs – Commercial/Industrial Performance and Smart Equipment Choices.

Table 3-5. C/I Program Cumulative Annual Fuel Savings through March 31, 2009

	Program Reported Savings	Realization rate	Adjusted Gross Savings	Freerider-ship	Spillover	Net-to-Gross Ratio	Net Savings
Existing Facilities Program (EFP) - Total							
MWh/year	1,277,152	N/A	1,274,048	N/A	N/A	N/A	1,273,396
MW On-Peak	305.7	N/A	253.2	N/A	N/A	N/A	251.1
MW - curtailable	531.6	N/A	463.5	N/A	N/A	N/A	475.3
MMBtu/year	(66,983)	N/A	-102,479	N/A	N/A	N/A	-61,873

3.3.3 Cost-Effectiveness

The EFP benefit/cost analysis was updated in early 2009 using program savings and costs from July 1, 2006 through year-end 2008.

Table 3-6 shows the electricity and demand savings and average measure life used as inputs to the analysis. Table 3-7 shows program and participant costs, and Table 3-8 provides the present value of the benefits included in the analysis. Overall, as shown in a NEI impacts were valued at 11% of retail energy cost savings based on a conjoint analysis survey conducted in 2007.

Table 3-9, the Existing Facilities Program is performing well, with a Program Administrator Cost (PAC) Test ratio of 8.2 to 9.7 and a Total Resource Cost (TRC) Test ratio of 1.7 to 2.0. See Appendix A for definitions of benefit/cost terms and concepts.

Table 3-6. EFP Net Savings from July 1, 2006 through Year-End 2008

Program Component	Average Life of Electric Measures/Natural Gas Measure (Years)	Net Cumulative Annual GWh/Year	Net Cumulative MW	% Downstate (Con Edison)
Permanent Measures	15/20	375	66.1	21%
Curtailable Load Measures	3	-	41.4	60%

Table 3-7. EFP Participant and Program Cost from July 1, 2006 through Year-End 2008

Program Component	Program Administrator Cost (\$Millions)	Program and Participant Costs (\$Millions)
Permanent & Curtailable Load	\$49.4	\$240.0

Note: Customer incentives for the Existing Facilities Program represent 60% of Program Administrator Cost and 14% of measure cost.

Table 3-8. EFP Present Value of Benefits from July 1, 2006 through Year-End 2008

Program Component	Resource Benefits				NEI
	Present Value of Avoided Energy Costs (Millions \$2008)	Present Value of Avoided Capacity and Distribution Costs (Millions \$2008)	Present Value of Capacity Market Price Effect (Millions \$2008)	Present Value of Avoided Natural Gas (Millions \$2008)	Present Value of Non-Energy Impacts (NEI) (Millions \$2008)
Permanent Measures	\$279.0	\$88.6	-	\$7.2	\$73.1a
Curtaillable Measures	\$0	\$0	\$52.9	-	-

a NEI impacts were valued at 11% of retail energy cost savings based on a conjoint analysis survey conducted in 2007.

Table 3-9. EFP Benefit-Cost Ratios through Year-End 2008

Program Administrator Cost (PAC) Test	Total Resource Cost (TRC) Test
8.2 to 9.7a	1.7 to 2.0a

a The lower number incorporates resource benefits only. The higher number incorporates both resource benefits and non-energy impact.

3.4 New York Energy \$martSM Business Partners

3.4.1 Progress Toward Goals

Table 3-10 shows the Business Partners Program goal to sign up 1,500 partners over five years. Although almost 800 allies are currently participating in the commercial lighting program element, a total of 127 new partners have signed up since July 1, 2006. Program staff expects an increase in allies as the core services and program elements continue to ramp up.

NYSERDA has decided not to pursue further contract negotiations with the implementation contractor originally selected in August 2007 for the Business Partners: Building Performance and HVAC Program. NYSERDA plans to issue a new solicitation to more effectively address the changing needs of the HVAC and building performance industry in New York.

Table 3-10. New York Energy \$martSM Business Partners Program – Goal and Achievement

Activity	Program Goals (July 1, 2006 through June 30, 2011)	Achieved July 1, 2006 through March 31, 2009	% of Goal Achieved
Business Partners (signed up)	1,500	127	8%

3.4.2 Energy, Peak Demand and Fuel Savings

Table 3-11 shows the cumulative annual energy and peak demand savings from the Business Partners Program. A realization rate and net-to-gross ratio is applied to adjust the program-reported savings, based on the most recent Measurement and Verification and Attribution evaluations. Net savings in the rightmost column are the total savings being claimed by the program after these evaluation activities.

Table 3-11. New York Energy SmartSM Business Partners Cumulative Annual Energy and Peak Demand Savings (through March 2009)

	Program-Reported Savings	Realization Rate	Adjusted Gross Savings	Freeridership	Spillover	Net-to-Gross Ratio ¹	Net Savings
Small Commercial Lighting							
MWh/year	56,554	0.94	53,161	39%	80%	1.10	58,477
MW On-Peak	14.4	1.0	14.4	39%	80%	1.10	15.9
Premium-Efficiency Motors²							
MWh/year	9,885	1.0	9,885	67%	168%	0.88	8,776
MW On-Peak	1.9	1.0	1.9	67%	113%	0.70	1.3
Commercial HVAC³							
MWh/year	6,767	Not Evaluated	6,767	Not Evaluated	Not Evaluated	N/A	6,767
MW On-Peak	2.0	Not Evaluated	2.0	Not Evaluated	Not Evaluated	N/A	2.0
Hospitality Lighting							
MWh/year	8,660	Not Evaluated	8,660	Not Evaluated	Not Evaluated	Not Evaluated	8,660
MW On-Peak	0.9	Not Evaluated	0.9	Not Evaluated	Not Evaluated	Not Evaluated	0.9
Total Business Partners							
MWh/year	81,866	N/A	78,473	N/A	N/A	N/A	82,680
MW On-Peak	19.2	N/A	19.2	N/A	N/A	N/A	20.1

¹ Net-to-Gross Ratio = (1-Freeridership) * (1+Spillover).

² Savings from the prior motor incentive program have been held constant. Savings achieved in 2006 from the new motor management program and the STAC 100 Motors program, in the amount of 296,202 kWh and 48 kW, have been added in the Net Savings column.

³ Savings for the Commercial HVAC portion of the program have been reduced as of 4th Quarter 2006. This approach was taken due to the known short-term nature of savings from advanced diagnostics and commissioning, which were part of the program.

N/A – not applicable.

3.4.3 Cost-Effectiveness

The benefit/cost analysis of the Commercial Lighting element of the Business Partners Program was updated in early 2009 using program savings and costs between July 1, 2006 and through year-end 2008. Benefit/cost analysis was not conducted on the other elements because they were closed (Hospitality Lighting), suspended (Commercial HVAC), or no longer reporting savings due to changes to the program (Premium-Efficiency Motors).

Table 3-12 shows the electricity and demand savings and average measure life used as inputs to the analysis. Table 3-13 shows program and participant costs, and Table 3-14 provides the present value of the benefits included in the analysis. Overall, as shown in Table 3-15, the Small Commercial Lighting Program is performing well, with a Program Administrator Cost (PAC) Test ratio of 4.4 to 5.1 and a Total Resource Cost (TRC) Test ratio of 3.7 to 4.3.

Typically, there is more of a difference between the PAC and TRC ratios. However, in the case of Small Commercial Lighting, more funds were spent on market and infrastructure development compared to the cost of measures installed on projects directly involved in the program. Furthermore, spillover from the market and infrastructure development activities is likely to be underrepresented given the difficulty of capturing these benefits from such programs. See Appendix A for definitions of benefit/cost terms and concepts.

Table 3-12. Commercial Lighting Net Savings through from July 1, 2006 through Year-End 2008

Program Component	Average Life of Electric Measures (Years)	Net Cumulative Annual GWh/Year	Net Cumulative MW	% Downstate (Con Edison)
Commercial Lighting	15	29.5	8.7	12%

Note: Customer incentives for the Commercial Lighting Program represent 7% of Program Administrator Cost and 26% of measure cost.

Table 3-13. Commercial Lighting Participant and Program Costs from July 1, 2006 through Year-End 2008

Program Component	Program Administrator Cost (\$Millions)	Program and Participant Costs (\$Millions)
Commercial Lighting	\$7.4	\$8.8

Note: Customer incentives for the Commercial Lighting Program represent 7% of Program Administrator Cost and 26% of measure cost.

Table 3-14 Commercial Lighting Present Value of Benefits from July 1, 2006 through Year-End 2008

Program Component	Resource Benefits		NEI
	Present Value of Avoided Energy Costs (Millions \$2008)	Present Value of Avoided Capacity and Distribution Costs (Millions \$2008)	Present Value of Non-Energy Impacts (NEI) (Millions \$2008)
Commercial Lighting	\$21.6	\$10.7	\$5.5a

a NEIs are valued at 11% of retail energy cost savings based on a conjoint analysis survey conducted in 2007.

Table 3-15. Commercial Lighting Benefit/Cost Ratios through Year-End 2008

Program Administrator Cost (PAC) Test	Total Resource Cost (TRC) Test
4.4 to 5.1	3.7 to 4.3a

a The lower number incorporates resource benefits only. The higher number incorporates both resource benefits and non-energy impacts.

3.5 New York Energy \$martSM Loan Fund and Financing Program

3.5.1 Progress Toward Goals

Three longer-term non-energy goals have been set for the Loan Fund and Financing Program. These five-year goals and progress are shown in Table 3-16. The Loan Fund has already far surpassed its five-year goals for participating lenders and total loan amount. The Program is more than half way toward its goal for the number of customers receiving assistance.

Table 3-16. New York Energy \$martSM Loan Fund and Financing Program – Goals and Achievements for Commercial/Industrial Projects

Activity	Program Goals (July 1, 2006 through June 30, 2011)	Achieved July 1, 2006 through March 31, 2009	% of Goal Achieved
Customers receiving assistance (closed commercial/industrial loans)	500	324	65%
Participating lenders (signed participation agreements)	75	149	>100%
Leveraged loan amount (for closed commercial/industrial loans)	\$60 million	\$129 million	>100%

3.5.2 Energy, Peak Demand and Fuel Savings

Table 3-17 shows the cumulative annual energy and peak demand savings from the Loan Fund and Financing Program. A realization rate and net-to-gross ratio are applied to adjust the program reported savings based on the most recent Measurement and Verification and Attribution evaluation studies. Net savings in the rightmost column are the total savings being claimed by the program after these evaluation activities.

Table 3-17. Loan Fund Cumulative Annual Energy and Peak Demand Savings (through March 2009)

	Program-Reported Savings	Realization Rate	Adjusted Gross Savings	Freerider-ship	Spillover	Net-to-Gross Ratio ¹	Net Savings
MWh/year	156,576	0.81a	130,823	27%	20%	0.93	121,665
MW On-Peak	41.7	1.73a	64.7	27%	20%	0.93	60.2
MMBtu	602,656	1.59	958,223	27%	20%	0.93	891,147

¹ Net-to-Gross Ratio = 1-Freeridership+Spillover.

a The realization rates calculated only apply to the custom measure kWh and kW savings. Savings arising from pre-qualified measures have a realization rate of 1.0.

3.6 Energy Smart Focus Program

3.6.1 Progress Toward Goals

Table 3-18 shows the Energy Smart Focus Program five-year goal for participants receiving assistance. A number of programmatic and procedural issues have delayed program ramp up, and thus the participation level to date is less than initially anticipated.

Table 3-18. Energy Smart Focus Program – Goal and Achievement

Activity	Program Goals (July 1, 2006 through June 30, 2011)	Achieved July 1, 2006 through March 31, 2009	% of Goal Achieved
Participants Receiving Assistance ¹	21,000	1,820	9%
Focus Sector Partnerships ²	N/A	288	NA

¹This metric does not include updates from the Local Government, Colleges and Universities, and the Hospital sectors as these sectors are ramping up.

²This metric is new and was not part of the original SBC3 Operating Plan goals.

3.6.2 Energy, Peak Demand and Fuel Savings

Energy Smart Focus is primarily a sector-based energy information and services program. Services provided vary by sector, but ultimately many customers served by Energy Smart Focus will elect to participate in other **New York Energy \$martSM** programs. Energy and demand savings that may be attributable to the Focus Program are tracked and reported under the other **New York Energy \$martSM** programs.

3.6.3 Sector Highlights

As a sector-based energy information and services program, many aspects of the Focus Program cannot be quantified and instead are presented as sector highlights. Sector highlights indicate success in penetrating markets and influencing the energy efficiency of individual sectors. As the Focus Program matures and the sector activities evolve, sector highlights will be revised to show progress and milestones.

Focus on Commercial Real Estate (CRE)

PARTNERSHIPS

- The Green Lease Forum, in coordination with the Natural Resources Defense Council and other co-sponsors, has successfully drafted a model green lease to help address the split incentive issue between owner and tenants in making investment decisions. The next steps in bringing the model lease to the market are under consideration.
- CRE is providing ongoing support to the New York City Mayor's Office of Long Term Planning and Economic Development Corporation in facilitating benchmarking for buildings over 50,000 square feet using the Focus CRE Toolkit to benchmark all building types (commercial and multifamily).

PROGRAM TRAINING

- The Focus CRE effort has conducted presentations at the ACEEE MT Symposium to outline market transformation strategies in conducting outreach to commercial real estate clients. Meetings were held in coordination with U.S. EPA to train utilities and program administrators on the benchmarking process and opportunity for energy efficiency.

BENCHMARKING, ENERGY SCAN & FINANCIAL ANALYSIS

- The Focus CRE effort has conducted outreach to key owners representing 32% of the NYC market with over 139 million square feet of commercial office space. During this quarter, Focus CRE effort has introduced the Lease Based Analysis Tool, which helps owners assess the value proposition of proposed energy projects identified during benchmarking. The lease based analysis tool was used to determine the net Return on Investment (ROI) for five demonstration projects with SL Green, a major Real Estate Investment Trust (REIT).

Focus on Colleges and Universities (C&U)

The Focus on C&U agreement with Einhorn Yaffee Prescott (EYP) was fully executed in December 2008. The following items represent a sampling of work completed to date:

- Development of the Focus on C&U Web site. To date, there have been 1,030 page views by 784 unique visitors.
- Establishment of a C&U toll-free number and email address. Over 20 telephone and e-mail inquiries have been received.
- Six face-to-face campus visits and two presentations have been completed.
- The program is focusing on completing more face-to-face customer visits in the next quarter.

Focus on Institutions

K-12 SCHOOLS

During the first quarter of 2009, the Focus on K-12 Schools sponsored and coordinated the first Critical Issues One-Day Training Summit, with the State Education Department, NYPA, LIPA and the School Facilities Management Institute. Approximately 160 people were in attendance, representing school

districts across the State (both business officers and facility managers), architectural and engineering firms and other professional associations.

During this one-day training summit, the Focus on K-12 Schools unveiled a new program offering as part of its 2009 benchmarking initiative. This new program offering will provide additional free services including training and NY-CHPS Charrettes. Further, there have been eight school districts and 70 school buildings that have received ENERGY STAR awards.

STATE SECTOR

During the first quarter of 2009, the Focus on State Institutions program completed the initial benchmarking of the State University of New York (SUNY). SUNY represents approximately 35% of the total square footage of the State Institutions Sector. SUNY also has approximately 45,000 full-time employees that were impacted by this initiative. The program also started tracking ten-year's worth of utility data for SUNY statewide.

The program also produced and distributed an energy benchmarking tool, which the Division of Military and Naval Affairs (DMNA) pushed to all armories in the State. The goal of this tool is for DMNA to have updated monthly energy use data by facility. The program has also met with the Department of Transportation (DOT) and the Office of Mental Retardation and Developmental Disabilities (OMRDD) to support energy initiatives.

Focus on Industry

The following are key accomplishments of the Focus on Industry program:

- Created an industrial customers list of registered projects with U.S. Green Buildings Council.
- Created a list of New York State entities receiving DOE Save Energy Now assessments.
- Developed an events list for upcoming industrial tradeshow/conferences/seminars to attend and promote industrial energy efficiency and NYSERDA programs.
- Created a list of New York State large industrial users by region for direct outreach.
- Initiated outreach to the National Institute of Standards and Technology – Manufacturing Extension Partnership Centers, Technology Development Centers and Local Development Centers throughout New York State to promote Focus on Industry and NYSERDA programs.
- Worked directly with several customers to encourage them to apply to NYSERDA programs (NCP and EFP).

3.7 New Construction Program

3.7.1 Progress Toward Goals

Three long-term non-energy goals have been set for the New Construction Program (NCP). Table 3-19 shows these five-year goals and progress to date. Overall, the program is performing well with respect to these five-year goals.

Table 3-19. New Construction Program – Goals and Achievements

Activity	Program Goals (July 1, 2006 through June 30, 2011)	Achieved July 1, 2006 through March 31, 2009	% of Goal Achieved
Customers receiving assistance (completed projects)	750	314	42%
Construction market affected (square feet)	75 Million	38.1 million	51%
Participating A&E firms (completed projects)	800	502	63%

3.7.2 Energy, Peak Demand and Fuel Savings

Table 3-20 shows the cumulative annual energy and peak demand savings from the NCP. A realization rate and net-to-gross ratio are applied to adjust the program reported savings, based on the most recent Measurement and Verification and Attribution evaluation studies. Net savings in the rightmost column are the total savings being claimed by the program after these evaluation activities.

Table 3-20. New Construction Program Cumulative Annual Energy and Peak Demand Savings (through March 2009)

	Program- Reported Savings	Realiz- ation- Rate	Adjusted Gross Savings	Freerider- ship	Spillover	Net-to- Gross Ratio ¹	Net Savings
MWh/year	258,891	1.03	262,714	40%	85%	1.22	315,321
MW On- Peak	67.6	1.03	65.3	40%	85%	1.22	78.3
MMBtu	39,700	0.98	39,061	NA	NA	0.31	9,567

¹Net-to-Gross Ratio = 1-Freeridership+Spillover (a weighted average of the NTG ratios estimated in the previous MCAC analysis and this current analysis is shown here).

3.7.3 Cost-Effectiveness

The NCP benefit/cost analysis was updated in early 2009 using program savings and costs from July 1, 2006 through year-end 2008. Table 3-21 shows the electricity and demand savings and average measure life used as inputs to the analysis. Table 3-22 shows program and participant costs, and Table 3-23 provides the present value of the benefits included in the analysis. Overall, as shown in Table 3-24, the NCP is performing well, with a Program Administrator Cost (PAC) Test ratio of 4.1 to 5.8 and a Total Resource Cost (TRC) Test ratio of 2.2 to 3.1. As shown in Table 3-25, with prospective benefits, the Program Administrator Cost (PAC) Test ratio is 10.2 to 14.2 and the TRC ratio is 2.5 to 3.6. See Appendix A for definitions of benefit/cost terms and concepts.

