



APPENDIX B – SELECT EEPS PROGRAM SYNOPSES

The following appendix to the 2015 report, [Charting the Course for Energy Efficiency in New York](#), contains program statistics and short descriptions for eight energy efficiency programs designed and run as part of the Energy Efficiency Portfolio Standard (EEPS). The purpose of this appendix is to provide readers with an idea of how programs under EEPS achieve energy savings. The eight programs profiled are selected because they represent either one of the largest programs under EEPS in terms of reported energy savings achieved or the lowest Cost per First-Year kWh Saved among all programs. All reported statistics are drawn directly from the [New York Department of Public Service EEPS website](#) and represent reported metrics up to the third quarter of 2015.

| Program Administer | Program Name | Sector | Cost per First-Year kWh Saved Assuming 10-year Lifecycle | Percent of Total EEPS MWh Acquired & Committed Savings to Date |
|-----------------------|--|-------------|--|--|
| Central Hudson | Home Energy Reporting | Residential | \$0.00570 | 0.82% |
| National Grid | Small Business Direct Install Program | Commercial | \$0.02752 | 7.60% |
| National Grid | Residential Building Practices and Demonstration | Residential | \$0.00408 | 0.99% |
| NYSEG | Refrigerator and Freezer Recycling Program | Residential | \$0.00931 | 0.64% |
| NYSERDA | Industrial & Process Efficiency Program | Commercial | \$0.01490 | 19.57% |
| NYSERDA | CFL Expansion Program | Residential | \$0.00271 | 15.49% |
| NYSERDA | FlexTech Expansion Program | Commercial | \$0.00864 | 8.75% |
| NYSERDA | Existing Facilities Program | Commercial | \$0.02316 | 8.12% |

CENTRAL HUDSON: RESIDENTIAL HOME ENERGY REPORTING

| PROGRAM STATISTICS | |
|---|----------------|
| Net First Year MWh Acquired & Committed to Date: | 54,397 MWh |
| MWh Target to Date: | 39,000 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 139.48% |
| Expenditures & Encumbrances to Date: | \$3,100,213.00 |
| Budget to Date: | \$2,941,232.77 |
| Percent of Budget Expended & Encumbered to Date: | 105.41% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 0.82% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0057 |

Launched in February 2011, Central Hudson's Residential Home Energy Reporting Program promotes energy efficient behavior among residential electric and gas customers by providing specialized energy use information to their residential customers. Customers periodically receive Home Energy Reports that include information on their home's energy use in comparison to their neighbors' energy usage, their home's energy use patterns over time, as well as information on energy efficiency measures. Customers may use the report to identify achievable goals and tools to promote energy efficiency. The program is administered in conjunction with Opower, Inc., a private company that specializes in behavior change programs.

The program has targeted over 110,000 residential electric and gas customers with approximately 95,000 customers receiving the reports after some customers opted. Seventy percent of the program's participants are electric service only customers, with the remaining percent receiving gas and electric service. The average annual energy savings was about 210 kWh per participant according to a recent [evaluation study](#).

NATIONAL GRID: RESIDENTIAL BUILDING PRACTICES AND DEMONSTRATION PROGRAM

| PROGRAM STATISTICS | |
|---|----------------|
| Net First Year MWh Acquired & Committed to Date: | 66,021 MWh |
| MWh Target to Date: | 49,815 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 132.5% |
| Expenditures & Encumbrances to Date: | \$2,690,825.59 |
| Budget to Date: | \$2,575,789.15 |
| Percent of Budget Expended & Encumbered to Date: | 104.5% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 0.99% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0041 |

The Residential Building Practices and Demonstration (RBPDP) Program, launched in April 2011, is very similar to Central Hudson's Residential Home Energy Reporting Program by providing specialized energy usage reports to residential customers in the utility's combined gas and electric service territories in upstate New York. These reports include information on the customer's home's energy use in comparison to their neighbors' energy usage, their home's energy use patterns over time, as well as information on energy efficiency measures that could be implemented. Like the Central Hudson program, Opower, Inc. administers National Grid's RBPDP Program.

NATIONAL GRID: SMALL BUSINESS DIRECT INSTALL PROGRAM

| PROGRAM STATISTICS | |
|---|------------------|
| Net First Year MWh Acquired & Committed to Date: | 505,166 MWh |
| MWh Target to Date: | 547,248 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 92.3% |
| Expenditures & Encumbrances to Date: | \$139,005,678.30 |
| Budget to Date: | \$139,040,842.42 |
| Percent of Budget Expended & Encumbered to Date: | 99.9% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 7.60% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0275 |

The National Grid Small Business Direct Install Program provides direct incentives to customers to implement energy efficiency incentives. For eligible customers, National Grid will pay up to seventy percent of the installation and equipment costs of qualified energy efficiency equipment. In order to be eligible, a customer must have an average monthly kW demand of 110 kW or less and must pay the Systems Benefit Charge. The Program offers customers financing options for their share due. If the customer pays their share in one lump sum, National Grid will discount the amount due by fifteen percent. The second option, allows a customers to place their share onto their monthly electric bill for up to twenty-four months.

The Program offers customers different energy efficiency options. Some of the options include a free on-site energy audit along with a proposed recommendation of energy efficiency measures, equipment installation, and environmentally friendly removal of fluorescent lights and ballasts. Some of the equipment upgrades includes lighting, lighting occupancy sensors, walk-in cooler efficiency, and other site-specific projects. National Grid has posted a number of [customer profiles](#) on their website that highlight successes under this program.

NYSEG: REFRIGERATOR AND FREEZER RECYCLING PROGRAM

| PROGRAM STATISTICS | |
|---|----------------|
| Net First Year MWh Acquired & Committed to Date: | 42,548 MWh |
| MWh Target to Date: | 16,353 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 260.2% |
| Expenditures & Encumbrances to Date: | \$3,962,028.18 |
| Budget to Date: | \$4,898,749.81 |
| Percent of Budget Expended & Encumbered to Date: | 80.9% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 0.64% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0093 |

The New York State Electric & Gas Corporation under the Refrigerator and Freezer Recycling Program removes energy inefficient appliances from participating customers' homes. In some cases, a small financial incentive (\$30-\$50) is offered in combination with the free removal and recycling of old refrigerators and freezers. The program removes up to two refrigerators or freezers per household. The appliance must be in working condition and have an inside volume of between 10 and 30 cubic feet.

NYSERDA: CFL EXPANSION PROGRAM

| PROGRAM STATISTICS | |
|---|-----------------|
| Net First Year MWh Acquired & Committed to Date: | 1,029,365 MWh |
| MWh Target to Date: | 1,986,311 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 51.8% |
| Expenditures & Encumbrances to Date: | \$27,910,865.99 |
| Budget to Date: | \$37,068,852.58 |
| Percent of Budget Expended & Encumbered to Date: | 75.3% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 15.49% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0027/kWh |

The CFL Expansion Program is designed to increase the sales of compact fluorescent lamps (CFLs). The program aims to increase advertising and marketing promotions with retail stores and lighting manufacturers, the network size of retail partners and manufacturers, consumer accessibility to a wider variety of CFLs through incentives to retailers to increase the number of CFLs sold and create permanent shelf space, in-store promotions and point-of-purchase information to educate consumers, and participation in the CFL Collection Center Program, as well as promote the manufacture, sale, and usage of high power factor CFLs.

NYSERDA: EXISTING FACILITIES PROGRAM

| PROGRAM STATISTICS | |
|---|------------------|
| Net First Year MWh Acquired & Committed to Date: | 539,653 MWh |
| MWh Target to Date: | 748,427 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 72.1% |
| Expenditures & Encumbrances to Date: | \$124,991,730.47 |
| Budget to Date: | \$129,243,574.36 |
| Percent of Budget Expended & Encumbered to Date: | 96.7% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 8.12% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0232 |

The Existing Facilities Program seeks to promote existing commercial facilities to retrofit their buildings to make energy-efficiency improvements that will ultimately reduce energy costs and improve the company's return on investment. NYSERDA assists participants by identifying opportunities for energy savings, prioritize projects, and evaluate the business' return on investment.

The program offers various incentives including natural gas, electric, demand response, and monitoring-based commissioning. The natural gas and electric efficiency incentives are available to offset capital cost of efficiency projects, which reduce energy consumption. Demand response incentives are available based on the cost associated with technology. These incentives are offered to existing facilities to offset the cost of equipment for a particular project. The incentive is capped at two million dollars or seventy-five percent of the total project cost. NYSERDA requires a minimum project size of thirty thousand dollars. Lastly, monitoring-based commissioning incentives provide support for the implementation of continuous commissioning programs and operational-based energy savings.

In order to be eligible, facilities must pay into the System Benefits Charge. If eligible, a facility may undertake a performance-based project or qualify for pre-qualified incentives. Performance-based incentives are based on the amount of energy that you save annually as a result of the project. These projects are large custom improvements totaling a minimum incentive of thirty thousand dollars and a maximum cost of two million dollars. Example electric efficiency projects include, but are not limited to, lighting control systems, control and building automation systems, chiller systems, demand response and energy storage, motors and VFDs, HVAC systems, and natural gas efficiency projects include boiler control systems, furnaces, water heaters, steam and hot water distribution piping and insulation, and heat recovery.

Pre-qualified incentives are available to projects that are smaller sized and retrofit equipment change-outs totaling a maximum of sixty thousand dollars in incentives. These incentives are offered for various projects including lighting, motors, variable frequency drives, HVAC, chillers, commercial refrigeration, commercial kitchen equipment and washers, interval meters, high efficiency furnaces and boilers, insulation, space heating equipment, and water heating equipment.

NYSERDA: FLEXTech EXPANSION PROGRAM

| PROGRAM STATISTICS | |
|---|-----------------|
| Net First Year MWh Acquired & Committed to Date: | 581,221 MWh |
| MWh Target to Date: | 642,359 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 90.5% |
| Expenditures & Encumbrances to Date: | \$50,219,433.78 |
| Budget to Date: | \$54,143,421.26 |
| Percent of Budget Expended & Encumbered to Date: | 92.8% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 8.75% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0086/kWh |

NYSERDA’s FlexTech Expansion Program allows customers to access objective and customized information to allow the customer to become easily informed about energy efficiency, procurement, productivity, and financing options. Energy engineers and other experts provide cost-shared technical studies to the customers to help gather this information about the customer’s needs and objectives. The studies evaluate all energy sources as well as provide objective analysis of energy trade-offs and switching options.

In order to become eligible, customers may be commercial, industrial, institutional, municipal, not-for-profits, and K-12 schools. The Program is offered statewide with particular focus on the Con Edison service territory. Participants located within the Con Edison service territory are eligible for higher cost sharing maximums.

NYSERDA: INDUSTRIAL & PROCESS EFFICIENCY PROGRAM

| PROGRAM STATISTICS | |
|---|------------------|
| Net First Year MWh Acquired & Committed to Date: | 1,300,273 MWh |
| MWh Target to Date: | 1,390,000 MWh |
| Percent of MWh Target Acquired & Committed to Date: | 93.5% |
| Expenditures & Encumbrances to Date: | \$193,718,610.73 |
| Budget to Date: | \$192,902,818.45 |
| Percent of Budget Expended & Encumbered to Date: | 100.4% |
| Percent of Total EEPS MWh Acquired & Committed Savings to Date: | 19.6% |
| Cost per First-Year kWh Saved Assuming 10-year Lifecycle: | \$0.0149/kWh |

NYSERDA’s Industrial and Process Efficiency (IPE) Program provides performance-based financial incentives to assist New York manufacturers and data centers in implementing energy-efficiency improvements that result in overall cost reduction and increased productivity.

In order to be eligible, a facility must pay into the System Benefits Charge on their electric or natural gas bill. If eligible, incentives are available for new construction and existing facilities, manufacturers and data centers. Per facility, maximum annual investments totaling \$5 million per facility for electric incentives and \$1 million per facility for natural gas may be allotted. Financial incentives are based on one full year of energy savings. The incentives are measured by energy use per unit of production before and after the productivity improvement and multiplying the difference by the latest output.

Projects may include, but are not limited to, increase manufacturing productivity, improve IT efficiency, and minimize energy use in buildings. The IPE program evaluates offset the costs of energy efficiency per unit of production through process Efficiencies, energy efficiencies, and operations and maintenance efficiencies. Eligible manufacturing facilities and data centers will work with outreach contractors. The NYSERDA website contains a number of [case studies](#) highlighting the IPE program at various facilities.