



**New Jersey's Clean Energy Program  
Fiscal Year 2016 Program Descriptions and Budget**

**Commercial & Industrial  
Energy Efficiency Programs  
Managed by TRC as C&I Program Manager**



**FY 2016 Program & Budget Filing**

**March 18, 2016**

**New Jersey’s Clean Energy Program  
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# **New Jersey's Clean Energy Program FY 2016 Commercial & Industrial Programs Descriptions and Budget**

## **Introduction**

This fiscal year 2016 Filing provides program descriptions and budgets for programs managed by TRC, the Commercial and Industrial (C&I) Energy Efficiency Market Manager who took over management of the C&I Programs from the seven electric and natural gas utilities effective April 1, 2007.

The fiscal year start date is July 1 and end date is June 30. The budget, goals, marketing and outreach plans reflect the twelve month period July 1, 2015 through June 30, 2016.

Changes to programs and incentive levels are effective upon approval by the Board of Public Utilities and subsequent notice to the industry.

**Appendix A** –12-Month Outreach Plan

**Appendix B** - 12-Month C&I Market Manager Budgets

**Appendix C** - 12-Month Goals

# Fiscal Year 2016 C&I Programs

## General Overview

New Jersey's Commercial & Industrial (C&I) Energy Efficiency Program includes nine individual programs targeting the commercial and industrial market segments: 1) New Construction, 2) Retrofit, 3) Pay for Performance New Construction, 4) Pay for Performance, 5) Local Government Energy Audit (LGEA), 6) Direct Install, 7) Combined Heat and Power (CHP) and Fuel Cells, 8) Large Energy Users Program, 9) SBC Credit Program.

Unless specifically stated in the following program descriptions, customers eligible for incentives under New Jersey's Commercial & Industrial Energy Efficiency Program are defined as non-residential electric and/or gas customers of one of New Jersey's regulated electric or gas utilities who contribute to the Societal Benefits Charge fund. \*

*\*Please note, for a limited time, funding may be made available from the Department of Energy under Grant Award Number DE-EE0000353 (EE Programs for Non Investor Owned Utility Customers) for a State Energy Program which would allow participation in Direct Install, Pay for Performance, and the Local Government Energy Audit Program by oil and propane customers and those who are served by municipal and rural electric cooperatives (non-investor owned electric utilities). Funds will be available on a first come, first-served basis. Existing program guidelines and rules related to Direct Install, Pay for Performance and the Local Government Energy Audit Program will apply.*

Construction projects are subject to prevailing wage requirements pursuant to P.L. 2009, c. 203, which amends P.L. 2009, c. 89, as well as the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to P.L. 1963 c. 150 as amended, and N.J.A.C. 17:27-1.1 et seq. and Affirmative Action rules. The prevailing wage rate shall be paid to workers employed in the performance of any construction undertaken in connection with Board of Public Utilities financial assistance programs. This law applies to contracts greater than \$15,444. By submitting an application to the program and receiving program incentives, customers self-certify that they are complying with prevailing wage requirements.

The C&I New Construction and C&I Retrofit components (a.k.a. SmartStart) offer prescriptive and custom efficiency measure incentives plus technical support. For budget purposes, these are shown as two different programs, but they offer similar services as described under Program Offerings and Customer Incentives below.

The Pay for Performance components, for both existing building and new construction, uses a "whole building approach" to energy efficient construction and offers incentives based on the level of savings achieved.

The Programs are designed to:

- Capture lost opportunities for energy efficiency savings that occur during customer-initiated construction events (i.e., when customers normally construct buildings or purchase building systems equipment).
- Achieve market transformation by helping customers and designers make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices.
- Stimulate commercial and industrial customer investments in energy efficiency measures.
- Facilitate effective implementation of New Jersey's new commercial energy code as well as future upgrades to that code.

The Programs have been designed to address key market barriers to energy efficient building construction and design on the part of developers, designers, engineers, and contractors including:

- Unfamiliarity or uncertainty with energy efficient building technologies and designs;
- Bias toward lower first cost versus operating costs;
- Compressed time schedules for design and construction;
- Aversion to perceived risk-taking involved with specifying technologies less familiar to the local design community, despite the proven reliability of efficient technologies and designs; and,
- Incentive structures and priorities for engineers, designers and contractors, which often do not align with energy efficiency considerations.

The Programs employ a comprehensive set of offerings and strategies to address these market barriers noted above, and to subsequently achieve market transformation in equipment specification, building/system design and lighting design. These include:

- Program emphasis on customer-initiated construction and equipment replacement events that are a normal part of their business practice.
- Coordinated and consistent marketing to commercial and industrial customers, especially large and centralized players, such as national/regional accounts, major developers, etc.
- Consistent efficiency and incentive levels for efficient electric and gas equipment and design practices to permanently raise efficiency levels.
- Prescriptive incentives for pre-identified energy-efficient equipment and custom measure incentives for more complex and aggressive measures to permanently raise the efficiency levels of standard equipment.

The C&I Programs have established maximum annual per-entity incentive caps which are in addition to individual program incentive caps. The caps are as follows:

## **Existing Program Incentive Caps:**

New Construction and Retrofit Programs - \$500,000 per electric account and \$500,000 per natural gas account, per fiscal year. A customer is defined as a utility account.

Pay for Performance Program (P4P) - \$1 million per electric account and \$1 million per natural gas account per fiscal year, not to exceed \$2 million per project.

A Pay for Performance project is defined as a single building owned by an entity, which has met Pay for Performance eligibility requirements and is, or will be, participating in the Pay for Performance. If a project possesses more than one electric account and more than one gas account, the multiple electric accounts will be treated as a single electric account and the multiple gas accounts will be treated as a single gas account, and the project will be held to the above mentioned cap.

Combined Heat and Power and Fuel Cell Program (CHP / FC) – The combination of utility incentives plus NJCEP incentives may equal up to \$2 million for systems  $\leq$ 1MW and \$3 million for systems  $>$ 1MW. However, “% of project cost” caps listed in the table under the Combined Heat & Power Program section of this filing will still apply. Up to an additional \$250,000 is available for entities that successfully participate in Pay for Performance, in addition to installing an eligible CHP/FC system at the project site.

Large Energy Users Program - \$4 million per eligible entity per fiscal year.

Direct Install – Project incentive cap of up to \$125,000. Direct Install participants will also be held to a fiscal year entity cap of \$250,000 per entity. The signed Scope of Work Agreement will be the milestone used to determine proximity to the entity cap.

Local Government Energy Audit Program (LGEA) – LGEA participants will be held to a fiscal year entity cap of \$100,000 per entity.

## **Program-Wide Entity Caps:**

If an entity brings more than one project through the New Jersey’s Clean Energy Program in one fiscal year in addition to the project caps defined above, they will be held to a fiscal year entity cap. The milestones used to determine the cap, by program, are as follows:

- Application approval - Retrofit, New Construction, CHP-FC
- Energy Reduction Plan approval - Pay for Performance
- Final Energy Efficiency Plan approval Large Energy Users
- Fully executed Scopes of Work - Direct Install

These same milestones will be used in determining whether an entity has exceeded the fiscal year entity cap.

**Entity Cap:**

An entity cap of \$4 million per entity, per fiscal year will be increased to \$5 million per entity, per fiscal year if any of the project(s) includes installation of both comprehensive energy efficiency scope(s) of work and a CHP or Fuel Cell system at the same site. The entity cap will be based on a fiscal year.

**Entity Cap “fiscal year”:**

The C&I Program will use a fiscal 12-month period for tracking entity cap limits. Once the entity cap limit for applications has been reached, based on approved applications or Energy Reduction Plans, the earliest an entity may apply for subsequent incentive funding is July 1<sup>st</sup> of the following year.

Incentives received under all C&I Programs, except the Local Government Energy Audit, count toward the fiscal year incentive cap.

Applicants to any of the NJCEP C&I Program must be contributors to the Societal Benefits Charge fund within recent 12 months.

In addition to the existing Commercial & Industrial Energy Efficiency Programs, the Board has approved a number of other initiatives including programs run by New Jersey’s investor-owned utilities, and, , when funds are approved, management of SEP funding for Non Investor Owned Utility entities which will supplement existing Clean Energy Programs. TRC will process applications and provide general support for these initiatives that impact the Commercial & Industrial Energy Efficiency Programs and the fees associated with processing these applications will be paid with NJCEP funds.

## **New Construction and Retrofit Programs**

### **Program Description**

The C&I New Construction and C&I Retrofit Programs (a.k.a. SmartStart) offer prescriptive efficiency measure incentives that provide fixed incentives for energy efficiency measures. The Programs also offer custom measures incentives.

### **Target Markets and Eligibility**

The C&I New Construction and C&I Retrofit Programs target commercial, educational, governmental/institutional, industrial, and agricultural customers engaged in customer-initiated construction events including public schools construction, other new building construction, renovations, remodeling, equipment replacement, and manufacturing process improvements. The Program offers incentives and technical support for both existing buildings and new construction. In addition, the Program may be used to address economic development opportunities and transmission and distribution system constraints.

Applicants to the Program must be contributors to the Societal Benefits Charge (SBC) fund.

### **Program Offerings and Customer Incentives for the C&I New Construction and C&I Retrofit Programs**

The Programs will include the following program offerings for the various market segments:

- Prescriptive Efficiency Measure Incentives that provide fixed incentives for energy efficiency measures. Incentives are based on incremental costs (i.e., the additional cost above baseline equipment), in consideration of market barriers, changes in baselines over time and market transformation objectives. Eligible measures include:
  - Electric Chillers
  - Natural Gas Chillers
  - Unitary HVAC (Heating, Ventilating, Air Conditioning) Systems
  - Ground Source Heat Pumps (Geothermal)
  - Gas Fired Boilers
  - Gas Furnaces
  - Variable Frequency Drives
  - Gas Fired Water Heating
  - Gas Fired Water Booster Heating
  - Tankless Water Heaters
  - Select Premium Efficiency Motors
  - Prescriptive Lighting & Lighting Controls

- Performance Based Lighting
  - Kitchen Hood Variable Frequency Drives
  - Low Intensity Infrared Heaters
  - Boiler/AC Economizing Controls
  - Refrigeration Controls
  - Refrigerated Doors/Covers
  - Food Service Equipment
  - Custom Measures
- Custom Measure Incentives for more complex and aggressive efficiency measures. The process for calculating custom measure incentives entails a performance-based approach for custom equipment with a set value of incentives for electric and gas energy savings projects which may include a commissioning component. Incentives are evaluated and determined via an incremental cost and energy savings analysis to be provided by the customer or customer's authorized representative (vendor/contractor). Determination of the appropriate baseline (existing conditions and/or industry standard) will be reviewed on a case-by-case basis subject to program review and approval. The Market Manager has the discretion to determine the reasonableness of project costs for proposed technologies based on industry standards and other market research. Eligible electric and gas measures include lighting systems, HVAC systems, motor systems, large boiler systems, gas-engine driven chillers and other non-prescriptive measures proposed by the customer. Technologies not explicitly listed as custom (per the filing and/or Program Guide) will be reviewed for eligibility and are subject to approval at the discretion of the Market Manager. More details regarding this process can be found later in this document in the section entitled "C&I Construction Program Incentives".

Customers should submit an application for the type of equipment they have chosen to install. The application should be accompanied by a related worksheet, where applicable, a manufacturer's specification sheet for the selected equipment and one month of the most recent electric/natural gas utility bill for a prescriptive application or twelve months for a custom application. To qualify for incentives, customers must be contributors to the SBC fund for the type of incentive being applied – electric or natural gas. For example: customers applying for prescriptive lighting incentives must provide an IOU electric bill identifying SBC fund contribution. Similarly, an IOU gas bill identifying SBC fund contribution is required for natural gas saving measures such as gas heating) Program representatives will then review the application package and approve it, reject it, and/or advise of additional upgrades to equipment that will save energy costs.

## **C&I New Construction**

This Program component offers incentives and technical support for new construction projects.

## **C&I Retrofit**

The Retrofit component is offered to all eligible C&I customers and provides incentives for replacing standard equipment with high efficiency alternatives. The Program also offers custom measure incentives.

### Regional and National Initiatives

- *New Jersey SmartStart Buildings* has, and will continue to support efforts to upgrade efficiency standards and state building codes. Activities include technical support, dissemination of information, sponsorship of conferences/workshops on codes and standards, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes.

## **C&I New Construction and C&I Retrofit Program Incentives**

The table below lists existing FY 2015 statewide incentives for the C&I New Construction, and C&I Retrofit program components and, where noted, proposed changes that will take place upon approval of this filing for FY 2016. The incentives vary by size, technology and efficiency level and will be paid based on specific eligibility requirements. The program offers both prescriptive incentives and custom measure incentives.

Incentives are available for up to \$500,000 per electric account and \$500,000 per natural gas account per fiscal year. A customer is defined as a utility account.

### Custom Measure Incentives:

The Program provides a set level incentive for electric and gas savings. This process is more of a performance-based approach for custom equipment. Established incentive caps for the program are the lesser of a set value of \$0.16/kWh and \$1.60/therm based on estimated annual savings, 50% of total installed project cost or a buy down to a one-year payback. Eligible projects must have a minimum first year energy savings of 75,000 kWh for custom electric projects or 1,500 therms for custom gas projects. This requirement may be waived by the Market Manager on a case-by-case basis if project savings are within 10% of these minimum requirements. Projects with both electric and gas savings

may be considered for incentives if either of the minimum savings requirements are met.

*Multiple applications for separate, individual facilities may not be grouped to meet minimum savings requirements. The program will allow a single facility with multiple utility accounts to submit a proposed custom project under one application.* A customized set of Microsoft Excel-based forms is required for all projects. These forms summarize the critical components of the custom measure including a detailed description of the technology, installed cost, and projected savings. Upon project completion, additional documentation is required to confirm that the measures were installed as proposed and that any changes during construction are reflected in the final savings values. As is clearly described in the Program forms, certain measures may require post-installation metering, trending analysis, and/or the installing contractor's Statement of Substantial Completion. Baseline for custom retrofit projects are existing conditions, however the custom measure must exceed ASHRAE 90.1-2007 standards by at least 2% where specific guidelines exist. In cases where ASHRAE guidelines do not apply, the Program will require that custom measures exceed industry standards per the Consortium for Energy Efficiency (CEE), EPA Energy Star, or using such resources as: current New Jersey baseline studies and other market research; the program experience of the Commercial/Industrial Market Manager; experience of the New Jersey utilities or utility/public program experience from other comparable jurisdictions. New construction/gut-rehab projects will use ASHRAE 90.1-2007 as the baseline for estimating energy savings. TRC will provide contractors with Program spreadsheets that include standard formats for reporting Program savings as well as standard incentive calculations.

The Program can limit the number of custom applications accepted for the same technology in order to evaluate if a prescriptive incentive can be developed. For most technologies, three (3) applications will be the limit. During the prescriptive evaluation period no new custom applications for the same technology will be accepted. Customers applying to the program will be formally notified that any applications received over the limit will not be accepted by the Program. The customer will not be able to resubmit an application until the technology has been evaluated and/or a prescriptive incentive has been developed.

### **SmartStart Pre-Approval Guidelines:**

Pre-approval by the Market Manager is required for the following project types:

- Prescriptive Lighting;
- Prescriptive Lighting Controls;
- Performance Lighting (for existing buildings only); and
- Custom measures

Pre-approval is not required for all other SmartStart application types, however, to be eligible for incentives, the application must be submitted to the Market Manager within

12 months of equipment purchase. Sufficient documentation must be provided to the Market Manager confirming date of equipment purchase (material invoice, purchase order, etc.). Customers implementing projects prior to program approval do so at their own risk.

### **SmartStart Inspection Protocols:**

Inspection protocols for custom measure projects in FY 2016 will require 100% pre & post inspections for projects with an estimated incentive equal to and above \$25,000. Inspections for projects with incentives below \$25,000 will be sampled at random.

Inspection protocols for prescriptive measure projects in FY 2016 are as follows:

1. Pre and post inspection required on 100% of prescriptive lighting and lighting controls projects with an incentive equal to and above \$25,000. Inspections for projects with incentives below \$25,000 will be sampled at random.
2. Performance lighting projects for existing buildings including major gut rehab, will require 100% pre and post inspection.
3. Pre-inspection not required for all remaining prescriptive measures except where defined above (prescriptive lighting, lighting controls and performance lighting-existing buildings).

On 9/7/10, the State of NJ adopted the ASHRAE 90.1-2007 for all commercial and industrial buildings, in regards to energy conservation. For FY 2016, New Jersey's Clean Energy Program will continue to utilize this code, ASHRAE 90.1-2007, as reflected in the tables below.

## **C&I Sandy Relief Plan**

New Jersey's Clean Energy Program developed a Sandy Relief Plan to assist eligible C&I customers affected by the storm. **The Sandy Relief Plan is discontinued as of July 1, 2015.** Applications received through June 30, 2015 will be processed through to completion by the Market Manager.

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive
<b>Custom Measure Incentives:</b>		
Measures not covered by the prescriptive incentive tables	<p>Performance incentives of \$0.16/kWh and \$1.60/therm of first year savings, 50% of total installed project cost, or buy down to 1-year payback. Based on estimated savings - minimum of 75,000 kWh or 1,500 Therms saved annually required. Projects must have an IRR of 10% or greater</p> <p>Minimum savings requirements may be waived by the Market Manager on a case-by-case basis if project savings are within 10% of these minimum requirements. Projects with both electric and gas savings may be considered for incentives if either of the minimum savings requirements are met. Multiple smaller applications may not be grouped to meet minimum savings requirements.</p>	Minimum IRR requirement removed
<b>Qualifying Prescriptive Equipment Incentives: (no incentive shall exceed total installed cost of the measure(s) excluding NJ sales tax)</b>		

**Electric Chillers: FY16 Electric Chiller Efficiency and Incentive Structure**

*Note A - The manufacturer’s published chiller efficiency must be determined using the Air-Conditioning, Heating and Refrigeration Institute (AHRI) 550/590 test procedures and at the AHRI standard evaporator and condenser temperatures. If an applicant has a water cooled centrifugal chiller that is designed to operate at other than the AHRI standard conditions the procedure in Standard 90.1-2013, Section 6.4.1.2.1 may be used by the applicant to adjust the manufacturer’s published efficiency at non-AHRI conditions to the efficiency at AHRI standard conditions. The applicant will need to provide the manufacturer’s non-AHRI ratings as well as the calculations for the chiller efficiency at AHRI conditions.*

*Constant speed chillers will have to meet or exceed IPLV efficiency to qualify for the incentive program while the incentive will be based on the chillers performance relative to the full load efficiency. Conversely, variable speed chillers will have to meet or exceed the full load efficiency to qualify for the incentive program while the incentive will be based on the chillers performance relative to the IPLV efficiency.*

*Electrically operated comfort cooling air-cooled and water-cooled chillers are eligible for incentives under the prescriptive path. Chillers for process cooling (e.g. manufacturing, data center, food storage or processing, et cetera) loads may apply for an incentive under the custom path.*

Capacity	Path A		Path B		Path A		Path B	
	Incentive Minimum Full Load kW/ton	Qualifying IPLV kW/ton	Qualifying Full Load kW/ton	Incentive Minimum IPLV kW/ton	Incentive Minimum Full Load EER	Qualifying IPLV EER	Qualifying Full Load EER	Incentive Minimum IPLV EER
<b>Air Cooled</b>								
tons < 150					10.30	13.70	9.70	16.12
tons > 150					10.30	14.00	9.70	16.42
<b>Water Cooled Positive Displacement</b>								
tons < 75	0.735	0.600	0.780	0.490				
75 < tons < 150	0.706	0.560	0.750	0.480				
150 < tons < 300	0.647	0.540	0.680	0.431				
300 < tons < 600	0.598	0.520	0.625	0.402				
tons > 600	0.549	0.500	0.585	0.372				
<b>Water Cooled Centrifugal</b>								
tons < 150	0.598	0.550	0.695	0.431				
150 < tons < 300	0.598	0.550	0.635	0.392				
300 < tons < 400	0.549	0.520	0.595	0.382				
400 < tons < 600	0.549	0.500	0.585	0.372				
tons > 600	0.549	0.500	0.585	0.372				

Capacity	Constant Speed		Variable Speed	
	Base \$/ton	Performance \$/ton	Base \$/ton	Performance \$/ton
<b>Air Cooled</b>				
tons < 150	\$20.00	\$3.50	\$90.00	\$4.00
tons ≥ 150	\$20.00	\$2.75	\$92.00	\$4.00
<b>Water Cooled Positive Displacement</b>				
tons < 75	\$13.00	\$2.25	\$40.00	\$2.50
75 ≤ tons < 150	\$20.00	\$2.00	\$43.00	\$2.00
150 ≤ tons < 300	\$17.00	\$2.00	\$43.00	\$2.00
300 ≤ tons < 600	\$15.00	\$2.25	\$37.00	\$2.00
tons ≥ 600	\$30.00	\$2.00	\$44.00	\$2.00
<b>Water Cooled Centrifugal</b>				
tons < 150	\$24.00	\$2.25	\$12.00	\$4.00
150 ≤ tons < 300	\$10.00	\$2.00	\$30.00	\$2.50
300 ≤ tons < 400	\$8.00	\$2.00	\$20.00	\$2.00
400 ≤ tons < 600	\$8.00	\$2.00	\$25.00	\$2.00
tons ≥ 600	\$8.00	\$2.00	\$25.00	\$2.00

*Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.*

Water Cooled Chillers	\$12 - \$170 per ton depending on size and efficiency	Efficiency and incentive structure revised per above tables
Air Cooled Chillers	\$8 - \$52 per ton depending on size and efficiency	Efficiency and incentive structure revised per above tables
<b>Natural Gas Chillers:</b>		
<i>For gas chillers, full load efficiencies are determined in accordance with A.H.R.I. 560, however, part load efficiencies are not rated.</i>		
Gas Absorption Chillers	≥1.1 full load or part load Coefficient of Performance (COP)	No Change
< 100 tons	Up to \$450 per ton	No Change
100 to 400 tons	Up to \$230 per ton	No Change
> 400 tons	Up to \$185 per ton	No Change
Gas Engine Driven Chillers	Treated under Custom measure path (≥1.1 full or part load COP)	No Change
Desiccant Systems	Up to \$1.00 per cfm (gas or	No Change

	electric)	
<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>
<b>Unitary HVAC Systems:</b>		<i>Refer to Note A above</i>
Unitary AC and Split Systems		
< 5.4 tons ≥ 5.4 to < 11.25 tons ≥ 11.25 to < 20 tons ≥ 20 to 30 tons	14.0 SEER, Up to \$92/ton 11.5 EER, Up to \$73/ton 11.5 EER, Up to \$79/ton 10.5 EER, Up to \$79/ton	No Change
Air to Air Heat Pumps < 5.4 tons ≥ 5.4 to < 11.25 tons ≥ 11.25 to < 20 tons ≥ 20 to 30 tons	≥ 14.0 SEER & 7.8 HSPF, Up to \$92/ton 11.5 EER, Up to \$73/ton 11.5 EER, Up to \$79/ton 10.5 EER, Up to \$79/ton	No Change
Packaged Terminal AC & HP < 9,000 BTUH ≥ 9,000 to 12,000 BTUH > 12,000 BTUH	Up to \$65 per ton 12.0 EER, Up to \$65/ton 11.0 EER, Up to \$65/ton 10.0 EER, Up to \$65/ton	No Change
Dual Enthalpy Economizers	All Up to \$250/unit	No Change
Central DX AC Systems ≥ 9.5 EER	>30 to 63 tons, Up to \$40 per ton > 63 tons, Up to \$72 per ton Incentives for qualifying Central DX AC systems > 63 tons for existing buildings only. New construction ineligible.	No Change
Water Source Heat Pumps	14.0 EER, Up to \$81/ton for qualifying equipment	No Change
Occupancy Controlled Thermostats for Hospitality / Institutional Facilities	Up to \$75/per occupancy controlled thermostat	No Change
A/C Economizing Control	≤5 tons - \$85 >5 tons - \$170	No Change

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive	
Closed Loop $\geq$ 16 EER	$\geq$ 16 EER up to \$450 per ton $\geq$ 18 EER up to \$600 per ton $\geq$ 20 EER up to \$750 per ton Closed loop systems only	No Change	
<b>Gas Fired Boilers: FY 2016 Efficiency Levels</b>			
<b>Boiler Type</b>	<b>Size Category (MBh input)</b>	<b>Non-Condensing</b>	<b>Condensing</b>
Hot Water	$< 300$	85% AFUE	93% AFUE
Hot Water	$\geq 300$ and $\leq 2,500$	85% Et	91% Et
Hot Water	$> 2,500$	85% Ec	93% Ec
Steam	$< 300$	82% AFUE	NA
Steam, all except natural draft	$\geq 300$ and $\leq 2,500$	81% Et	NA
Steam, all except natural draft	$> 2,500$	81% Et	NA
Steam, natural draft	$\geq 300$ and $\leq 2,500$	79% Et	NA
Steam, natural draft	$> 2,500$	79% Et	NA
$< 300$ MBH	\$2.00 per MBH but not less than \$300 per unit; $\geq 85\%$ AFUE	Hot Water Non-Condensing - \$0.95/MBH; Min \$400  Hot Water Condensing - \$2.00/MBH ; Min \$1,000  Steam Natural Draft - \$1.40/MBH; Min \$300  Steam Power Ventilation - \$1.40/MBH; Min \$400  Efficiency level defined by above table	

<p>≥300 MBH - 1500 MBH</p>	<p>Up to \$1.75 per MBH          ≥ 85% AFUE hot water boilers, ≥ 84% AFUE steam boilers</p>	<p>Hot Water Non-Condensing - \$1.75/MBH</p> <p>Hot Water Condensing - \$2.20/MBH ; Min \$1,000</p> <p>Steam Natural Draft - \$1.00/MBH</p> <p>Steam Power Ventilation - \$1.20/MBH</p> <p>Efficiency level defined by above table</p>
<p>&gt; 1500 MBH - 4000 MBH</p>	<p>Up to \$1.00 per MBH          ≥ 84% AFUE for hot water boilers          ≥ 83% AFUE for steam boilers</p>	<p>Category Size Revised          &gt;1500 MBH – 2500 MBH</p> <p>Hot Water Non-Condensing - \$1.50/MBH</p> <p>Hot Water Condensing - \$2.20/MBH</p> <p>Steam Natural Draft - \$0.90/MBH</p> <p>Steam Power Ventilation - \$1.20/MBH</p> <p>Efficiency level defined by above table</p>

> 2500 MBH – 4000 MBH	Up to \$1.00 per MBH ≥ 84% AFUE for hot water boilers ≥ 83% AFUE for steam boilers	Category Size Revised >2500 MBH – 4000 MBH  Hot Water Non-Condensing - \$1.30/MBH  Hot Water Condensing - \$2.00/MBH  Steam Natural Draft - \$0.70/MBH  Steam Power Ventilation - \$1.00/MBH  Efficiency level defined by above table
> 4000 MBH	Treated under Custom Measure Path	No Change
Boiler Economizer Controls	BTU - Incentive ≤800,000 - \$1,200 >800,000 - <1.6mil - \$1,500 ≥1.6mil - <3mil- \$1,800 ≥3mil - <3.5mil - \$2,100 ≥3.5mil - <4mil - \$2,400 ≥4mil \$2,700	No Change
<b>Gas Furnaces</b>		
AFUE to ≥ 95% ≥ 2.0% Fan Efficiency, ENERGY STAR qualified	Incentive up to \$400 per furnace	No Change

<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>																
Gas Infrared Heating	Low Intensity Infrared Heater with Reflectors ≤100,000 btu/hr - \$500 per unit >100,000 btu/hr - \$300 per unit Indoor Only	No Change																
<b>Variable Frequency Drives (HVAC):</b>																		
Variable Air Volume (add on to existing VAV HVAC systems only)	\$65 - \$155 per HP	No Change																
VFDs for existing Constant Volume HVAC systems	Custom	Up to \$80/hp (Max \$6,000 per VFD)																
Chilled Water Pumps	Up to \$60 per HP, > 20HP	No Change																
Cooling Tower Fans	\$60/HP, Existing cooling tower Fan Motors Only > 10HP	No Change																
Air Compressors with VFD's	Incentives will be paid as a Prescriptive Measure based on specific eligibility requirements. Available incentives are to be paid in accordance with the information below:  <table border="0"> <thead> <tr> <th><b>Installed HP</b></th> <th><b>Incentive</b></th> </tr> </thead> <tbody> <tr> <td>25 to 29</td> <td>Up to \$5,250</td> </tr> <tr> <td>30 to 39</td> <td>Up to \$6,000</td> </tr> <tr> <td>40 to 49</td> <td>Up to \$7,200</td> </tr> <tr> <td>50 to 59</td> <td>Up to \$8,000</td> </tr> <tr> <td>60 to 199</td> <td>Up to \$9,000</td> </tr> <tr> <td>200 to 249</td> <td>Up to \$10,000</td> </tr> <tr> <td>≥ 250</td> <td>Up to \$12,500</td> </tr> </tbody> </table>	<b>Installed HP</b>	<b>Incentive</b>	25 to 29	Up to \$5,250	30 to 39	Up to \$6,000	40 to 49	Up to \$7,200	50 to 59	Up to \$8,000	60 to 199	Up to \$9,000	200 to 249	Up to \$10,000	≥ 250	Up to \$12,500	No Change
<b>Installed HP</b>	<b>Incentive</b>																	
25 to 29	Up to \$5,250																	
30 to 39	Up to \$6,000																	
40 to 49	Up to \$7,200																	
50 to 59	Up to \$8,000																	
60 to 199	Up to \$9,000																	
200 to 249	Up to \$10,000																	
≥ 250	Up to \$12,500																	

<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>
Boiler VFDs	Draft Air Fans for Boilers $\geq 5$ to $< 10$ HP - \$155/HP $\geq 10$ to $< 20$ HP - \$120/HP $\geq 20$ HP - \$65/HP  Boiler Feed Water Pumps $\geq 5$ to $< 10$ HP - \$155/HP $\geq 10$ to $< 20$ HP - \$120/HP $\geq 20$ HP - \$60/HP	No Change
Kitchen Hood VFDs – New Hoods  Prescriptive incentive based on cumulative motor HP controlled	$< 5$ hp \$250/hp 5 to $< 10$ hp \$200/hp 10 to $< 15$ hp \$150/hp 15 to $< 20$ hp \$125/hp 20 to $< 25$ hp \$105/hp 25 to $< 30$ hp \$90/hp 30 to $\leq 50$ hp \$55/hp	No Change
Kitchen Hood VFDs – Existing Hoods/Retrofit  Prescriptive incentive based on cumulative motor HP controlled	$< 5$ hp \$300/hp 5 to $< 10$ hp \$200/hp 10 to $< 15$ hp \$160/hp 15 to $< 20$ hp \$125/hp 20 to $< 25$ hp \$95/hp 25 to $< 30$ hp \$80/hp 30 to $\leq 50$ hp \$55/hp	No Change
<b>Gas Fired Water Heating:</b>		
$\geq 0.82$ energy factor, Energy Star, or require 90% Thermal Efficiency with shield combustion	Up to \$300 per tankless water heater	No Change
$\leq 50$ gallons; $\geq 0.067$ Energy Factor	Up to \$50 per water heater	No Change
$> 50$ gallons; $< 300$ MBH $\geq 85\%$ AFUE	Up to \$2.00 per MBH, but not less than \$50/unit	No Change
$> 50$ gallons; 300 MBH - 1500 MBH $\geq 85\%$ AFUE	Up to \$1.75 per MBH	No Change
$> 50$ gallons; $> 1500$ MBH - 4000 MBH $\geq 84\%$ AFUE	Up to \$1.00 per MBH	No Change
<b>Gas Fired Water Booster Heaters:</b>		
$\leq 100$ MBH	Up to \$17 per MBH	No Change
$> 100$ MBH	Up to \$35 per MBH	No Change

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive
<b>Premium Efficiency Motors:</b>		
Fractional (< 1 HP) Electronic Commutated Motors (ECM)	Up to \$40 per ECM for replacement of existing shaded-pole motor in refrigerated/freezer cases Premium Motors application revised to read Refrigerator/Freezer Case Premium Efficiency Motors effective March 1, 2013	No Change
<b>Prescriptive Lighting:</b> For all prescriptive lighting, fixture or lamp must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards		
T-8 lamps retrofitted to reduced wattage T8 lamps	<p>Up to \$10 per fixture for T8 to reduced wattage T8 (28W/25W 4') retrofit or new fixture – requires lamp and ballast replacement</p> <p>For retrofit to T8 lamps – requires High Performance or Reduced Wattage lamps and ballasts qualified by CEE for 4' systems only.</p>	<p>Up to \$5 per fixture for T8 to reduced wattage T8 (28W/25W 4') retrofit or new fixture – requires lamp and ballast replacement</p> <p>For retrofit to T8 lamps – requires High Performance or Reduced Wattage lamps and ballasts qualified by CEE for 4' systems only.</p>
Permanently De-lamp Fixtures and Add Reflectors as long as changing to a more efficient lighting system.	<p>Up to \$15 per fixture for the retrofit of T8 to T8 technology with permanent delamping and adding new reflectors.</p> <p>For retrofit to T8 lamps – requires High Performance (4' Only) or Reduced Wattage lamps (4' Only) and ballasts qualified by CEE</p>	<p>Up to \$10 per fixture for the retrofit of T8 to T8 technology with permanent delamping and adding new reflectors.</p> <p>For retrofit to T8 lamps – requires High Performance (4' Only) or Reduced Wattage lamps (4' Only) and ballasts qualified by CEE</p>

<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>
Metal Halide w/ pulse start ballast, for fixtures > 150 watts	Incentive discontinued	No change
T-5 and T-8 Fixtures replacing HID fixtures or incandescent	<p>Incentives will be paid as a Prescriptive Measure based on specific eligibility requirements.</p> <p>Incentives discontinued for T12 retrofits/replacements for all C&amp;I customers including Sandy Relief participants</p> <ul style="list-style-type: none"> <li>• T-5 or T-8 fluorescent fixtures replacing 1000 Watt or greater HID, or incandescent fixtures: Up to \$200 per fixture removed.</li> </ul>	<p>No change</p> <ul style="list-style-type: none"> <li>• T-5 or T-8 fluorescent fixtures replacing &gt;750 Watt or greater HID, or incandescent fixtures: Up to \$150 per fixture removed.</li> </ul>
	<ul style="list-style-type: none"> <li>• T-5 or T-8 fluorescent fixtures replacing 400 - 999 Watt HID, fluorescent, or incandescent fixture: Up to \$100 per fixture removed</li> <li>• T-5 or T-8 fluorescent fixtures replacing 250 - 399 Watt HID or incandescent fixture: Up to \$50 per fixture removed.</li> </ul>	<ul style="list-style-type: none"> <li>• T-5 or T-8 fluorescent fixtures replacing 400 - 750 Watt HID, fluorescent, or incandescent fixture: Up to \$100 per fixture removed</li> <li>• T-5 or T-8 fluorescent fixtures replacing 250 - 399 Watt HID or incandescent fixture: Up to \$50 per fixture removed.</li> </ul>

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive
T-5 and T-8 Fixtures replacing HID fixtures	<ul style="list-style-type: none"> <li>• T-5 or T-8 fluorescent fixtures replacing 175 to 249 Watt HID fixture: Up to \$43 per fixture removed.</li> <li>• T-5 or T-8 fluorescent fixtures replacing 100 to 174 Watt HID fixture: Up to \$30 per fixture removed.</li> <li>• T-5 or T-8 fluorescent fixtures replacing 75 to 99 Watt HID fixture: Up to \$16 per fixture removed.</li> </ul>	T-5 or T-8 fluorescent fixtures replacing less than 250W HID fixture: Up to \$25 per fixture removed.
	The current requirement for one to one replacement will be eliminated Refer to Application and/or website for standards that apply to these measures	No Change
New Construction and Complete Renovation	No prescriptive lighting incentives for new construction. Complete renovation of existing buildings eligible for prescriptive lighting incentives only.	Existing buildings eligible for performance lighting incentives; Existing lighting must be completely removed from area where new lighting is to be installed.
Induction Lighting Fixtures Retrofit of HID	Up to \$50 per HID ( $\geq 100W$ ) fixture retrofitted with induction lamp, power coupler and generator. Replacement unit must use 30% less wattage per fixture than existing HID system.	No Change
Replacement of HID	Up to \$70 per HID ( $\geq 100W$ ) fixture with a new induction fixture	No Change

**LED Prescriptive Lighting** – For incentive eligibility LED equipment must be listed on the current Energy Star or Design Lights Consortium qualified products list. LED (integral/screw-in) lamp and recessed downlight incentives are provided for replacement of incandescent/halogen lamps only. Incentives will not be provided for:

- LEDs replacing existing LED lamps/fixtures; or LEDs replacing existing T12 equipment
- LED Lamps (Integral/Screw-In) replacing HID and CFL lamps.
- Installation of eligible screw-in/plug-in lighting measures in non-permanent and non-hard-wired fixtures (Example - refrigerator, oven, floor/desk lamps, etc).

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive
LED Lamp (Integral/Screw-In)	<p>\$5/lamp for R/PAR20, MR/PAR16, Globe, Candelabra and other miscellaneous types</p> <p>\$10/lamp for R/BR/PAR 30, R/BR/PAR 38-40, A-Lamp</p>	<p>\$5/lamp for PAR30, PAR30L, PAR38, R30, B10, CA10, F10, G16.5, G25, MR16, PAR16, PAR20, R20, Globe, Candelabra and other miscellaneous types</p> <p>\$10/lamp for A15, A19, A21, BR30, BR40, R40, B13, BA10, F15, MRX16</p>
LED Refrigerated Case Lighting	<p>Up to \$30 per 4' LED Fixture Up to \$42 per 5' LED fixture Up to \$65 per 6' LED fixture</p> <p>Incentive for replacement of fluorescent lighting system in medium or low temperature display cases. Technical requirements of this incentive are listed on the prescriptive lighting application.</p>	<p>No Change No Change No Change</p>
LED Display Case Lighting	Up to \$30 per display case	No Change
LED Shelf-mounted display and task lights	Up to \$15 per foot	No Change
LED Portable Desk Lamps	Up to \$20 per fixture	Up to \$5 per fixture
LED Wall-wash Lights	<p>Up to \$30 per fixture</p> <p>Up to \$35 per fixture</p>	No Change

LED Recessed Down Lights		Up to \$5 per fixture
LED Stairwell and Passageway Luminaires	Up to \$40 per fixture	No Change
LED Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	Up to \$175 per fixture; retrofit (custom)	Up to \$100 per fixture; new and retrofit
LED Outdoor Pole/Arm-Mounted Decorative Luminaires	Up to \$175 per fixture; retrofit (custom)	Up to \$50 per fixture; new and retrofit
LED Outdoor Wall-Mounted Area Luminaires	Up to \$100 per fixture	No change
LED Parking Garage Luminaires	Up to \$100 per fixture	No Change
LED Track or Mono-point Directional Lighting Fixtures	Up to \$30 per fixture	No Change

Large Outdoor Pole/Arm-Mounted Area and Roadway Retrofit	Custom	Up to \$150 per fixture
LED high-bay and Low-bay fixtures for Commercial & Industrial Buildings	Up to \$150 per fixture	No Change
LED High-bay Aisle Lighting	Up to \$150 per fixture	No Change
LED Bollard Fixtures	Up to \$50 per fixture	No Change
LED Linear Panels ( <u>Luminaires for Ambient Lighting of Interior Commercial Spaces</u> )	Up to \$50 per fixture for 1X4, 2X2 and 2X4 New Fixtures only	Up to \$15 per fixture for 1x4, 2x2 (new and retrofit) Up to \$25 per fixture for 2x4 (new and retrofit)
LED Fuel Pump Canopy	Up to \$100 per fixture	No Change
LED Architectural Flood and Spot Luminaries	Up to \$50 per fixture	No Change
LED Linear Ambient Luminaires (Indirect, Indirect/Direct, Direct/Indirect, Direct)	Up to \$20 per 2' fixture Up to \$30 per 3' fixture Up to \$45 per 4' fixture Up to \$60 per 6' fixture Up to \$75 per 8' fixture	No Change
LED Retrofit Kits	Incentive offered as a Custom measure except for 2' and 4' linear lamps.	Incentive offered as a Custom measure except as noted.

LED Linear Lamps (2' and 4')	Up to \$5/Lamp	No Change
LED Bath Vanity	Custom	Up to \$5/fixture
LED Cove Mount	Custom	Up to \$5/fixture
LED Decorative Candle: Other	Custom	Up to \$5/fixture
LED Decorative: Other	Custom	Up to \$5/fixture
LED Downlight Pendant	Custom	Up to \$5/fixture
LED Bath Vanity	Custom	Up to \$5/fixture
LED Downlight Solid State Retrofit	Custom	Up to \$5/fixture
LED Downlight Surface Mount	Custom	Up to \$5/fixture
LED Energy Star: Other	Custom	Up to \$5/fixture
LED Outdoor Porch Wall Mount	Custom	Up to \$5/fixture
LED Energy Star Outdoor Post-Mount	Custom	Up to \$5/fixture
LED Porch (wall mounted)	Custom	Up to \$5/fixture
LED Torchiere	Custom	Up to \$5/fixture
LED Ceiling Mount	Custom	Up to \$5/fixture
LED Close to Ceiling Mount	Custom	Up to \$5/fixture
LED Decorative Pendant	Custom	Up to \$5/fixture
LED Inseparable SSL - Other	Custom	Up to \$5/fixture
LED Energy Star Security	Custom	Up to \$5/fixture
LED Energy Star Wall Sconces	Custom	Up to \$5/fixture
LED Wrapped Lens	Custom	Up to \$5/fixture

<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>
<b>Lighting Controls:</b>	<b>Wireless and Hard-Wired Only</b>	<b>No Change</b>
Occupancy Sensors (Turning fixtures off in Existing facilities only  Wall Mounted Remote Mounted (e.g., ceiling)	Up to \$20 per control Up to \$35 per control	No Change No Change
Day Lighting Dimmers – All facilities Fluorescent, HID or LED Fixtures	For both fluorescent fixtures, HID or Fluorescent Hi-Bay, and LED controls - \$45 per fixture controlled.	No Change
Hi-Low Controls - All facilities: Fluorescent, HID or LED Fixtures	For all Hi-Low Controls, \$35 per fixture controlled	No Change

Technology Classification	Current FY 2015 Incentive	Proposed FY 2016 Incentive
Performance Based Lighting incentives for indoor and outdoor installations (attached to building)	<p>Code changed to ASHRAE 90.1.2007</p> <p>Available for New Construction Only. No longer available for Complete Renovation.</p> <p>New construction additions (add-ons) to an existing building are eligible for Performance incentives</p> <p>Existing buildings, regardless of connected load, are eligible for Prescriptive Lighting incentives and are not eligible for Performance incentives. However, performance based lighting incentives are available for Sandy Relief participants.</p>	<p>No Change</p> <p>Available for New Construction and Existing Buildings. Areas within existing building eligible only if existing lighting completely removed.</p> <p>No Change</p> <p>Existing buildings eligible for performance lighting incentives for areas where existing lighting is completely removed.</p> <p>Sandy enhancements discontinued</p>
Performance Based Lighting incentives for indoor/outdoor installations (attached to building) – Existing Construction	<p>Available for New Construction Only. No longer available for Complete Renovation. However, performance based lighting incentives are available for Sandy Relief participants with existing buildings.</p> <p>New construction additions (add-ons) to an existing building are eligible for Performance incentives</p>	<p>Existing buildings eligible for performance lighting incentives for areas where existing lighting is completely removed.</p> <p>Sandy enhancements discontinued</p>
<b>Refrigeration Controls:</b>		
Door Heater Control	\$50 per control	No Change
Electric Defrost Control	\$50 per control	No Change
Evaporator Fan Control	\$75 per control	No Change
Novelty Cooler Shutoff	\$50 per control	No Change

<b>Refrigeration Doors/Covers:</b>		
Energy-Efficient Doors for open Refrigerated Doors/Covers	\$100 per door	No Change
Aluminum Night Curtains for Open Refrigerated Cases	\$3.50 per linear foot	No Change
<b>Technology Classification</b>	<b>Current FY 2015 Incentive</b>	<b>Proposed FY 2016 Incentive</b>
<b>Food Service:</b> Commercial Dishwashers – Equipment must be qualified by the current version* of ENERGY STAR® or CEE* <sup>1</sup>		
Under Counter	\$400 per unit	No Change
Door Type	\$700 per unit	No Change
Single Tank Conveyor	\$1,000 per unit	No Change
Multiple Tank Conveyor	\$1,500 per unit	No Change
<b>Food Service:</b> Commercial Combination Oven/Steamer (Electric) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must meet the idle energy rate requirements in the Electric Combination Oven/Steamer Table, utilizing American Society for Testing and Materials (ASTM) F2861.</li> <li>○ Must have a cooking energy efficiency of 50 percent or greater in steam mode and 70 percent cooking energy efficiency or greater in convection mode, utilizing (ASTM) F2861.</li> <li>○ Combination oven/steamer pan capacity based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.</li> </ul> </li> </ul>		
<b>Pan Capacity</b>	\$1,000 per oven	No Change
Less than 15 pans		
15-28 pans		
Greater than 28 pans		
<b>Food Service:</b> Commercial Combination Oven/Steamer (Gas) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a cooking energy efficiency of 38 percent or greater in steam mode and 44 percent or greater in convection mode, utilizing ASTM F2861.</li> </ul> </li> </ul>		

\* Version in place at time of application submittal

<ul style="list-style-type: none"> <li>○ Must meet the idle energy rate requirements in the Gas Commercial Combination Oven/Steamer Table, utilizing ASTM F2861.</li> <li>○ Combination oven/steamer pan capacity on based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.</li> </ul>		
<b>Pan Capacity</b> Less than 15 pans 15-28 pans Greater than 28 pans	\$750 per oven	No Change
<b>Food Service:</b> Commercial Convection Oven (Electric) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (potato) cooking energy efficiency of 70 percent or more, utilizing ASTM F1496.</li> <li>○ Full-size electric ovens must have a tested idle energy rate of 1.6 kW or less, utilizing ASTM F1496.</li> <li>○ Half-size electric ovens must have a tested idle energy rate of 1.0 kW or less, utilizing ASTM F1496.</li> </ul> </li> </ul>		
Commercial Convection Oven (Electric)	\$350 per oven	No Change
<b>Food Service:</b> Commercial Convection Oven (Gas) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (potato) cooking energy efficiency of 44 percent or greater and an idle energy rate of 13,000 Btu/h or less, utilizing ASTM F1496.</li> </ul> </li> </ul>		
Commercial Convection Oven (Gas)	\$500 per oven	No Change
<b>Food Service:</b> Commercial Rack Oven (Gas) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested baking energy efficiency of 50 percent or greater, utilizing ASTM F2093.</li> </ul> </li> </ul>		

Commercial Rack Oven Single (Gas)	\$1,000 per single oven	No Change
Commercial Rack Oven Double (Gas)	\$2,000 per double oven	No Change
<b>Food Service:</b>		
Commercial Conveyor Oven (Gas)		
<ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested baking energy efficiency of 42 percent or greater, utilizing ASTM F1817.</li> <li>○ Small conveyor ovens with total conveyor width 25 inches or less must have a tested idle energy rate that is 29,000 Btu/h or less, utilizing ASTM F1817.</li> <li>○ Large conveyor ovens with total conveyor width greater than 25 inches must have a tested idle energy rate that is 57,000 Btu/h or less, utilizing ASTM F1817.</li> <li>○ Multiple-deck oven configurations are paid per qualifying oven deck.</li> </ul> </li> </ul>		
Commercial Conveyor Oven – Small (Conveyor width 25in. or less, Gas).	\$500 per deck	No Change
Commercial Conveyor Oven – Large (Conveyor width greater than 25in., Gas).	\$750 per deck	No Change
<b>Food Service:</b>		
Commercial Fryer (Electric)		
<ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load cooking energy efficiency of 80 percent or greater and an idle energy rate of 1.0 kW or less, utilizing ASTM F1361.</li> <li>○ Multiple vat configurations are paid per qualifying vat.</li> </ul> </li> </ul>		
Commercial Fryer (Electric)	\$200 per vat	No Change
<b>Food Service:</b>		
Commercial Fryer (Gas)		
<ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must meet a tested heavy load cooking energy efficiency of 50 percent or greater and an idle energy rate of 9,000 Btu/h or less, utilizing ASTM F1361.</li> </ul> </li> </ul>		

<ul style="list-style-type: none"> <li>○ Multiple vat configurations are paid per qualifying vat.</li> </ul>		
Commercial Fryer (Gas)	\$749 per vat	No Change
<p><b>Food Service:</b> Commercial Large Vat Fryer (Electric)</p> <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (French fry) cooking energy efficiency of 80 percent or greater, utilizing ASTM F2144.</li> <li>○ Multiple vat configurations are paid per qualifying vat.</li> </ul> </li> </ul>		
Commercial Large Vat Fryer (Electric)	\$200 per vat	No Change
<p><b>Food Service:</b> Commercial Large Vat Fryer (Gas)</p> <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (French fry) cooking energy efficiency of 50 percent or greater, utilizing ASTM F2144.</li> <li>○ Multiple vat configurations are paid per qualifying vat.</li> </ul> </li> </ul>		
Commercial Large Vat Fryer (Gas)	\$500 per vat	No Change
<p><b>Food Service:</b> Commercial Griddle (Electric)</p> <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load cooking energy efficiency of 70 percent or greater and an idle energy rate of 355 watts per square foot of cooking surface or less, utilizing ASTM F1275.</li> </ul> </li> </ul>		

Commercial Griddle (Electric)	\$300 per griddle	No Change
<b>Food Service:</b> Commercial Griddle (Gas) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load cooking energy efficiency of 38 percent or greater and an idle energy rate of 2,650 Btu/h per square foot of cooking surface or less, utilizing ASTM F1275.</li> </ul> </li> </ul>		
Commercial Griddle (Gas)	\$125 per griddle	No Change
<b>Food Service:</b> Commercial Steam Cooker (Electric) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (potato) cooking energy efficiency of 50 percent or greater, utilizing ASTM F1484.</li> </ul> </li> </ul>		
Commercial Steam Cooker (Electric)	\$1,250 per steamer	No Change
<b>Food Service:</b> Commercial Steam Cooker (Gas) <ul style="list-style-type: none"> <li>○ Equipment must be qualified by the current version of ENERGY STAR® or CEE or ASTM criteria defined below.</li> <li>○ ASTM Criteria: <ul style="list-style-type: none"> <li>○ Must have a tested heavy load (potato) cooking energy efficiency of 38 percent or greater, utilizing ASTM F1484.</li> </ul> </li> </ul>		
Commercial Steam Cooker (Gas)	\$2,000 per steamer	No Change
<b>Food Service:</b> Insulated Holding Cabinets <ul style="list-style-type: none"> <li>○ Must meet CEE Tier II specification.</li> <li>○ Does not include cook and hold equipment.</li> <li>○ All measures must be electric hot food holding cabinets that are fully insulated and</li> </ul>		

have solid doors.		
Insulated Holding Cabinet, Full Size	\$300 per unit	No Change
Insulated Holding Cabinet, ¾ Size	\$250 per unit	No Change
Insulated Holding Cabinets, ½ Size	\$200 per unit	No Change
<b>Food Service:</b> Commercial Glass Door Refrigerators		
<ul style="list-style-type: none"> <li>○ The refrigeration system must be built-in (packaged).</li> <li>○ Cases with remote refrigeration systems do not qualify.</li> <li>○ Must meet ENERGY STAR® Version 2.0 specification.</li> </ul>		
ENERGY STAR® Glass Door Refrigerators – Internal volume <15 ft³	\$75 per unit	No Change
ENERGY STAR® Glass Door Refrigerators – Internal volume 15 ft³–29.9 ft³	\$100 per unit	No Change
ENERGY STAR® Glass Door Refrigerators – Internal volume 30 ft³–49.9 ft³	\$125 per unit	No Change
ENERGY STAR® Glass Door Refrigerators – Internal volume ≥ 50 ft³	\$150 per unit	No Change
<b>Food Service:</b> Commercial Solid Door Refrigerators		
<ul style="list-style-type: none"> <li>○ The refrigeration system must be built-in (packaged).</li> <li>○ Cases with remote refrigeration systems do not qualify.</li> <li>○ ENERGY STAR® specification Version 1.0 refrigerators do not qualify.</li> <li>○ Must meet ENERGY STAR® Version 2.0 specification.</li> </ul>		
ENERGY STAR® Solid Door Refrigerators – Internal volume <15 ft³	\$50 per unit	No Change
ENERGY STAR® Solid Door Refrigerators – Internal volume 15 ft³–29.9 ft³	\$75 per unit	No Change

ENERGY STAR® Solid Door Refrigerators – Internal volume 30 ft <sup>3</sup> –49.9 ft <sup>3</sup>	\$125 per unit	No Change
ENERGY STAR® Solid Door Refrigerators – Internal volume ≥ 50 ft <sup>3</sup>	\$200 per unit	No Change
<b>Food Service:</b> Commercial Glass Door Freezers		
<ul style="list-style-type: none"> <li>○ The refrigeration system must be built-in (packaged).</li> <li>○ Cases with remote refrigeration systems do not qualify.</li> <li>○ Must meet ENERGY STAR Version 2.0 specification.</li> </ul>		
ENERGY STAR® Glass Door Freezers – Internal volume <15 ft <sup>3</sup>	\$200 per unit	No Change
ENERGY STAR® Glass Door Freezers – Internal volume 15 ft <sup>3</sup> –29.9 ft <sup>3</sup>	\$250 per unit	No Change
ENERGY STAR® Glass Door Freezers – Internal volume 30 ft <sup>3</sup> –49.9 ft <sup>3</sup>	\$500 per unit	No Change
ENERGY STAR® Glass Door Freezers – Internal volume ≥ 50 ft <sup>3</sup>	\$1,000 per unit	No Change
<b>Food Service:</b> Commercial Solid Door Freezers		
<ul style="list-style-type: none"> <li>○ The refrigeration system must be built-in (packaged).</li> <li>○ Cases with remote refrigeration systems do not qualify.</li> <li>○ ENERGY STAR® specification Version 1.0 freezers do not qualify.</li> <li>○ Must meet ENERGY STAR® Version 2.0 specification.</li> </ul>		
ENERGY STAR® Solid Door Freezers – Internal volume <15 ft <sup>3</sup>	\$100 per unit	No Change
ENERGY STAR® Solid Door Freezers – Internal volume 15 ft <sup>3</sup> –29.9 ft <sup>3</sup>	\$150 per unit	No Change
ENERGY STAR® Solid Door Freezers – Internal volume 30 ft <sup>3</sup> –49.9 ft <sup>3</sup>	\$300 per unit	No Change
ENERGY STAR® Solid Door Freezers – Internal volume ≥ 50 ft <sup>3</sup>	\$6000 per unit	No Change

**Food Service:****Commercial Ice Machines**

- Ice machines must be tested in accordance with the Air Conditioning and Refrigeration Institute (ARI) Standard 810.
- Includes machines generating ice cubes that are 60 grams (2 oz.) or lighter. It also includes flaked, crushed and fragmented ice makers.
- Only air-cooled machines (self-contained, ice making heads, or remote condensing) qualify.
- The entire ARI tested ice making system must be purchased.
- Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor unit.
- The efficiency specifications for the two qualifying tiers are equivalent to ENERGY STAR® or Super-Efficient.

ENERGY STAR® Ice Machine (101–200 lbs/day)	\$50 per unit	No Change
ENERGY STAR® Ice Machine (201–300 lbs/day)	\$50 per unit	No Change
ENERGY STAR® Ice Machine (301–400 lbs/day)	\$75 per unit	No Change
ENERGY STAR® Ice Machine (401–500 lbs/day)	\$75 per unit	No Change
ENERGY STAR® Ice Machine (501–1000 lbs/day)	\$125 per unit	No Change
ENERGY STAR® Ice Machine (1001–1500 lbs/day)	\$200 per unit	No Change
ENERGY STAR® Ice Machine (greater than 1500 lbs/day)	\$250 per unit	No Change
Super-Efficient Ice Machine (101–200 lbs/day)	\$100 per unit	No Change
Super-Efficient Ice Machine (201–300 lbs/day)	\$100 per unit	No Change
Super-Efficient Ice Machine (301–400 lbs/day)	\$150 per unit	No Change

Super-Efficient Ice Machine (401–500 lbs/day)	\$150 per unit	No Change
Super-Efficient Ice Machine (501–1000 lbs/day)	\$250 per unit	No Change
Super-Efficient Ice Machine (1001–1500 lbs/day)	\$400 per unit	No Change
Super-Efficient Ice Machine (greater than 1500 lbs/day)	\$500 per unit	No Change

Note: The incentives identified above may be lowered with the approval of the Office of Clean Energy.

## **Delivery Methods**

All of New Jersey’s Commercial & Industrial Clean Energy Programs will be managed by TRC as the Commercial & Industrial Market Manager (“Market Manager”). The Programs will be offered on a consistent program design and implementation basis to ensure consistency across the state.

As new technologies are introduced and prices for measures change, sometimes in response to program offerings, program managers will continuously monitor technologies and costs and adjust program incentives accordingly. The Market Manager will propose adjustments to program offerings based on program experience, the results of any evaluations, program and market studies as well as other state/regional market research, and current pilot/demonstration projects.

## **Goals**

New Construction, completed jobs	Refer to Appendix D
Existing Construction, completed jobs	Refer to Appendix D

## **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all C&I program participants. All applications are reviewed upon receipt to verify adherence to eligibility requirements. In addition, all technical information submitted in support of the application is reviewed to confirm measure qualification and to verify the incentive calculation. Applicant supplied information and Market Manager performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

A minimum of 10% of all incentive applications are selected for pre-installation and/or post-installation inspection by a Market Manager inspector (or one of its subcontractors). Inspections include a site visit to verify customer eligibility and energy efficient measure technical specifications that result in a verification of the incentive calculation. A field inspection report is prepared and maintained in the project file for future verification.

## **Budget**

A detailed state-wide budget for all of New Jersey’s Clean Energy Commercial & Industrial Programs is attached in Appendix C. The Program will be offered on a consistent program design and implementation basis to ensure consistency across the State.

## **Minimum Requirements for Program Administration**

Not Applicable.

# Local Government Energy Audit (LGEA) Program

## Program Description

The LGEA program provides a free energy audit of facilities of eligible entities (“Applicant”). The goal of the energy audit is to provide Applicants with information on how their facilities use energy, identify energy conservation measures (ECMs) that can reduce energy use, and put Applicants in a position to implement these ECMs. The energy audit also guides Applicants towards appropriate NJCEP equipment incentive programs in order to receive financial incentives for implementing the ECMs.

## Target Markets and Eligibility

LGEA is open to the following eligible entities that contribute to the Societal Benefits Charge fund through either their gas and/or electric utilities:

- “State contracting agency” as defined by N.J.S.A. 52:34-35
- “Public agency” as defined by N.J.S.A. 52:35A-1
- Local governments per Local Public Contracts Law (N.J.S.A. 40A:11-1)
- Local governments per Public School Contracts Law (N.J.S.A. 18A:18A-1)
- County colleges per County College Contracts Law (N.J.S.A.18A:64A-25.1)
- NJ State Colleges or State Universities per State College Contracts Law (N.J.S.A.18A:64-52)
- Nonprofit charitable organizations per Section 501(c)(3) of the Internal Revenue Code

Applicants may apply for an energy audit for buildings that they own, although a building may still be eligible if the Applicant leases the building and provides supporting documentation from the building owner before having an energy audit performed.

Buildings must demonstrate a peak demand of 200kW or greater in the most recent 12 months of electric utility bills (inclusive of all accounts in the building) in order to qualify. Buildings that do not meet this requirement will be recommended to apply for the Direct Install program. TRC will have the ability to grant exceptions to the kW requirement, on a per building basis, if the Applicant can demonstrate they meet or identify with at least one of the following:

- ESIP is an anticipated source of funding
- ERB is an anticipated source of financing
- Master or campus metering arrangement on-site, where demand of any one building is unknown
- Already participated in Direct Install
- Demonstrates an interest in measures that are not available under the Direct Install program, such as building shell measures (e.g. insulation, windows, etc.)

LGEA is available to buildings never previously audited under the program, as well as buildings that have received an audit so long as the audit conducted under the LGEA program is at least three (3) years old (measured from the audit report approval date). All program requirements must be met in order for an entity to qualify for a second energy audit.

## **Program Offering**

This program is implemented as follows:

- The Applicant will submit an application to the program identifying the energy audit option available that best addresses their needs, as well as building type, square footage, utility account information and associated bills, and other applicable energy usage information for each building to be audited.
- When an Applicant is enrolled in LGEA and participating in any NJCEP equipment incentive programs at the same time for the same facility(ies), TRC will assess the impact that the work may have on the energy audit and require the applicant take one of the below actions, depending on the level of impact:
  - Proceed with energy audit and equipment upgrades (minimal impact)
  - Complete equipment upgrades prior to proceeding with energy audit process or vice versa (moderate impact)
  - Cancel energy audit application (significant impact)
- If the initial program eligibility and application requirements have been met and the Applicant is approved to have an energy audit performed under this program TRC will issue an Approval Letter/Notice to Proceed to the Applicant.
- The energy audit scope of work is based on Section 3.8.1 of RFP 16-X-23938, dated April 21, 2015, and is consistent with ASHRAE Level 2<sup>2</sup> audit, except for

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<sup>2</sup> From the ASHRAE Handbook:

Level I – Walk-through Assessment – Assess a building’s energy cost and efficiency by analyzing energy bills and conducting a brief survey of the building. A Level I energy analysis will identify and provide a savings and cost analysis of low-cost/no-cost measures. It will also provide a listing of potential capital improvements that merit further consideration, along with an initial judgment of potential costs and savings.

Level II – Energy Survey and Analysis – This includes a more detailed building survey and energy analysis. A breakdown of energy use within the building is provided. A Level II energy analysis identifies and provides the savings and cost analysis of all practical measures that meet the owner’s constraints and economic criteria, along with a discussion of any effect on operation and maintenance procedures. It also provides a listing of potential capital-intensive improvements that require more thorough data collections and analysis, along with an initial judgment of potential costs and savings. This level of analysis will be adequate for most buildings and measures.

Level III – Detailed Analysis of Capital-Intensive Modifications – This level of analysis focuses on potential capital-intensive projects identified during Level II and involves more detailed field data

lighting which is Level 3. Audit scope may vary slightly depending on the specific needs and circumstances of the Applicant within limitations of the RFP. ASHRAE Level 1 audits are not included in the program, but TRC will conduct a high level assessment of on-site generation potential.<sup>3</sup>

- In order to provide compatibility with the Energy Savings Improvement Program (ESIP) and Energy Resilience Bank (ERB) initiatives, the energy audit scope will include an evaluation of energy related water conservation measures, demand response potential, as well as the estimated greenhouse gas reduction for each recommended measure.
- TRC will perform the audit, prepare an audit report, and notify the Applicant when the final audit report is completed and all program requirements have been met. In addition, TRC will meet with the Applicant to discuss audit findings and next steps for implementing measures recommend in the report.

The LGEA will provide audits up to a value of \$100,000 per program year, per Applicant. For larger Applicants, if the audit cost exceeds, or is expected to exceed \$100,000, TRC will work with AEG and Board Staff to determine and authorize a larger cost cap, not to exceed \$300,000. Approval of a higher cost cap will be contingent on a commitment from the Applicant to pursue ESIP (by selecting intent to pursue ESIP on the application).

Services offered under LGEA do not count towards the fiscal year incentive cap (see *Program-Wide Entity Caps*, page 6).

### **Goals and Energy Savings**

LGEA goals can be found in Appendix D.

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all LGEA participants. All applications are reviewed upon receipt to verify adherence to eligibility requirements and technical information. Applicant-supplied information is entered into the database and files are created for all documents, including project correspondence. TRC will perform internal quality assurance reviews on audit reports. On a random basis, AEG will conduct on-site facility inspections to verify building and audit data. The inspection rate is up to 20% of

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gathering and engineering analysis. It provides detailed project cost and savings information with a high level of confidence sufficient for major capital investment decisions.

<sup>3</sup> ASHRAE Level 1 audits, modified scopes to address specific needs (e.g. feasibility of combined heat and power, renewable energy, etc.), and refresh of audits previously completed by TRC will be evaluated for inclusion in the program at a later time subject to pricing approval by the BPU.

audits but may be exceeded at the discretion of AEG or BPU. AEG may perform a review of the completed energy audit report(s) prior to release of payment to TRC.

## **Direct Install Program**

### **Background**

Under the Direct Install Program, the unique needs of New Jersey's small business community will be addressed.

### **Program Description**

The Direct Install Program offers eligible small business customers the opportunity to retrofit existing inefficient equipment with more energy efficient systems. Municipal and other local government agencies that have successfully participated in the Local Government Energy Audit Program are also eligible. The Program provides turn-key services including technical assistance, financial incentives, education to encourage the early replacement of existing equipment with high efficiency alternatives, as well as the installation of new equipment. A variety of electric and natural gas energy using systems are eligible for improvements including lighting, controls, refrigeration, HVAC, motors, and variable speed drives. The Program strives to include a comprehensive package of cost-effective energy efficiency improvements in each customer's project.

### **Target Market and Eligibility**

The Direct Install Program is open to all eligible commercial and industrial customers whose peak demand did not exceed 200 kW in any of the preceding twelve months. The small business sector targeted by the Program tends to have a historical reluctance or inability to fund energy efficiency improvements. In addition, their small size tends to exclude them as beneficiaries of services from other energy service providers.

### **Program Offerings and Incentives**

The Direct Install Program provides turn-key services and offers customers a single source of technical assistance, financial incentives and installation services. The Program will be delivered across the state by multiple regional Participating Contractors who have been selected via a Request for Proposal (RFP) process to deliver installation and related services. Participating Contractors will be responsible for promotion of the program and

providing program installation services in addition to reporting to TRC on a regular basis. The Program has developed comprehensive listings of unit pricing for all eligible equipment. Eligible equipment categories include but may not be limited to:

- Energy efficiency lamps, ballast and fixtures including Super T8 and T5 Lamp and Ballast Retrofit
- Energy Star approved LED lamps
- Design Lights Consortium (DLC) Qualified LED Fixtures
- New High Bay T5 & T8 fixtures to replace older HID's
- HVAC & HW controls
- LED Exit Signs
- Commercial CFL Lamps
- Occupancy Sensors
- VFDs
- ENERGY STAR Programmable Thermostats
- ENERGY STAR/High Efficiency Boilers (up to 1,500,000 Btuh)\*
- and Furnaces (up to 140,000 Btuh)\*\*
- Oil to Natural Gas Conversions allowed for existing furnaces and boilers
- High Efficiency Cooling Systems
- ENERGY STAR Products
- Refrigeration Measures
- Other measures may be added after evaluation by the Program

\* In cases where the existing boiler is oversized, the existing larger boiler may be evaluated and considered for replacement as long as the replacement unit does not exceed 1,500,000 Btuh.

\*\* In cases where the existing furnace is oversized, the existing larger furnace may be evaluated and considered for replacement as long as the replacement unit does not exceed 140,000 Btuh

In K-12 public and private schools where the Participating Contractor has assessed an existing boiler that does not exceed 3,000 kBtu/h in output heating capacity, the Participating Contractor will have the ability to propose a new system that comprises multiple/modular boilers in series as an appropriate replacement, based on the total output heating capacity and efficiency of the existing boiler. A minimum efficiency level of 93% will be enforced.

The Participating Contractor will be solely responsible for boiler project design, providing proper training to the applicant, and also developing and providing load calculations to the applicant and Market Manager supporting the proposed system. Further, the Participating Contractor will be required to work with township officials to ensure the installation meets all current local and state codes and standards.

Customer incentives are offered to reduce the cost of installing energy efficient equipment and are based on the total installed cost of the retrofits. Qualifying C&I customers are eligible for incentives up to 70% of the installed cost of cost-effective, approved measures with a project incentive cap of \$125,000. Direct Install participants will also be held to a fiscal year entity cap of \$250,000 per entity. Incentives are paid to the installation contractor and the contractor will invoice the customer for the remaining balance of the installation.

The Direct Install program will investigate additional/enhanced incentives for distressed communities such as Urban Enterprise Zones (UEZ) and work with Board Staff to determine if additional incentives are appropriate.

The Direct Install program shall allow religious facilities\*\*\* which are metered residentially to participate in Direct Install. Historically, the program has handled this issue on a case by case basis through the appeals process. Applicant will still be required to meet all other program requirements.

\*\*\* Refers to buildings that are used as places of worship. This includes churches, temples, mosques, synagogues, meetinghouses, or any other buildings that primarily function as a place of religious worship. Also applies to buildings that may be associated with a religious organization, such as schools, or buildings used primarily for other community activities.

Direct Install Participating Contractors are responsible for the following program components:

- Marketing to eligible customers (marketing materials to be approved by the Market Manager);
- Performing site visits and collecting all equipment and energy data, analyzing information and identifying opportunities for efficiency improvements, and making recommendations to the customer;
- Presentation of comprehensive recommendations to the customer, including costs and savings estimates, and obtaining customer agreement to proceed with installation. The customer agreement will be a standard agreement approved by the Program;
- Preparation and submission of completed customer incentive applications, including pre-implementation report to Market Manager for review and approval;
- Installation of eligible measures per customer agreement, including all appropriate permitting;
- Submission of post-implementation report, including payment request. The Market Manager will review all post-implementation reports and either forward to OCE as approved for payment or send back to the contractor with questions or issues.

- Tracking and reporting on program activity including, but not limited to:
  - Customer name, address and contact person
  - Customer account number(s)
  - Project type (electric, gas, both)
  - Business type (SIC or NAICS code)
  - Inventory of equipment to be replaced, including quantity, type, location, hours of use
  - Estimates of energy (kWh &/or therms) and demand (kW) savings and total project costs
- Proper disposal of all removed equipment.
- Any reporting requirements identified by the Market Manager (e.g. ARRA reporting)

### **Program Goals**

Direct Install Program goals can be found in Appendix D.

### **External Evaluation**

Ongoing evaluation services will be provided by the OCE through its external evaluation vendor.

### **Program Budget**

A detailed state-wide budget is shown in appendix C.

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all Direct Install Program participants. All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence

### **Delivery Methods**

The Direct Install Program will be managed by the C&I Market Manager and will be delivered by a competitively selected pool of subcontractors. The program will be offered on a consistent program design and implementation basis to ensure consistency across the state.

## **SEP - EE Programs for Non Investor Owned Utility Customers**

Funding may be made available from the Department of Energy for a State Energy Program which would allow for participation in the Direct Install program by oil and propane customers and those who are served by municipal and rural electric cooperatives (non-investor owned electric utilities).

Funds will be available on a first-come, first-served basis. The Market Manager's fees to implement the program (e.g. application processing, inspections, etc.) will be charged to New Jersey's Clean Energy Program using existing program contract price lines.

Other than expiration dates, existing program guidelines and rules related to Direct Install will apply. Expiration dates are subject to the timeframe defined in the Grant Award.

## **Pay for Performance**

### **Program Description**

The C&I Pay for Performance Program takes a comprehensive, whole building approach to energy efficiency in existing commercial and industrial buildings. Similar to performance contracting programs offered in other states, this Program links incentives directly to energy savings and includes a measurement and verification (M&V) component to ensure that the estimated savings levels are achieved. This market-based program relies on a network of Program Partners, selected through a Request for Qualifications process. Once approved, Partners provide technical services to program participants. Certain entities who have their own in house professional engineering expertise can become a Partner for their own facility. Their staff will be oriented through a fast-track process. This option is geared toward larger customers. This opportunity will be evaluated on a case-by-case basis by the Market Manager. All other Program requirements will be in effect. Partners are required to strictly follow program policy but will work under contract to owners, acting as their “energy expert”. Partners are required to develop an Energy Reduction Plan for each project. The Energy Reduction Plan includes the whole-building technical analysis component of a traditional energy audit along with a financial plan for funding the energy efficiency improvements and a construction schedule for installation. A set minimum energy reduction goal is required of all projects and is based on an approved whole-building energy simulation. The achievement of the energy reduction goal is verified using post-retrofit billing data and EPA Portfolio Manager Methodology.

### **Target Market and Eligibility**

The C&I Pay for Performance Program is open to existing commercial and industrial buildings with peak demand of 200 kW or greater in any of the preceding twelve months. This participation threshold is 100 kW for multifamily facilities only. Market Manager reserves the right to approve projects that are within 10% of the minimum 200 kW threshold (100 kW for multifamily facilities). In addition, any multifamily facility which does not meet the eligibility requirements of the New Jersey’s Clean Energy Home Performance Program is eligible to participate in the Pay for Performance Program. Due to the comprehensive design of this program, projects may not apply for incentives in other NJCEP programs while enrolled in Pay for Performance for the same facility(ies). All eligible measures must be considered in Pay for Performance, with the exception of on-site generation (e.g. CHP and Fuel Cell program). Additional exceptions may be considered by Market Manager on a case by case basis.

Participants are required to work with an approved Pay for Performance Partner to develop the Energy Reduction Plan and facilitate installation of the recommended package of energy efficiency improvements. In order to receive the full suite of incentives offered in the Pay for Performance Program, the submitted Energy Reduction

Plan must include a package of energy efficiency measures that achieve the minimum performance threshold or Energy Target (i.e., 15% of total building source energy consumption). A custom savings threshold is offered to customers whose annual energy consumption is heavily weighted to manufacturing and process loads. This approach will be reviewed on a case-by-case basis. In order to be considered for a custom savings threshold (i.e., other than a 15% reduction in total building source energy consumption, the project must involve:

- A manufacturing facility(including such industries as plastics and packaging, chemicals, petrochemicals, metals, paper and pulp, transportation, biotechnology, pharmaceutical, food and beverage, mining and mineral processing, general manufacturing, and equipment manufacturers), data centers, and hospitals.
- Manufacturing and/or process-related loads, including data center consumption, consume 50% or more of total facility energy consumption. For hospitals, 50% or more of the gross floor area must be used for general medical and surgical services and 50% or more of the licensed beds must provide acute care services.
- Energy target for projects meeting the above criteria will be 4% of total building source energy consumption.

Market Manager, in collaboration with the Office of Clean Energy, reserves the right to consider alternative minimum threshold savings requirement in these types of situations.

In addition, the Energy Reduction Plan must include a comprehensive mix of measures, specifically lighting cannot make up more than 50% of the total projected savings except as defined below:

Lighting savings up to 70% of total projected savings can be considered but the minimum Energy Target will increase proportionately as demonstrated in Table 1 below. Incentive structure remains the same as detailed further in this document.

All other Pay for Performance Program rules apply.

**Table 1**

Lighting Savings	Minimum Source Energy Target
51%	16%
52%	17%
53%	18%
54%	19%
55%	20%
56%	21%
57%	22%
58%	23%
59%	24%
60%	25%
61%	26%
62%	27%
63%	28%
64%	29%
65%	30%
66%	31%
67%	32%
68%	33%
69%	34%
70%	35%

The 15% minimum energy reduction will be based on source energy, which is consistent with EPA’s Portfolio Manager benchmarking software. Pre-approval of the Energy Reduction Plan is required for all projects, which may include a site inspection. An Energy Reduction Plan must be approved by the program and an approval letter sent to the customer in order for incentives to be committed. Upon receipt of an Energy Reduction Plan, all project facilities must be pre-inspected. Measures installed prior to pre-inspection of the facility shall not be included as part of the ERP scope of work and will not be eligible for incentives. Measure installation undertaken prior to ERP approval, but after pre-inspection, is done at the customer’s own risk. In the event that an Energy Reduction Plan is rejected by the program, the customer will not receive any incentives.

Projects that cannot identify efficiency improvements that meet the minimum performance level will be referred to the appropriate SmartStart Buildings Program(s).

The Pay for Performance Program offers two types of incentives which will be disbursed upon satisfactory completion of three Program milestones. The first incentive type is related to completion of the Energy Reduction Plan. The second incentive type is performance-based and is related to the installation of recommended measures. The performance-based incentive will be paid out in two phases – the first at the completion of installation of the recommended measures, the second upon submittal of a Post Construction Benchmarking Report that verifies the level of savings achieved. These incentives are explained below in more detail.

## Definition of a Project

A project is defined as a single, detached commercial, industrial, or multifamily building. The entire building must be analyzed under the Program and achieve a 15% source energy reduction.

Campuses/Multiple Buildings: The Program will also service campus-style facilities. A campus-style facility is one where ALL the following conditions apply:

- There are two or more P4P-eligible buildings that are located on adjacent properties
- Buildings are owned by a single entity
- AND one of the following:
  - Buildings are master-metered
  - Buildings are served by a common heating and/or cooling plant.
  - Buildings share walls and/or are connected via a physical structure.

Campus facilities are encouraged to participate in the C&I Sector Specific offering to assist in prioritizing each building for energy efficiency improvements. The Sector Specific offering will provide benchmarking services for all buildings and assist the building owner(s) in developing a multi-year plan for addressing the energy efficiency improvements across the campus. Through this plan, building owners can schedule major building improvement projects over several years to maximize energy efficiency as well as taking full advantage of Clean Energy Program incentives. Once a set of buildings within a campus is selected to be included in the P4P Program, they will be addressed in a single Energy Reduction Plan (ERP).

For administrative purposes of tracking technical reviews and site inspections, each building addressed within a multi-building ERP will be considered a separate project. This is necessary because although a single ERP will include all of the necessary project information, the review of each of the building simulation models will require individual attention. Similarly, site inspections will take considerably longer for multi-building projects as each building will require an inspection. Where applicable, administrative tracking will be associated with any approved sampling of building simulation models (i.e., if a single model is developed to represent several similar buildings).

Multifamily Buildings: The Program will also accommodate certain types of multifamily buildings. Specifically, multifamily customers that fit the following description will be able to participate in the Pay for Performance program:

- High-rise/Mid-rise buildings

- High-rise/Mid-rise apartment complexes are apartments, cooperative, and/or condominiums structures that are 4-stories or more above ground.
- Low-rise, garden-style buildings with central heating and/or cooling or master meters
  - Garden-style apartment complexes consist of multiple low-rise apartments, cooperatives, condominiums and/or townhouses that are 3 stories or less, surrounded by landscaped grounds.
  - Central heating and/or cooling means that each individual unit *does not* contain its own heating or cooling systems. The building must contain a central heating and/or cooling plant that serves multiple buildings and/or units.
  - Master meters means electric and/or gas meters that serve multiple buildings (rather than individual units or a single building).

Low-rise (and mid-rise where appropriate), garden-style complexes will be treated as one project under the Pay for Performance program. In other words, if there are 10 garden-style buildings that are part of one multifamily community, all 10 will be aggregated into one P4P application. The 100 kW participation threshold will be met through this aggregation (including common area and in-unit billing). The 15% savings requirement (as well as all other program requirements) will be achieved in aggregate, as well. Only one set of incentives will be paid per project, and all incentive caps apply. Please see logic tree at the end of this Pay for Performance section for guidance on Program eligibility. TRC will coordinate with the Residential Market Manager to make sure that multifamily customers are served by New Jersey’s Clean Energy Programs.

Multifamily complexes and campus-style facilities are viewed as a single entity that is eligible for Pay for Performance incentives subject to the annual incentive caps of \$1 million per electric account and \$1 million per gas account to the campus, not to exceed \$2 million per project.

### **Program Offerings and Incentives**

The Pay for Performance Program has developed a network of Program Partners who can provide the technical, financial, and construction-related services necessary for completing the Energy Reduction Plan. One of the goals of this program is to expand the network of energy efficiency firms that can provide these services in order to make this Program accessible for all eligible commercial and industrial customers. This market-based approach is a key component of market transformation by creating “green collar” jobs and helping to develop the workforce necessary to achieve ambitious long-term energy savings targets. The Program has enrollment periods during the year where firms that are interested in becoming Program Partners are required to submit an application, including case studies and resumes showing recent successful experience and expertise in C&I energy efficiency projects. Applications are reviewed by a technical evaluation

panel who will determine if an applicant meets the criteria to become an approved program Partner. Once approved, Partners must attend a program orientation session before being able to bring projects into the Program.

Program incentives are performance-based and not specifically tied to the project cost or the recommended energy efficiency measures. Disassociating incentives from project cost is a key program design decision as it streamlines program administration by eliminating the collection of bid documents, construction contracts and change orders. This incentive structure also provides the benefit of allowing Program Partners to estimate and explain incentives to prospective participants as part of the program sales process. The performance-based incentives are capped not to exceed 50% of the total project cost.

Incentives, up to \$1,000,000 per electric and \$1,000,000 per gas utility account are available, not to exceed \$2,000,000 per project, and will be released in phases upon satisfactory completion of each of three Program milestones, which are:

1. Submittal of a complete Energy Reduction Plan
2. Installation of all recommended measures per the Energy Reduction Plan
3. Completion of Post Construction Benchmarking Report.

Incentive #1 – Energy Reduction Plan – This incentive has been developed to offset the cost of services associated with the development of the Energy Reduction Plan. This incentive is based on the square footage of the building(s) and is paid at \$0.10/sq ft with a maximum incentive of \$50,000 and minimum of \$5,000. This incentive is capped at 50% of annual energy cost. This incentive cap assists in limiting incentives for facilities with large square footage but very low energy intensity (e.g. warehouses). Please note, for customers who have successfully participated in the Local Government Energy Audit Program, Incentive #1 related to the Energy Reduction Plan will be reduced by 50% to \$0.05 per square foot up to \$25,000 to recognize the value of the audit provided through the LGEA Program. Incentive #1 is contingent upon moving forward with the installation of measures identified in the Energy Reduction Plan and must be supported by a signed Installation Agreement. Market Manager, in coordination with the Office of Clean Energy, may waive this contingency due to extenuating circumstances. If a project is cancelled after the receipt of Incentive #1 and the Incentive #1 payment is not returned to NJCEP, the customer/Partner may reapply to the Program in the future but will not be eligible for another Incentive #1 payment for the same facility.

Incentive #2 – Installation of Recommended Measures – This incentive is based on the projected energy savings estimated in the approved Energy Reduction Plan. The performance-based incentives to be paid at completion of construction are as follows: (designed to be roughly 50% of the total performance-based incentive):

1. Projected first year electric savings from \$0.09/kWh for the minimum 15% (or 4% when applicable) savings up to \$0.11/kWh, based on \$0.005/kWh per additional 1% savings.
2. Projected first year natural gas savings from \$0.90/therm for the minimum 15% savings (or 4% when applicable) up to \$1.25/therm based on \$0.05/therm per additional 1 % savings.

Savings projections will be calculated using calibrated energy simulation. The approach involves the following steps:

- Develop whole building energy simulation using approved simulation tools. The list of approved tools will be based on the software requirements outlined in ASHRAE 90.1 2007 Section 11 or Appendix G, or as approved by the Market Manager.
- Calibrate simulation to match pre-retrofit utility bills
- Model proposed improvements to obtain projected energy savings
- Calculate percent energy reduction to demonstrate achievement of Energy Target.

Modeling methodology will be in general compliance with national programs such as LEED and EPAct Federal Tax Deductions for Commercial Buildings, which will allow taking advantage of the expertise of a growing number of engineering and consulting firms involved in these programs.

Incentive #3 – Post Construction Benchmarking Report – Upon submittal of a Post Construction Benchmarking Report that verifies that the level of savings actually achieved by the installed measures meets or exceeds the minimum performance threshold, the performance-based incentive will be released. The performance-based incentives are as follows (designed to be roughly 50% of the total performance-based incentive):

- (1) Actual first year electric savings from \$0.09/kWh for the minimum 15% savings (or 4% when applicable) up to \$0.11/kWh, based on \$0.005/kWh per additional 1% savings.
- (2) Actual first year natural gas savings from \$.90/therm for the minimum 15% savings (or 4% when applicable) up to \$1.25/therm based on \$0.05/therm per additional 1 % savings.

Incentives #2 and #3 are intended to act as a single performance incentive that is split in order to provide up-front financial assistance in implementing the project. The Post Construction Benchmarking Report's main purpose is to "true-up" this performance incentive in the post-retrofit period by adjusting incentive #3 so that the total performance incentive (i.e. #2 and #3) is in compliance with the program's incentive structure. Failure to meet the 15% minimum threshold (or 4% where applicable) for energy savings by any margin will result in no awarded performance incentive #3.

The Post Construction Benchmarking Report will be based on the approved Energy Reduction Plan and will provide an accurate verification of savings while keeping the costs associated with M&V at a reasonable level. Specifics of the M&V requirements will be a critical component of the program and should be as simple as possible to reasonably verify savings while not overburdening the Partner or TRC. M&V requirements will follow the International Performance Measurement & Verification Protocol (IPMVP). Option D – Calibrated Simulation will be the required M&V approach for all projects. Options A – Partially Measured Retrofit Isolation, B – Retrofit Isolation, may be used as guidelines for data collection. The Post Construction Benchmarking Report must demonstrate savings over at least one year of post-construction consumption. Market Manager may grant up to an additional twelve (12) month extension for extenuating circumstances where projected savings levels were not reached based on the initial one year post-construction consumption.

To validate the savings and achievement of the Energy Target, the EPA Portfolio Manager, in conjunction with Program tools, will be used. The steps of this process are summarized below:

- Develop and document building energy baseline based on at least one full year of historical energy use data for the building.
- Document annual energy use during the post-retrofit period. Collect energy consumption data for the 12-month post-installation period.
- Perform weather-normalization and calculate Percent Reduction of Source Energy Use as the difference between baseline and post-retrofit energy consumption as a percentage of the baseline energy consumption (baseline – post retrofit energy consumption / baseline).

Incentive #2 and #3 combined will be capped not to exceed 50% of the total project cost, and Incentive #1, #2, and #3 combined will not exceed \$2 million per project (if both electric and gas measures are implemented; \$1 million if all-electric or all-gas) whichever is less. Entity caps of \$4 million per fiscal year (or \$5 million with CHP/Fuel Cell) also apply.

## **Program Goals**

The Pay for Performance Program goals may be found in Appendix D.

## **Program Deliverables**

The Pay for Performance Program will provide the following services:

1. Maintain a pool of Program Partners that can offer Program services and publicize this list to potential participants.

2. Continue to develop new Program Partners as market demand warrants. Depending on program demand, provide up to two (2) full-day Program Orientation seminars for Program Partners to introduce the Program and the Energy Reduction Plan development. OCE staff will also be invited.
3. Conduct quarterly Partner webinars to supplement program orientations in order to educate existing Partners on program requirements.
4. Conduct Monthly Partner Conference Calls to present Program updates and discuss any issues that Partners may be encountering.
5. 100% Quality Control review of all submitted Energy Reduction Plans.
6. Pre and Post on-site inspections.

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all Pay for Performance Program projects. All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Pre and/or post inspections are conducted as required.

### **Program Evaluation**

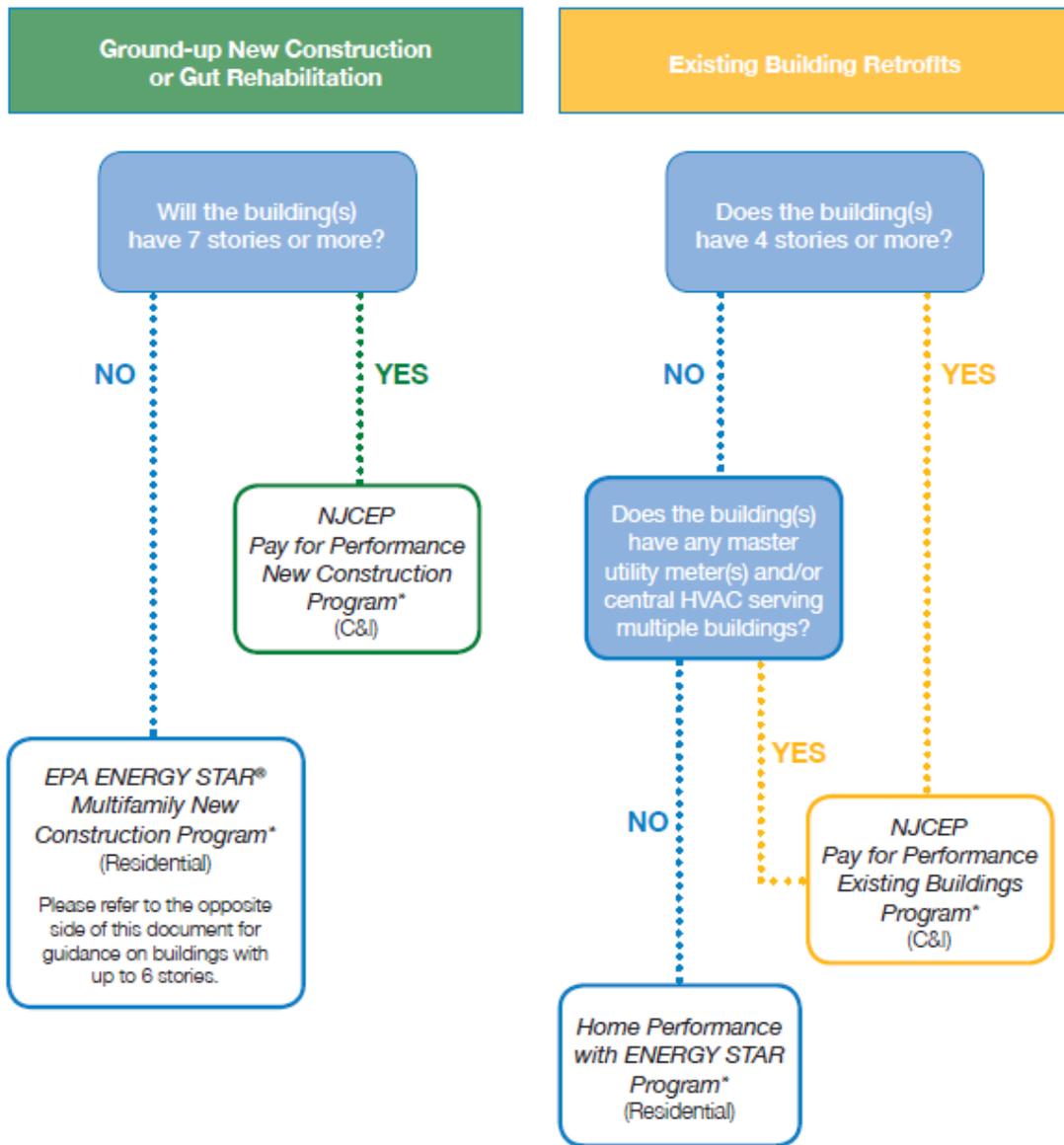
Ongoing evaluation services will be provided by the OCE through its external evaluation vendor.

### **Program Planning**

TRC will continue to collaborate with BPU Staff, the Environmental Defense Fund (EDF), and select program partners to implement an alternate program path that aligns with EDF's Investor Confidence Project (ICP).

# New Jersey's Clean Energy Program™

## Multifamily Buildings Incentive Program Guide



*\*Any multifamily building that is not eligible for the residential programs above will automatically be considered for Pay for Performance under the C&I suite of programs. Projects eligible for the C&I Pay for Performance Program may also be eligible for the SmartStart Buildings and Direct Install programs. Learn more at [NJCleanEnergy.com/CI](http://NJCleanEnergy.com/CI).*

# EPA ENERGY STAR Residential Multifamily New Construction Programs

**What qualifies as Residential?**

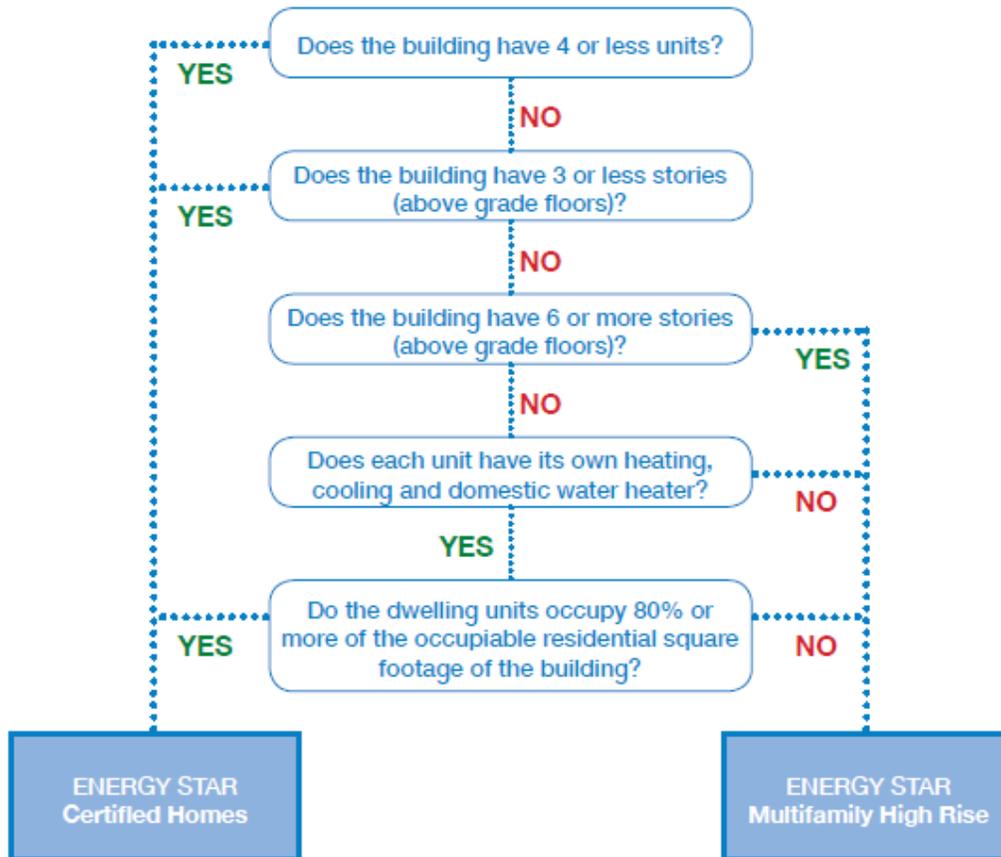
The primary use of the building must be for residential purpose, i.e. the residential and residential associated common area must occupy more than 50% of the building's occupiable square footage. This includes spaces used by residents, such as corridors, stairs, lobbies, laundry rooms, exercise rooms, and residential recreation rooms. This also includes offices used by building management, administration or maintenance and all special use areas located in the building to serve and support the residents such as day-care facilities, gyms, dining halls, etc. It does not include garage spaces.

**What qualifies as New Construction?**

New Construction projects can include significant gut rehabilitations when defined as a change of use, reconstruction of a vacant structure, or when construction work requires that the building be out of service for at least 90 consecutive days. The primary use of the building must be for residential purpose, i.e. the residential and residential associated common areas must occupy more than 50% of the building's occupiable square footage. For mixed used buildings, exclude the retail/commercial area when determining the square footage of the building.

New construction of motels/hotels, nursing homes, assisted living facilities or dormitories, are considered commercial facilities and do not qualify under the Residential Multifamily New Construction program. Learn more about the ENERGY STAR new construction program for commercial buildings at: [www.energystar.gov/DesignToEarn](http://www.energystar.gov/DesignToEarn). For more information about ENERGY STAR in existing commercial buildings visit the ENERGY STAR Buildings and Plants page at [www.energystar.gov/buildings](http://www.energystar.gov/buildings).

If your multifamily building qualifies as *both* New Construction *and* Residential, the following decision tree can help you determine which ENERGY STAR program is right for you.



1/2015

## **Combined Heat and Power and Fuel Cells**

As of March 1, 2016 this program will no longer be managed by TRC, it will be managed by ICF International.

The following is a description of both the small and large scale Combined Heat and Power (CHP) and Fuel Cell (FC) Program. For FY 2016, the C&I Market Manager will continue to manage the program for small scale systems ( $\leq$  1MW). Large scale systems ( $>$  1 MW) will be managed by OCE Staff on an interim basis

### **Program Description**

New Jersey's Clean Energy Program offers a stand-alone Combined Heat and Power (CHP) and Fuel Cell (FC) Program. Program participants are eligible to receive financial incentives for Combined Heat and Power and Fuel Cell installations to further enhance energy efficiency in their buildings through on-site power generation with recovery and productive use of waste heat, and reducing existing and new demands to the electric power grid. The Program offers financial incentives for both fuel cells with and without waste heat recovery.

By installing CHP and Fuel Cell systems, participants will assist in reducing overall system peak demand, furthering the use of emerging technologies, reducing emissions, and using distributed generation to provide reliability solutions for New Jersey while supporting the State's Energy Master Plan. (Please note, the combination of incentives for Fuel Cells with those for CHP under the same Program is not meant to define fuel cells that do not utilize waste heat recovery as a CHP technology.)

### **Target Market and Eligibility**

The CHP-FC program is open to all New Jersey-based commercial and industrial (C&I) customers paying into the Societal Benefits Fund. Applications are reviewed and funds committed on a first come, first serve basis provided all program requirements are met. CHP-FC systems that receive funding from the Energy Resiliency Bank will not be eligible for incentives through New Jersey's Clean Energy Program.

### **Equipment Eligibility**

To qualify for incentives, CHP and Fuel Cell equipment must meet all of the following eligibility criteria:

- For Fuel Cells without waste heat recovery only: System must be sized to meet all or a portion of the customer's on-site load, not to exceed 100% of most recent historical annual consumption or peak demand. For all projects, CHP and Fuel

Cell, any surplus power that may become available during the course of a given year may be sold to PJM.

- Natural gas, hydrogen, and mixed fuel (e.g. natural gas and biogas) CHP and Fuel Cell equipment installed on the customer side of the utility meter is eligible. Mixed fuel projects will be accepted and reviewed for incentive eligibility on a pilot basis. Upon receipt and review of a mixed-fuel CHP/FC project, the Market Manager will determine if any other eligibility criteria may be required to approve the project and commit incentives. The Market Manager has the ability to recommend reduced incentives from those shown in Table 1 if equipment output is derated based on fuel input or other factors associated with mixed-fuel system performance, subject to review and approval by BPU Staff. Mixed-fuel system incentives will not exceed those listed in Table 1.
- Equipment must be new, commercially available, and permanently installed.
- Expansion of an existing system with new equipment is also eligible, however, only the incremental expansion would be eligible for incentives.
- The following applies to CHP systems, including fuel cells that utilize waste heat:
  - The CHP system must achieve an annual system efficiency of at least 65% (Lower Heating Value – LHV), based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation.
  - Waste heat utilization systems or other mechanical recovery systems are required. Even though waste heat systems are produced with many configurations, they all perform the same task of capturing waste heat energy in the radiator or exhaust systems of a generator and delivering it to a heat load or cooling load. The captured energy is used in heating processes, such as water heating, pasteurizing, product preheating, etc. New electric generation equipment which captures waste heat or energy from existing systems is also allowed.
- The following only applies to Fuel Cells without waste heat utilization:
  - Fuel Cell systems must achieve an annual electric system efficiency of at least 50% (LHV).
- In order to qualify for incentives, systems must operate a minimum of 5,000 full load equivalent hours per year (i.e. run at least 5,000 hours per year at full rated KW output). The Office of Clean Energy (OCE) may grant exceptions to this minimum operating hours requirement for critical facilities (as defined by the Office of Emergency Management and FEMA), provided the proposed system operates a minimum of 3,500 full load equivalent hours per year.
- Projects are subject to ten (10) year warranty requirements

- Third party ownership (or leased equipment), such as those procured under Power Purchase Agreements, are permitted within the program with the following provisions:
  - In order to ensure the equipment remains on site and is in operation for the term of the agreement, a binding agreement is required between the parties. A copy of this agreement shall be provided to the Market Manager prior to commitment of incentives. The agreement should state that the equipment could be transferred to new owners should the property be sold or otherwise have a buyout provision so the equipment remains on site and stays operational so the projected energy savings can accrue. The intent is to provide incentives for generating equipment, which is installed and functioning for the duration of its useful life. Under the Program, only permanently installed equipment is eligible for incentives and this must be physically demonstrable to the Market Manager, upon inspection, prior to receiving an incentive. This can be demonstrated by electrical, thermal and fuel connections in accordance with industry practices for permanently installed equipment and be secured to a permanent surface (e.g. foundation). Any indication of portability, including but not limited to temporary structures, quick disconnects, unsecured equipment, wheels, carrying handles, dolly, trailer or platform will deem the system ineligible.
  - The customer/applicant will be allowed to sign over the incentive to the third party owner. A valid project cost shall be demonstrated as part of the application in order to establish an appropriate incentive level.
  - All other program rules apply.
- The following criteria may also apply during review of CHP and Fuel Cell project applications:
  - Environmental performance;
  - Projected system startup date;
  - Annual system utilization;
  - Alignment with programmatic goals;
  - Project clarity;
  - Facility's operation as an Emergency Management Center

*Not Eligible for CHP or Fuel Cell Incentives*

The following types of generating systems/equipment are not eligible for the program:

- Used, refurbished, temporary, pilot, demonstration, or portable equipment/systems.
- Back-Up Generators - systems intended for emergency or back-up generation purposes.
- Any system/equipment that uses diesel fuel, other types of oil and coal for continuous operation.

- 100% renewable fueled projects, including biodiesel and landfill gas, must be submitted through the renewable energy programs. Please refer to the FY 2016 Renewable Program Compliance Filing for requirements and funding details.

## **Incentives**

Incentives vary based on CHP or Fuel Cell technology, type, project size and total project cost. Table 1 below summarizes the qualifying technologies and available incentives. Please note, incentives for small scale systems ( $\leq 1\text{MW}$ ) are managed by the C&I Market Manager. Large scale systems ( $> 1\text{MW}$ ) are currently managed by OCE Staff and will be transitioned to the C&I Market Manager pending approval by Treasury and the Board.

TABLE 1: CHP AND FUEL CELL TECHNOLOGY AND INCENTIVE LEVELS

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/Watt)	P4P Bonus <sup>(2)</sup> (\$/Watt) (cap \$250,000)	% of Total Cost Cap per project	\$ Cap per project		
<b>Combined Heat &amp; Power (CHP)</b> Powered by non-renewable fuel source <ul style="list-style-type: none"> <li>• Gas Internal Combustion Engine</li> <li>• Gas Combustion Turbine</li> <li>• Microturbine</li> </ul>	≤500 kW <sup>(1)</sup>	\$2.00	\$0.25	30-40% <sup>(3)</sup>	\$2 million		
	>500 kW – 1 MW <sup>(1)</sup>	\$1.00					
	>1 MW – 3 MW <sup>(1)</sup>	\$0.55		30%	\$3 million		
	>3 MW <sup>(1)</sup>	\$0.35					
<b>Fuel Cells</b> Powered by non-renewable fuel source. Incentives available for systems both with and without waste heat recovery.	≤1 MW w. waste heat	\$4.00		60%	\$2 million		
	≤1 MW	\$3.00					
	>1 MW w. waste heat	\$2.00				45%	\$3 million
	>1 MW	\$1.50					
<b>Waste Heat to Power (WHP)<sup>(4)</sup></b> Powered by non-renewable fuel source. Heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine)	≤1 MW <sup>(1)</sup>	\$1.00		30%	\$2 million		
	>1 MW <sup>(1)</sup>	\$0.50				30%	\$3 million

- (1) Incentives for CHP and WHP only are tiered which means the incentive levels vary based upon the installed rated capacity, as listed in the chart above. For example, a 4 MW CHP system would receive \$2.00/watt for the first 500 kW, \$1.00/watt for the second 500 kW, \$0.55/watt for the next 2 MW and \$0.35/watt for the last 1 MW (up to the caps listed). Fuel Cell incentives are not tiered.
- (2) Any facility successfully participating in Pay for Performance prior to applying for CHP or Fuel Cell incentives will be eligible for an additional \$0.25 per Watt from the NJCEP, not to exceed \$250,000. This amount is in addition to the “\$ cap per project” listed above. The “% of project cost” caps listed above will be maintained.
- (3) The maximum incentive will be limited to 30% of total project. This cap will be increased to 40% where a cooling application is used or included with the CHP system (e.g. absorption chiller).
- (4) Projects installing CHP or Fuel Cell with WHP will be eligible for incentives shown above, not to exceed the lesser of percent per project cap or dollars per project cap of the CHP or Fuel Cell. Minimum efficiency will be calculated based on annual total electricity generated, utilized waste heat at the host site (i.e. not lost/rejected), and energy input.

Projects will receive program incentives in three partial payments. The first incentive will be paid upon proof of purchase of equipment. The second payment paid upon project installation and operation, including successful inspection. The remainder of the project incentive will be paid upon acceptance and confirmation the project is achieving the required performance thresholds based on twelve (12) months of operating data. The payment structure is summarized in Table 2 below:

**TABLE 2: CHP AND FUEL CELL INCENTIVE PAYMENT SCHEDULE**

<b>Purchase</b>	<b>Installation</b>	<b>Acceptance of 12 months post-installation data</b>
30%	60%	10%

In FY 2016, New Jersey’s Clean Energy Program will continue to provide an incentive for CHP projects fueled by renewable resources eligible for incentives under New Jersey’s Clean Energy Renewable Program. Please refer to the FY 2016 Renewable Program Compliance Filing for requirements and funding details.

Applicants will not be allowed to receive incentives for the installed generation equipment from other available SBC-funded programs. CHP and Fuel Cell projects will

be evaluated on a per site basis and incentives awarded accordingly. Installations of multiple systems planned for the same site within a 12 month period must be combined into a single project.

### **Warranty Requirements**

Systems installed must be covered by a minimum ten (10) year warranty, extended warranty or service contract.

### **Application Guidelines for CHP and Fuel Cell Projects**

The following guidelines apply to all projects. Additional detail is provided in the CHP-FC Application:

- Prior to equipment installation, Participants must submit the required Application, including all appendices, to the Market Manager. Upon review and approval of the Application, a commitment/award letter will be issued approving the eligibility of the system and reserving the incentive.
- The Application must include information demonstrating that the proposed system will meet all applicable technical and eligibility requirements as specified by the Program.
- Applicants must allow inspection of eligible systems. The Market Manager will inspect 100% of the installations prior to issuing the incentive.
- Funding will be reserved for eighteen (18) months from the date of the award letter after which Market Manager may cancel the funding. Any circumstances which will result in a delay past the 18-month timeframe must be reported to the Market Manager at least one month prior to the expiration of the funding award. Applicants must submit a request for extension in writing. The request must identify the reason for the request, and a schedule that identifies how much extra time is needed to complete the project. Requests for extensions may be granted by the Market Manager for up to twelve (12) months so long as applicant can demonstrate proof of significant project advancement. This could be in the form of copies of permits, equipment invoices, installation invoices indicating percentage complete, updated project schedules, etc. Any further requests for extension must be presented to the Market Manager for Board staff consideration. In addition, Market Manger reserves the right to conduct an inspection of the project to confirm project advancement. Approval of a request for extension will not change or modify any other program terms and conditions.
- Applicant must provide twelve (12) months of operational data demonstrating the equipment has:

- Achieved at least the minimum required efficiency levels, and
- Annual generated kWhs are within 20% of that stated in the approved Application.

This shall be done by implementing appropriate metering as part of the system installation. Data collected should include, but not be limited to, fuel input (MMBtu), electrical output (kWh, MMBtu), recoverable and utilized thermal output (MMBTU). A detailed metering plan shall be included within the feasibility analysis. If the review of the twelve (12) months of operational data demonstrates the equipment is not achieving the required level of efficiency, the applicant may submit a request to the Market Manager for an extension. Requests for extensions may be granted by the Market Manager for up to twelve (12) months (two, six (6) month extensions). These extensions are in addition to any extension granted during project construction, as discussed in the previous section.

Applicants are required to submit operational data to demonstrate system performance for the first five years the system is in operation. This data will aid the New Jersey Board of Public Utilities in various efforts related to supporting CHP and Fuel Cell development in the state. No additional incentives will be available for this effort.

- All submittals must be signed by a New Jersey Professional Engineer (PE) certifying that the information is accurate to the best of their knowledge.

### **Program Goals**

The Combined Heat and Power and Fuel Cell Program goals may be found in Appendix D.

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all CHP and Fuel Cell projects. All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

Each awarded CHP or Fuel Cell project will be inspected by the Market Manager. A field inspection report will be prepared and kept in the project file for record purposes.

Upon completion of the project, the award recipient will submit documentation that the work is complete (i.e., As-Built Drawings, P and ID Drawings, if necessary) and

certification that the project has been constructed in accordance with the accepted application. This may include, but not be limited to, the following:

- Review of documentation to support “Eligible Project costs” as defined above.
- Verification that the information stated in the application matches what was installed.
- Confirmation that the equipment is new and permanently installed and not used, refurbished, temporary, pilot or demonstration equipment.
- Confirmation that the installed system is covered by a minimum 10 year warranty, extended warranty, or service contract.
- Confirmation that the system does not use diesel fuel, other types of oil, coal, or renewable sources for continuous operation.

The Market Manager will review this documentation, and, in conjunction with the post installation inspection, will confirm the project has been installed per the specifications of the approved application as well as in line with all program requirements. A post inspection will be performed on 100% of projects which include CHP or Fuel Cell systems. The Market Manager may also request additional project information or documentation required to verify the project has met the program requirements based on the original application.

If the project has not been installed in accordance with the approved application, the Market Manager will review the project and assess the variances between the project as installed and as submitted. The Market Manager will request additional support documentation from the Applicant which may be helpful in evaluating the discrepancy. The Market Manager will review the discrepancies, perform a technical evaluation, and make a recommendation to the Program Coordinator and the OCE. Upon receiving approval of the recommendation, the Market Manager will notify the applicant and process the appropriate incentive.

## **Pay for Performance New Construction**

In order to address new buildings in the C&I market more comprehensively, TRC will continue implementing a Pay for Performance New Construction Program. The Pay for Performance New Construction Program promotes high performance buildings that achieve 15% or more energy cost savings than buildings built to the current energy code. By taking a performance-based approach, this Program allows architects, engineers, and energy professionals the flexibility to incorporate energy efficiency into the building design in a manner that best suits the project. Much of the program design and incentive structure is similar to the C&I Pay for Performance Program that is designed for existing buildings.

### **Program Description**

The C&I Pay for Performance New Construction Program takes a comprehensive, whole building approach to energy efficiency in new commercial and industrial buildings. Similar to performance contracting programs offered in other states, this Program links incentives directly to energy savings and includes a commissioning component to ensure that the estimated savings levels are achieved. This market based-program relies on a network of Program Partners, selected through a Request for Qualifications process. Once approved, Partners will provide technical services to program participants. Partners are required to strictly follow program policy but will work under contract to owners, acting as their “energy expert”. Partners will be required to develop an Energy Reduction Plan for each project. The Energy Reduction Plan details a set of recommended measures that will achieve the performance target. A set minimum performance target will be required of all projects and will be established using a 15% energy cost reduction from a reference building based on applicable energy code<sup>4</sup>. Market Manager reserves the right to consider alternative minimum threshold savings requirement in unique situations. The achievement of this energy reduction goal will be verified through post-construction commissioning.

### **Target Market and Eligibility**

The C&I Pay for Performance Program is open to new commercial and industrial construction projects with 50,000 sq ft or more of conditioned space. Market Manager reserves the right to approve projects that are within 10% of the minimum 50,000 sq ft threshold. Projects may include a single building meeting square footage requirements, or multiple buildings as long as those buildings are owned by the same entity, are located on adjacent properties, and are designed and constructed within the same time period. Due to the comprehensive design of this program, projects may not apply for incentives in other NJCEP programs while enrolled in Pay for Performance for the same

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<sup>4</sup> Current energy code in New Jersey is ASHRAE 90.1.2007

facility(ies). All eligible measures must be considered in Pay for Performance, with the exception of on-site generation (e.g. CHP and Fuel Cell program). Additional exceptions may be considered by Market Manager on a case by case basis.

Multifamily Buildings – The Pay for Performance New Construction Program will accommodate certain types of multifamily buildings. Specifically, multifamily customers that fit the following description will be able to participate in the Pay for Performance program (reference logic tree at end of P4P Existing Buildings section):

- High-rise buildings: 7 stories or greater  
Mid-rise buildings: 4-6 stories with central heating and/or cooling. Mid-rise buildings may also qualify for the Residential ENERGY STAR Multifamily High Rise program. See the Residential Program Compliance Filing for details.

Low-rise (and mid-rise where appropriate), garden-style complexes will be treated as one project under the Pay for Performance program. In other words, if there are 10 garden-style buildings that are part of one multifamily community, all 10 will be aggregated into one P4P application. The 50,000 square foot participation threshold will be met through this aggregation (including common area and in-unit). The 15% savings requirement (as well as all other program requirements) will be achieved in aggregate, as well. Only one set of incentives will be paid per project, and all incentive caps apply. There are no additional changes to the program.

Participants will be required to work with an approved Pay for Performance Partner to develop the Energy Reduction Plan and facilitate the incorporation of the recommended energy efficient design features. In order to receive the full suite of incentives offered in the Pay for Performance Program, the submitted Energy Reduction Plan must include a package of energy efficiency measures that achieve the minimum performance threshold (i.e., 15% less energy costs better than the ASHRAE-based reference building). In addition, the Energy Reduction Plan must include a comprehensive mix of measures; lighting cannot make up more than 50% of the total projected savings except as defined below:

Lighting savings up to 70% of total projected savings can be considered but the minimum Energy Target will increase proportionately as demonstrated in Table 1 below. Incentive structure remains the same as detailed further in this document.

**Table 1**

Lighting Savings	Minimum Source Energy Target
51%	16%
52%	17%
53%	18%
54%	19%
55%	20%
56%	21%
57%	22%
58%	23%
59%	24%
60%	25%
61%	26%
62%	27%
63%	28%
64%	29%
65%	30%
66%	31%
67%	32%
68%	33%
69%	34%
70%	35%

Energy cost will be used in the performance target calculation. Energy cost is also used by ASHRAE 90.1 and Appendix G, EPC Act Federal Tax Deductions, and LEED NC. Pre-approval of the Energy Reduction Plan is required for all projects. Projects that cannot identify efficiency measures that meet the minimum performance target will be referred to the appropriate SmartStart Buildings Program(s). The Energy Reduction Plan will include a commissioning report for all recommended measures.

Generally, pre-inspections will not be performed. Projects may complete construction, however, in the event that the equipment selected does not qualify for an incentive, it will be removed from the Proposed ERP and no incentives will be paid for that equipment. Customer's proceeding with installation prior to Proposed ERP approval are doing so at their own risk. To avoid "old" projects entering the program (i.e. buildings completed prior to applying for the program), invoices for qualifying measures cannot pre-date the initial application receipt date by more than 6 months. This will be verified through (a) proposed timeline outlined in the initial application and (b) dates on invoices collected at construction completion.

Multifamily complexes and campus-style facilities are viewed as a single entity that is eligible for Pay for Performance incentives subject to the annual incentive caps of \$1 million per electric account and \$1 million per gas account, not to exceed \$2 million per project.

For administrative purposes of tracking technical reviews and site inspections, each building addressed within a multi-building ERP will be considered a separate project. This is necessary because although a single ERP will include all of the necessary project information, the review of each of the building simulation models will require individual attention. Similarly, site inspections will take considerably longer for multi-building

projects as each building will require an inspection. Where applicable, administrative tracking will be associated with any approved sampling of building simulation models (i.e., if a single model is developed to represent several similar buildings).

### **Program Offerings and Incentives**

A key component of the Pay for Performance New Construction Program is the development of a network of Program Partners who can provide the technical, financial, and construction-related services necessary for completing the Energy Reduction Plan. The Partner network developed by the Pay for Performance Program for existing buildings includes firms that are also qualified to serve new construction projects. One of the goals of this program is to expand the network of energy efficiency firms that can provide these services. This market-based approach is a key component of market transformation by creating “green collar” jobs and helping to develop the workforce necessary to achieve ambitious energy savings targets. Firms interested in becoming Program Partners will be required to submit case studies and resumes showing experience and expertise in C&I energy efficiency projects for new buildings.

Program incentives are performance-based and not specifically tied to the project cost or the recommended energy efficiency measures. Disassociating incentives from project cost is a key program design decision as it streamlines program administration by eliminating the collection of bid documents, construction contracts and change orders. This incentive structure also provides the benefit of allowing Partners to estimate and explain incentives to prospective participants as part of the program sales process.

Incentives up to \$1,000,000 per electric and \$1,000,000 per gas utility account, not to exceed \$2,000,000 per project, are available and will be released in phases upon satisfactory completion of each of three Program milestones, which are:

- Submittal and approval of a of a Proposed Energy Reduction Plan,
  - Incentive paid in the amount of \$0.10/sf up to \$50,000
  - Additional submittals required: Signed Developer/Partner Contract, proof of 75% of design team’s fees paid by developer, Copy of Drawing Sheet Index & Specification Booklet Table of Contents
  - Market Manager reserves the right to approve projects that are within 10% of the minimum 50,000 sq ft threshold.
  - Incentive is contingent on moving forward with construction and must be supported by a signed Installation Agreement. Market Manager, in coordination with the Office of Clean Energy, may waive this contingency in extreme situations where construction is halted due to economic or other external factors. If a project is cancelled after the receipt of Incentive #1 and the Incentive #1 payment is not returned to NJCEP, the customer/Partner may reapply to the Program but will not be eligible for another Incentive #1 payment for the same facility.
- Submittal and approval of the As-Built Energy Reduction Plan

- Incentive paid in the amount of \$1.00/sf
- Additional submittals required: Invoices (or similar proof of purchase), passing post-installation inspection.
- Submittal and Approval of the Commissioning Report that indicates achievement of a performance target of at least 15% by the proposed design
  - For a performance target 15%-17%, incentive paid at \$0.35/sf.
  - For a performance target 18%-20%, incentive paid at \$0.45/sf.
  - For a performance target greater than 20%, incentive paid at \$0.65/sf.

Incentive #1 – Proposed Energy Reduction Plan – This incentive is intended to help offset the cost of services associated with the development of the Energy Reduction Plan and design fees. This incentive will be \$0.10 per conditioned square foot up to a maximum amount of \$50,000.

Incentive #2 – As-Built Reduction Plan – This incentive will be based on the final installed work scope. The incentive rate will be \$1.00 per conditioned square foot to be paid upon construction completion.

Incentive #3 – Commissioning Report – This incentive will be based upon confirmation that the building achieved the performance target value indicated in the Proposed Energy Reduction Plan. This incentive will range from \$0.35 - \$0.65 per conditioned square foot, increasing with the percentage of cost reduction achieved. Incentive #3 is payable upon construction completion and approval of the Commissioning Report. Changes during construction that result in a greater than 10% variation in projected energy cost savings must be incorporated into the As-Built Energy Reduction Plan and Incentive #3 re-calculated.

Incentive #2 and #3 combined will be capped not to exceed 75% of the total project incremental cost or \$2 million per project (if both electric and gas measures are implemented; \$1 million if all-electric or all-gas) whichever is less. Entity caps of \$4 million per fiscal year (or \$5 million with CHP) also apply. Incremental costs will include both soft and hard costs associated with participation in this Program and the achievement of the 15% performance target. Market Manager, in coordination with the Office of Clean Energy may consider alternative incentive caps in unique situations where incremental costs are difficult to quantify.

## **Program Goals**

The Pay for Performance New Construction Program goals may be found in Appendix D.

## **Program Deliverables**

Pay for Performance – New Construction will provide the following services:

1. Maintain pool of Program Partners that can offer Program services and publicize this list to potential participants.
2. Depending on program demand, provide up to two (2) half-day Program Orientation seminars for Program Partners to introduce the Program and the Energy Reduction Plan development.
3. Depending on program demand, provide two (2) subsidized Energy Modeling Training Sessions for Program Partners related to ASHRAE 90.1-2007 Appendix G.
4. Conduct Monthly Partner Conference Calls to present Program updates and discuss any issues that Partners may be encountering.
5. Conduct quarterly Partner webinars to educate existing Partners on program requirements.
6. 100% Quality Control review of all submitted Energy Reduction Plans.
7. One post-installation inspection per approved Proposed Energy Reduction Plan

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all Pay for Performance Program participants. All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Post installation inspections will be conducted for all projects; pre installation inspections as required.

### **Program Evaluation**

Ongoing evaluation services will be provided by the OCE through its evaluation vendor

## Large Energy Users Program

### Program Description

The purpose of the Large Energy Users Program is to foster self-investment in energy efficiency, and combined heat and power projects while providing necessary financial support to large commercial and industrial utility customers in the state of New Jersey. Incentives will be awarded to customers that satisfy the program's eligibility and program requirements ("Eligible Entities or Eligible Customers"), to invest in self-directed energy projects that are customized to meet the requirements of the customers' existing facilities, while advancing the State's energy efficiency, conservation, and greenhouse gas reduction goals.

### Target Markets and Eligibility

The Large Energy Users Program is available on a first come, first served basis to existing, large commercial and industrial buildings that meet the following qualifications:

- Eligible entities must have contributed a minimum of \$300,000 (on a pre-sales tax basis) into New Jersey's Clean Energy Program fund in fiscal year 2015 defined as from July 1, 2014 to June 30, 2015 (aggregate of all buildings/sites). Eligible Entities shall be defined as (1) Public: having distinct and separate budgetary authority; (2) Public Schools: having distinct and separate budgetary authority; (3) Private: Non-residential companies including all related subsidiaries and affiliates regardless of separate EIN numbers or locations within New Jersey. Consistent with DOCKET NO. EOO7030203).
- The total fiscal year 2015 contribution is calculated as \$0.025905/therm times total therms plus \$0.003437/kWh times total kWh or by updated conversion factors provided and approved by BPU staff
- In order to be considered for incentives, the average billed peak demand of all facilities submitted in the Draft Energy Efficiency Plan (DEEP)/Final Energy Efficiency Plan (FEED) must meet or exceed 400kW and/or 4,000 DTh.
  - Example: Entity submits DEEP/FEED for two buildings. Building one has a metered peak demand of 200kW, building two has a metered peak demand of 600kW. Per the above guideline, both buildings would be considered for incentives as the average would be equal to 400kW.

The program will be available via an open enrollment with funding committed on a first come, first served basis.

Entities interested in applying to participate in the program will submit the following information (limit 2 pages excluding attachments):

- Number of buildings/sites and list of all associated fiscal year 2015 utility and third-party supplier accounts.
- Total usage and number of location or premise IDs as provided by utility.
- Total contribution to New Jersey's Clean Energy Program (NJCEP) fund in previous fiscal year from above buildings/sites.

**Program Offerings and Incentives:**

The Program will offer a maximum incentive per entity which will be the lesser of:

- \$4 million
- 75% of total project(s) cost as identified in the Final Energy Efficiency Plan (FEED). Total project costs may include pre-engineering costs, soft costs, and other costs associated with the preparation of the FEED.
- 90% of total NJCEP fund contribution in previous year (i.e. from all entity facilities)
- \$0.33 per projected kWh saved annually; \$3.75 per projected Therm saved annually

The program has a minimum incentive commitment of \$200,000. Projects with incentives below this threshold will be redirected to other NJCEP programs. Incentives shall be reserved upon approval of the DEEP. Program funds will be committed upon approval of FEED by the Program Manager and, if required, by the Board of Public Utilities. Incentive shall be paid upon project completion and verification that all program requirements are met. Entities may submit up to three (3), DEEP/FEEDs throughout the program year.

**Submittal Requirements for Fund Reservation:**

Qualifying entities shall submit a DEEP to the Program Manager for existing facilities only. This shall be in a report format and must include at a minimum:

- Executive Summary:
  - Existing energy use by source from previous 12 months (kWh, kW, MMBtu)
  - Projected annual energy savings by source (kWh, kW, MMBtu, and %)

- Projected annual total site energy savings (kBtu/sqft and %)
- Total estimated project cost
- Total estimated annual energy cost savings
- Site Overview
- Table of Energy Conservation Measures (ECMs) to be implemented in next 12 months. Including the following information by measure:
  - Estimated Installed Cost
  - Estimated Annual Energy Savings by source (kWh, kW, MMBtu)
  - Estimated Annual Energy Cost Savings (\$)
  - Estimated Simple Payback or IRR % (*total of all measures*)
- ECM Descriptions including:
  - General description of equipment being replaced/augmented
  - Anticipated Implementation Schedule
  - Estimated construction start and end dates for each measure

\*Please note, the approved entity may choose to submit the Final Energy Efficiency Plan (FEEP) in lieu of submitting a.

**Submittal Requirements for Fund Commitment:**

Qualifying entities shall submit a FEEP to the Program Manager for existing facilities only. The FEEP must be submitted to the Market Manager for review three (3) months from the date of the DEEP approval letter. This shall be in a report format and must include at a minimum:

- a. Executive Summary:
  - i. Existing energy use by source from previous 12 months (kWh, kW, MMBtu)
  - ii. Existing total site energy use from previous 12 months (kBtu/sqft)
  - iii. Calculated annual energy savings by source (kWh, kW, MMBtu, and %)
  - iv. Calculated annual total site energy savings (kBtu/sqft and %)
  - v. Total estimated project cost (note - prevailing wage rates required)
  - vi. Total estimated annual energy cost savings
- b. Site Overview
- c. Utilities Overview
- d. Table of Energy Conservation Measures (ECMs) to be implemented in next 12 months. Including the following information by measure:
  - i. Estimated Installed Cost (Material, labor, etc)
  - ii. Estimated Annual Calculated Energy Savings by source (kWh, kW, MMBtu)

- iii. Estimated Annual O&M Savings (\$)
  - iv. Estimated Annual Calculated Energy Cost Savings (\$)
  - v. Estimated Simple Payback or IRR % (*total of all measures*)
  - vi. Anticipated sources of all funding not including Large Energy Users incentive
- e. ECM Descriptions including:
- i. Detailed description of equipment being replaced/augmented
  - ii. Detailed description of recommended measure (including quantities, EER, AFUE, etc.)
  - iii. Basis for calculating energy savings and O&M savings (*including all assumptions*)
  - iv. Basis for calculating installed cost (*including all assumptions*)
  - v. Anticipated implementation schedule
  - vi. Estimated construction start and end dates for each measure
- f. M&V:
- i. Description of pre/post M&V to be implemented. Must be in accordance with IPMVP Option A or B, or other method pre-approved by Market Manager (refer to pay for Performance Program requirements for further details in this regard)
- g. Appendices
- i. Professional Engineer (PE) Certification to verify all FEEP documents are accurate.
  - ii. Utility bills and/or summaries (*method to collect this information to be determined*)
  - iii. Supporting calculations
  - iv. Specification sheets

Please note the following in regard to the annual calculated energy savings by source: Depending upon the complexity of the energy conservation measures in the FEEP, the associated calculations may require building modeling to properly estimate the energy savings for particular measures. These measures may include building shell upgrades, building management systems, etc. Typical ECMs such as lighting, HVAC, motors, and others will likely not require these efforts and may be presented with generally accepted energy savings calculations and methodologies. Further details will be provided in the program application.

**Submittal Requirements for Incentive Payment:**

- b) Once the work defined in the FEEP has been completed , entity shall submit proof of construction completion for all measures, which may include but is not limited to the following:
  - a. Invoices for material/labor including as-built report
  - b. Work orders
- c) Entity must also submit:
  - a. Completed M&V report(s) certified by a Professional Engineer
  - b. Certification of compliance with prevailing wage
  - c. Valid tax clearance certificate
- d) Differences between the FEEP and as-built project must be documented and will require a revised FEEP submitted for review. In the event the scope of work, savings, and/or cost estimates does not match as-built documentation, an incentive true-up will occur. The true-up is not to exceed the original incentive commitment.

**Terms and Conditions:**

- a. All ECMs must meet Minimum Performance Standards, which may be fulfilled during Professional Engineer review, which shall be understood as the most stringent of:
  - a. Pay for Performance Guidelines-Appendix B
  - b. ASHRAE 90.1-2007
  - c. Local code
- b. FEEP must be submitted no later than three (3) months from date of the DEEP approval letter.
- c. ECMs must be fully installed no later than twelve (12) months from approval of the Final Energy Efficiency Plan. Extensions may be granted for a period of up to six months with satisfactory proof of project advancement. (This could be in the form of copies of permits, equipment invoices, installation invoices indicating percentage complete, updated project schedules, etc.)

**Limitations/Restrictions:**

- e) New construction and major rehabilitation projects are not eligible under the program, however these projects may be eligible for other NJCEP incentives.
- f) Incentive will be limited to energy-efficiency measures. The following shall not be included as part of this program:
  - a. Renewable energy
  - b. Maintenance energy saving projects

- g) Incentive shall only be available for ECMs approved in the FEEP.
- h) ECMs already installed or under construction will not be considered for incentives and shall not be included in FEEP.
- i) Federal grants/incentives are allowed; other state/utility incentives are allowed so long as they are not originating from NJCEP funds; NJCEP loan funds are allowed. Total of Federal, state, utility, and LEU Program funding shall not exceed 100% of total project cost.

### **Review and Payment Framework:**

1. Upon receipt of the FEEP, Program Manager will have sixty (60) days to review each submittal and provide comments to entity.
2. Market Manager will present FEEPs to Board for approval as required by Board policy and commitment of incentive. Market Manager may conduct up to three site inspections per FEEP submission including a pre inspection, at 50% completion and 100% completion, as required. A pre inspection will be scheduled within 30 days of FEEP submittal, granted sufficient data is provided. Entity will need to provide access to site and notification upon reaching specific percent completions as mentioned above. Measures which require an inspection at 50% completion will be identified by TRC upon submittal of the FEEP. These measures may include building shell upgrades or equipment which will be inaccessible once installed.
3. If ECMs are not completed within the specified timeframe, incentive commitment may be forfeited.
4. Entity will provide M&V data as requested and will comply with any program evaluation activities.

### **Program Goals**

The Large Energy Users Program goals may be found in Appendix D.

### **Program Deliverables**

The Market Manager will provide the following services under the Large Energy Users Program:

- j) Program management
- k) Review and approval/rejection of all submitted Draft Energy Efficiency Plan submittals
  - Review and approval/rejection of all submitted Final Energy Efficiency Plan submittals

- Technical assistance via email and telephone to assist entities in the proper submittal of the required information
- Updates of data tracking tools to incorporate additional tasks related to this initiative
- Conduct up to three quality control inspections for each FEEP submission – pre inspection, 50% completion inspection and final inspection upon installation of energy efficiency measures
- Incentive processing including issuance of checks and tracking/recordkeeping

### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all Program participants. All energy efficiency plans are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Pre and/or post inspections will be conducted as required.

### **Program Evaluation**

Ongoing evaluation services will be provided by the OCE through its external evaluation vendor.

## **SBC Credit Program**

The SBC Credit Program was approved by Board Order dated December 20, 2013, Docket Number EO12100940. The purpose of the SBC Credit Program is to implement the SBC Law (found at N.J.S.A. 48:3-60.3) and to foster self-investment in energy efficiency projects by providing financial support to all C&I ratepayers in the State of New Jersey. Credits will be granted to participants that satisfy the program's eligibility and program requirements to invest in self-directed EE projects. No budget is allocated for this program for fiscal year 2016. Pending Treasury and Board approval the C&I Market Manager will design and implement the program.

**Appendix A**  
**FY 2016 Outreach Plan**

## OUTREACH PLAN

### OVERVIEW

According to the 2011 State Energy Master Plan, “the Commercial and Industrial sector represents nearly 65% of the overall electric power used, and returns the greatest savings for the dollars invested.”

Therefore, improving energy efficiency in this sector is one of the most cost-effective ways to save energy, counteract high or volatile energy prices, enhance energy security and independence and reduce greenhouse gas emissions. TRC has found the most effective way to reach the commercial and industrial customer base is through a coordinated marketing and outreach strategy informed by research. This document identifies the proposed Outreach Plan for fiscal year 2016 for New Jersey’s Commercial & Industrial (C&I) Program. The Marketing Plan is presented as a separate document. This plan discusses both general outreach to the broad customer base, as well as targeted outreach to specific sectors and customers.

The C&I component of New Jersey’s Clean Energy Program (NJCEP) has experienced considerable growth since its inception. Growth over the past three years, and into FY 2015 is illustrated below by application volume and associated energy savings achieved.

Fiscal Year	Applications Received	Applications Paid	Committed Electric Savings	Committed Gas Savings
2012	6,214	2,642	207,853 MWh	509,679 DTh
2013	6,891	2,854	188,388 MWh	637,233 DTh
2014	7,175	3,095	266,645 MWh	400,069 DTh
2015	6,262	3,760	272,052 MWh	387,479 DTh

**NOTES:**

FY ‘12 includes ARRA payments

FY ‘13, ‘14 & ‘15 includes Hurricane Sandy Enhanced Incentives

FY ‘15 data is as of April 7, 2015

TRC and our subcontractor, EAM Associates comprises the Outreach Team. The Team will deliver the items outlined in this Outreach Plan. We will work together to develop strategies, identify new outreach opportunities and measure success. We will also coordinate on a regular basis with the Marketing Team (TRC, Clean Markets, BPU and AEG staff) to ensure we have a comprehensive approach to promoting the NJ Clean Energy Commercial and Industrial Programs and measuring success.

The Outreach Team believes there is continued value in a sector specific approach to outreach which addresses the following sectors as a way to continue to increase energy efficiency and savings and pursue opportunities for deeper energy savings as customers become more familiar with the programs and understand the savings potential. These sectors are: Municipal Government, K-12 schools, Hospitals/Health Care, Commercial, Retail, Industrial, Hospitality, Multifamily and Higher Education.

We will refine our sector-specific approach based upon recent market research to identify more specific industries, building types, trade allies and other customers within these broad sectors to focus our efforts. This will include a specific focus on new construction programs, large energy users and potential users of CHP/Fuel Cells. We will focus our efforts on working with the sectors that include those buildings, customers and trade allies.

The TRC Team will continue participation in general outreach events to raise the overall awareness of NJCEP offerings to the broad C&I market. General outreach events will attract potential program participants and trade allies from multiple C&I Sectors, however, TRC's experience indicates that more targeted efforts within particular sectors and with specific customers or trade allies will be more productive than attempting to reach out all of the C&I sectors in the state.

New Jersey's Clean Energy Program initiatives are designed to help drive energy savings across these market sectors. However, energy efficiency initiatives are only effective if building owners and facility managers know about program offerings and understand how to take full advantage of them within their specific planning, budgeting and procurement processes. A sector-based outreach approach is more effective than general outreach in helping customers access specific programs, services, products and technologies that are relevant to them and clearly showing how they can integrate the incentives and application process into their project schedule and financial analysis. Through close coordination with the NJCEP Marketing effort and working with trade and professional organizations specific to these sectors, NJCEP can reach these customers more directly, in a cost-effective manner, and be recognized as a valuable asset in helping them achieve their efficiency goals.

The objective of this Outreach Plan is to deliver more and deeper energy savings by driving greater energy efficiency awareness in the general C&I markets as well as increasing program participation among selected sectors and customer categories. This plan will also identify measurement and tracking systems to be used to determine the effectiveness of certain outreach activities.

This Plan is designed to build on our recent success and continue the forward momentum that TRC has built since program inception. It includes:

- Enhancements we propose for the Outreach initiative in Fiscal Year 2016
- Target Sectors and Customers
- The approach the Team will take to address the general and specific sectors and customers
- Outreach activities we will perform in support of the approach
- Program goals and deliverables

While this plan provides definition to the outreach tasks involved, TRC intends to maintain the flexibility to accommodate unplanned requests for NJCEP participation in events, meetings and other opportunities targeting C&I customers.

### **Program Enhancements for Fiscal Year 2016**

TRC has marketing and outreach managers on staff to coordinate all marketing and outreach activities. Additionally, TRC is working with a new marketing firm (Clean Markets) and has developed a new marketing plan that includes market research, analysis and segmentation. The results of this research will help inform decision-making regarding outreach strategies and we will work with the Marketing Team to identify additional research needs in the future.

Building upon the trend of increased program participation and energy savings, TRC will continue to provide general outreach and guidance to help facility owners and managers in the municipal government, K-12 schools, hospitals/health care, commercial, retail, industrial, hospitality, multifamily and higher education sectors in selecting specific programs, services, products and technologies that are relevant to them.

In addition, we propose the following enhancements for FY 2016:

#### **Using market research to identify targeted outreach actions within sectors**

The market research conducted as part of the new Marketing Plan revealed specific opportunities for focused outreach. The research identified that programs such as LEUP, CHP and new construction programs have not been fully subscribed. In addition, there are specific customer types such as retail chain accounts, data centers, hospitals and commercial real estate developers that have high potential for energy savings, but require a more customized outreach approach based upon their unique needs.

### **Developing Additional Outreach Tools**

Case Studies, presentation slides, decision trees and other tools help to boost the effectiveness of outreach efforts. We will work with our trade allies, customers, contractors and stakeholder to better understand their needs and coordinate efforts with the BPU and the Marketing Team to develop appropriate materials and information.

### **Highlighting Benchmarking Program**

Given that participation in the benchmarking program has been inconsistent over the past few years we will work to improve and increase outreach efforts related to benchmarking and identify specific sectors/customers that may benefit most from it. Partnerships with groups such as Sustainable Jersey, the NJ Business and Industry Association can be leveraged to present information about the program and showcase successful implementation of benchmarking and resulting energy efficiency measure implementation.

### **Strengthening and Formalizing Connections with Existing Certification Programs**

TRC will explore opportunities to coordinate further with groups such as Sustainable Jersey, EPA's Energy Star program and the US Green Building Council's LEED Program to discuss how we can raise awareness of how the NJCE Programs can assist customers in achieving their individual certifications which all have an energy savings/efficiency component. Coordinated outreach and marketing will also be explored.

### **Consolidate Reporting**

We will use the monthly administrative report to track and report on progress toward all outreach goals and specifically list outreach activities. C&I Program goals are outlined in the appendix. The following is an example of the metrics we currently report.

## Appendix A: FY 2016 Outreach Plan

Goal Number	Goal Description	Metric	Results To Date	% Achieved to Date
1	<b>Increase number of applications received, and energy savings committed by 10% over fiscal year 2014 results</b> <b>Energy Savings</b> Electric, MWh Gas, DTH <b>Applications Received</b>	 290,849 439,949 7,826	 233,516 208,223 5,432	 80% 47% 69%
2	<b>Outreach Meetings</b> 50 Direct Outreach Meetings/Month	600	253	42%
3	<b>Coordination with Utilities</b> Conduct joint customer meetings	None	13	N/A
4	<b>Presentations</b> To trade allies/key stakeholders	24	16	67%
5	<b>Benchmarks</b> Conduct energy performance benchmarks	300	48	16%
6	<b>Chambers of Commerce</b> Participate in Chamber events	20	31	155%
7	<b>Case Studies</b> Prepare and deliver building improvement case studies/success stories	30	5	17%

### Monitoring Outreach Effectiveness and Track Lead Generation as a Result of Outreach Efforts

The Outreach Team will maintain lists of all outreach events, document contacts made through cell phone apps (used to scan business cards at trade shows) or other means in order to document the value of an event and determine if we should continue to participate in the future. Additionally we will follow up with contacts made via e-mail or calls to discuss how they can incorporate NJCEP incentives into future plans.

### Expanding Utilization Trade Ally network

TRC will continue to work closely with the Pay for Performance and Direct Install Participating Contractor network to engage them more directly in the identification of outreach opportunities and the development of case studies/success stories. In addition, TRC will continue to identify new trade allies and partner organizations (in addition to the P4P and DI partners) that can assist in targeting specific customer groups or program participants. TRC will continue our relationships with existing trade allies to improve communication regarding pending or potential projects, training needs, program changes, and increase participation in the suite of programs available. In particular, this outreach will be critical to increasing participation in the Combined Heat & Power (CHP), the Large Energy Users Program (LEUP) and new construction programs.

A comprehensive, prioritized list of Trade Allies/Organizations is included as Attachment 1. In addition, listings of individual trade allies such as electricians, architects, and other contractors can be found on the OCE web site. That list will be updated on a more regular basis so that it too can be used for outreach purposes.

**Develop a Customer Relationship Management (CRM) System**

TRC will continue to work on the development of a centralized CRM system that can be used by all individuals performing outreach activities. This will give us the ability to generate reports, manage leads and keep notes associated with customer contacts.

**Targeted Sectors/Customers**

The Team will develop strategies that cover both the broad sectors of the Commercial and Industrial marketplace as well as more targeted efforts. We will strive to be responsive to requests from customer and other stakeholders and provide customized information when needed.

As outlined above, the Commercial and Industrial Marketplace is represented by several large sectors:

- Municipal Government
- K-12 schools
- Hospitals/Health Care
- Commercial
- Retail
- Industrial
- Hospitality
- Multifamily
- Higher Education

Whenever possible, we will work through trade/membership organizations (see attachment 1) with a focus on groups such as Sustainable Jersey, the NJ State League of Municipalities and Chambers of Commerce to reach these sectors using the tactics outlined in the next section, and to solicit input on needs and how best to deliver them.

The market research and analysis of past program participation has identified more specific customers and categories where we will direct our outreach efforts. These include:

- Potential customers of the new construction programs in Pay for Performance and Smart Start such as: builders, developers, architects, and commercial real estate companies.
- Potential customers of the Large Energy Users Program such as: pharmaceutical companies manufacturers, and colleges/universities.
- Potential customers of the Combined Heat and Power/Fuel Cell Program such as hospitals, large wastewater treatment facilities, data centers and supermarkets.
- Past program customers and customers who have used the LGEA or Benchmarking programs but have not yet moved forward with implementing a program to achieve energy savings. These customers can be identified by working with Sustainable Jersey (for LGEA participants) and monitoring the benchmarking application pipeline and our general database of applications.

### Outreach Approaches – General and Targeted (Sectors & Customers)

Our outreach strategy will incorporate **general** outreach activities intended to raise awareness within the C&I marketplace and within certain broad sectors. Such activities include exhibiting and speaking at conferences and trade shows and tracking leads generated; actively participating in membership organizations such as Chambers of Commerce and the NJ Business and Industry Association as examples; and working with the marketing team to develop digital, print and other advertising targeted at the C&I sectors.

We will continue to work with the Marketing Team to identify appropriate organizations to join and trade shows we should participate in. A listing of memberships and trades shows can be found in the Marketing Plan. The identification of these organizations and events is done as part of the marketing effort and are paid for out of the marketing budget. The outreach component is through staffing exhibits, speaking at or attending events as well as tracking the leads generated as a result of these events. We will also utilize a feedback process where the outreach staff will share information about these events (value for the money spent, opportunities to interact with potential customers, content of program etc.) with the Marketing Team to help inform decision making in the future regarding continued membership or participation.

Additionally, we will strengthen our **targeted** outreach to specific customer categories, potential program participants and sectors based upon the findings of the market research, feedback from customers and stakeholders, program participation data and

potential for energy savings. We will identify appropriate membership and professional organizations, events, and one-on-one opportunities such as lunch and learn seminars, webinars and other strategies that give us access to these customers and related trade allies and we will work with the Marketing Team to develop a complete strategy for engagement and follow up and to measure effectiveness.

The following approaches, categorized by **general** and **targeted**, will be used to identify potential participants (new and repeat) and to establish broader connections between C&I outreach personnel and key organizations that can help serve as “multipliers” through their constituent members.

### **GENERAL OUTREACH**

#### **Continue and Strengthen Partnerships – Trade and Professional Organizations, Chambers of Commerce, Government Associations etc.**

TRC, on behalf of the NJCEP is a member of, or has a relationship with numerous trade, business, government and energy-related organizations in order to give us access to their members through networking events, structured programs as well as advertising and event sponsorship. We have had much success working with these groups and propose continuing these relationships to further explore opportunities where we can provide valuable information to their members through events, publications and other venues.

The NJ Business and Industry Association, Chambers of Commerce, NJ Energy Coalition, Association of Energy Service Professionals (local chapter), and the Association of Electrical Contractors are among the organizations we will work with. A more comprehensive list of memberships can be found in the Marketing Plan. We will continue to explore others that may provide access to the broad C&I customer base.

#### **Trade Show/Conference Participation**

The Outreach Team will work with the Marketing Team and BPU to identify appropriate trade shows and conferences to participate in. Ideally, we will pursue speaking roles in addition to exhibiting and sponsorship. The Outreach Team will staff these events, track contacts made and handle follow up. They will also present when speaking roles are available.

#### **Follow Up with Past Program Customers and Customers Who Have Completed Benchmarking or LGEA or Who Have Cancelled Applications.**

The Team will utilize our database to identify customers who have used the programs in the past to inform them of new or updated programs they would be eligible for. In

addition, we will reach out to customers who have completed Benchmarking or a Local Government Energy Audit (LGEA) to determine if they have moved forward with implementation of energy efficiency measures identified utilizing the C&I programs. If not, we will reach out to them to offer assistance.

Finally, we will mine our existing database, with a focus on customers who have allowed applications to be cancelled, or who have previously shown an interest in the programs but have yet to take action. We will offer assistance, discuss their future energy plans, and help shape how they can incorporate NJCEP incentives into these plans. This may also help identify any program design issues that may need to be addressed to keep customers engaged.

### **Maintain and Expand Relationships with NJ's Gas and Electric Utilities**

We will continue to build upon our relationships with contacts with utility representatives to provide outreach or energy efficiency information. This may include training, providing materials and updates, sharing event and activity information, and co-presenting at events.

### **Maximize Opportunities to work with Key Market Participants**

Work with key market participants (energy service companies, P4P Partner Network, DI Contractors) to promote energy efficiency through these existing market channels. This could be joint meetings or energy mixers similar to those used in the Direct Install program.

## **TARGETED OUTREACH**

Using the market research and an evaluation of program participation we will focus certain outreach efforts on specific sectors, customer groups or trade ally/professional organizations.

Market Research and program participation data shows us that certain programs such as Direct Install and Pay for Performance for Existing Buildings are well subscribed while others such as the Large Energy Users Program (LEUP), Combined Heat and Power/Fuel Cells (CHP/FC) and the Pay for Performance New Construction (P4P NC) and Smart Start for New Construction are less so. In addition, based upon input from customers, trade allies and staff we know certain customers require more customized outreach strategies given their unique needs. Examples of these customers include data centers, chain retail, hospitals and commercial real estate developers.

Membership in groups such as American Institute of Architects (AIA), the NJ Apartment Association, the NJ Hotel and Lodging Association, the NJ Hospital Association, the NJ

Property Owners Association are among the groups we can work with to direct outreach to a more targeted audience with a more program-specific message.

Many of these groups host conferences and seminars that can provide us with opportunities to deliver targeted program specific information via presentations, webinars, small group meetings and other methods. This more targeted focus will allow for better tracking and measurement of leads generated.

In addition we will develop new case studies, presentations and testimonials designed to feature customers who have successfully used these programs. Wherever possible we want to facilitate peer-to-peer communication which can be extremely effective and compliment the traditional outreach strategies.

We will also monitor the program participation of these sectors and customers over time to determine if they are participating more in the programs.

Examples of Targeted Strategies:

- TRC will use information regarding past participation and work with utilities to determine who the eligible customers are for the LEUP and arrange for direct outreach to this group. One on one meetings and webinars can be arranged to ensure customers know about the program and how to use it. We will also pursue highlighting past LEUP participant successes during this outreach. We will continue to try to work with the Large Energy Users Coalition as well.
- Certain sectors, such as manufacturing, hospitals, hospitality, and campuses, have an energy profile that benefits from CHP (higher on site thermal loads). Targeting these sub-market sectors' trade associations, conferences, and seminars with New Jersey's Clean Energy Program information will increase participation in CHP. Developing case studies that highlight successes of peers will also prove to be a valuable tool in promoting the program. Given the potential for overlap, we will coordinate with the Energy Resiliency Bank (ERB) staff regarding outreach so that customers not eligible for ERB funding are aware of the NJCEP opportunities.
- Builders, contractors, real estate developers and architects will be a target audience for outreach on the P4P and other new construction programs. While other outreach efforts will be targeted at the customers, these professional work directly with the customers and can influence decision making regarding energy equipment and efficiency opportunities.

## Appendix A: FY 2016 Outreach Plan

- Through case studies, we will publicize the success of colleges and universities utilizing the programs as a way to encourage others to participate.

## Outreach Activities

The objective of the Outreach Plan is to continue to achieve greater energy savings and increase participation in the NJCEP Commercial & Industrial Programs, thereby moving New Jersey closer toward the goals of the Energy Master Plan.

TRC will continue to work with our growing list of Trade Allies and Membership Organizations as well as with our Program Partners and customers to promote and support the full suite of Commercial and Industrial Programs.

Outreach activities will continue to be carried out by the TRC Team and will include any combination of the following activities (the degree to which we will use each one will depend on the sector, customer need, and energy savings potential):

- Targeted individual or group meetings and presentations with customers
- Targeted individual or group meetings and presentations with Trade Allies, key stakeholders or through membership organizations
- Joint meetings with utility key account representatives and customers
- Participation in trade shows/conferences as a speaker or exhibitor
- Energy performance benchmarking
- Webinars with specific programmatic, sector or technology focus

### Targeted individual/group meetings and presentations with customers

TRC will maintain and establish direct relationships with as many key energy consumers as possible. The goal of relationship development is to create opportunities to influence capital planning activities and long-term energy reduction plans for both retrofit and new construction projects. We will place additional emphasis on the large energy user and the combined heat & power communities to better tap into potentially large sources of energy savings. In addition we will target contractors, architects and others involved in new construction projects as well as certain customer categories with more unique needs such as data centers. Direct contact will enable our trained energy experts to advise customers and refer them to program and non-program services available for reducing their energy consumption including:

- Energy performance benchmarking
- Retro-commissioning (i.e., facility systems' tune-ups – currently a non-program service)
- Program offerings and incentives
- Case studies and success stories within their sector

- ENERGY STAR Resources
  - Building an energy program
  - Improving building and plant efficiency (Commercial, New Construction, Industrial, Small business)
- Training via webinars, white papers, or other collateral depending on the topic (for example: How to integrate NJCEP incentives into your project planning process)
- Project Financing
  - Coordinate with Energy Savings Improvement Plan (ESIP) group
  - Coordinate with utility on-bill Repayment offerings
  - Other financing options

Through outreach, TRC will pursue an educational campaign to help transform facility managers into knowledgeable energy customers and supply them with the information they need to make decisions about energy upgrades and programs in their own facilities.

Customer outreach targets include:

- Commercial, industrial and institutional customers and building owners looking for incentive and participation guidance
- Municipal officials, school administrators and business managers
- National account representatives for NJ retail chain accounts (McDonalds, Burlington, Walgreens, and Toys R Us.)
- State, county, and community organizations involved in promoting energy efficiency and other green initiatives
- Utility efficiency and account representatives
- Developers interested in new construction incentives
- Large Energy Users Coalition and the CHP Working Group
- NJ Energy Resiliency Bank

**Targeted individual/group meetings and presentations with trade allies and key stakeholders or thorough membership organizations**

Trade allies, associations, and industry-specific associations can have significant influence on the energy efficiency decisions their clients and constituents make. Through individual meetings and direct contact at events, we will continue to engage these key decision-influencers, gain their trust, and help them better understand how to use NJCEP program support to increase sales, help clients save money, build membership in their organizations, and position themselves as market leaders and innovators.

Our outreach approach to trade allies and key stakeholders will now focus more heavily on direct contact at strategically selected industry trade shows (through exhibiting or presentations describing NJCEP offerings), Chamber of Commerce meetings, local and regional environmental/green conferences, and other similar events. Additionally, TRC will continue to utilize our relationship with both the Direct Install Participating Contractors and Pay for Performance Partners and develop a more formalized approach to utilizing the larger and less formal relationship with program trade allies.

Traditionally, many of the individual trade allies, such as contractors, architects and electricians, have been self-identified through the website. TRC will work with Honeywell (since these lists are used by both the residential and C&I customers) to more regularly update these lists and will utilize this list to reach out to these trade allies, re-familiarize them with the program offerings, and help identify opportunities for them to participate through web based trainings and seminars.

We will continue to perform targeted follow up meetings and make webinars available to train them on program offerings, gain their support, and encourage them to refer their clients/constituents directly to our outreach team for further guidance. The ultimate goal is to leverage these contacts to gain introductions and access to facility directors, business officials, and other senior leaders with whom we can work directly to make the right energy efficiency decisions.

**Joint meetings with utility key account representatives and customers**

Utility key account representatives generally have strong relationships with major energy users in their service territories. We will, wherever possible, work with utilities to help them educate their customers about the programs that are available through NJCEP and maximize the benefit from the range of programs and support services available to them. We will also partner on outreach events such as presentations to local chambers of commerce or other business groups. We had success with these opportunities in the past and will work to continue those partnerships.

**Participation in trade shows/conferences as a speaker or exhibitor**

As we refine and expand the conference and trade show opportunities that best match our targeted sectors and customers we will set up and staff program booths at these events. This provides an opportunity to have one on one interaction with potential customers. In addition we will pursue opportunities to secure speaking roles about NJCEP offerings as an additional opportunity to deliver the message about the programs available and how to use them. Tracking (through cell phone apps and a CRM system) as well as follow up on leads generated will also be done.

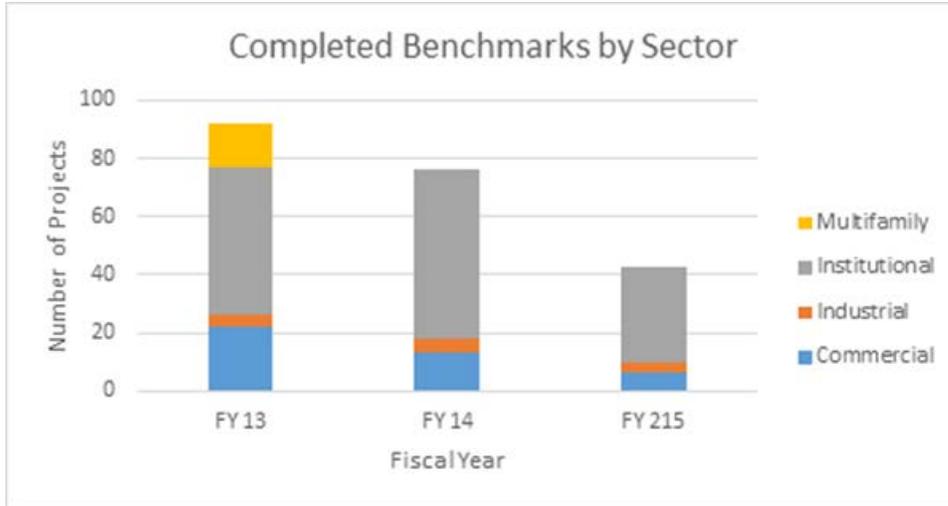
**Energy performance benchmarking**

Energy performance benchmarking provides a customer with an entry point to using New Jersey's Clean Energy programs. In addition, it helps to identify how and where energy is used, and what factors drive that use. Whether analyzing a single building or a portfolio of properties, energy benchmarking can aid the prioritization of preventative maintenance plan actions, develop accurate projections of annual energy consumption and expenditures, monitor the impact of energy efficiency improvements, and continuously track operational energy performance.

TRC analyzes seven major energy performance metrics and compares them to two different sets of energy data, EPA's national data and New Jersey specific data. This information is used to help school districts, municipalities and other sector-specific facility owners/managers compare their buildings against the national benchmarks established by the EPA ENERGY STAR Program and locally to other similar building types within New Jersey. The primary metric used to track performance within this program, the ENERGY STAR 1-100 score, is strongly correlated to average source energy use intensity (Source EUI), which is derived from the energy use per square foot per year and is related to the total yearly carbon footprint for a property. In addition to the ENERGY STAR score, TRC provides regional comparisons (where available) based on site energy use intensity (Site EUI) and further analyzes the whole building data to evaluate performance in Electricity Use, Electric Demand, Weather Normalized Heating Energy Use, and Energy Cost (per square foot & per building occupant).

We have found building-level energy performance benchmarking to be an effective energy management motivator. Seeing real data about how their buildings are performing relative to their peers tends to surprise some building owners and facility managers. Establishing baselines makes them work harder to prioritize and address their buildings' needs. The benchmarking report also provides an excellent platform and jumping off point for discussion about NJCEP programs that can help them implement changes.

Consistent and sustained outreach and marketing that highlight the benefits of benchmarking will help to improve participation in the benchmarking program.



Institutional includes: Municipalities, Schools, and churches.

TRC will focus our efforts on specific sectors or customer classes that can benefit most from benchmarking including school districts, municipalities and chain retail. By working through organizations such as Sustainable Jersey, NJ State League of Municipalities and Conference of Mayors, Edison Electric Institute (EEI) and their National Key Accounts Program, we can access these sectors and provide them with information and success stories that explain the value of benchmarking. TRC will highlight how benchmarking assists the customer in determining the best programs for them to achieve the highest level of energy savings.

In the case of Sustainable Jersey, their certification program awards points for certain energy-related measures including benchmarking. This presents an opportunity to coordinate on outreach and marketing of the benchmarking program to both their municipal and school customers. Sustainable Jersey’s community approach offers great potential to connect with professionals across multiple sectors.

EEI hosts a National Key Accounts conference where we will continue to exhibit and promote the benchmarking program.

TRC will also pursue the development of case studies that outline the value of benchmarking as well as other outreach materials such as articles and webinars that can be offered to specific sectors.

**Webinars with specific programmatic, sector or technology focus**

We will work with the Marketing Team to develop webinar topics that meet the needs of specific sectors or customers and also help us to promote participation in specific

## Appendix A: FY 2016 Outreach Plan

programs. We will work with BPU, trade allies and others to promote these events and solicit feedback from webinar participants that will address the value of the content as well as allow them to suggest topics for future webinars.

## Program Goals/Deliverables

The overarching Outreach goals are to increase awareness of New Jersey's Clean Energy Program, drive more energy savings and expand the total number of program participants. The following goals will help measure our success and we will provide monthly updates on these goals through the Monthly Administration Report.

1. Increase number of program applications received and energy savings committed by 10% over fiscal year 2015
2. Hold 50 direct outreach meetings per month (Customers, Trade Allies, Trade Organizations)
3. Conduct 24 joint customer meetings and other outreach activities with utilities (2/month)
4. Deliver 36 presentations to group gatherings of trade allies and/or key stakeholders at meetings, conferences, or trade shows.
5. Conduct energy performance benchmarking on 100 buildings.
6. Participate in 30 Chamber of Commerce events (attend/present)
7. Prepare 24 (2/month) new case studies.

## Conclusion and a Look Ahead

TRC strongly believes that dedicated outreach services are a vital and effective way to connect with the commercial, industrial, and institutional sectors to help them become more energy efficient. We hope that this plan demonstrates how we will use our expertise, market knowledge, and resources to continue increasing program participation and advancing program success. We look forward to working with Board staff on ways to further improve outreach and reporting, develop new strategies to gain greater market penetration, and make any other process changes that will allow us to become even more effective in supporting the goals of the NJCEP.

**ATTACHMENT 1**

**Trade Allies/Associations (prioritized based upon outreach strategies)**

American Institute of Architects (AIA) - Newark & Suburban  
American Institute of Architects (AIA) - Central Jersey  
American Institute of Architects (AIA) - Jersey Shore  
American Institute of Architects (AIA) - NJ Chapter  
American Institute of Architects (AIA) - South Jersey  
American Institute of Architects (AIA) - West Jersey Society of Architects  
New Jersey National Organization of Minority Architects (NJ NOMA)  
Associated Builders and Contractors, Inc. (ABC) New Jersey Chapter  
Associated Construction Contractors of New Jersey  
New Jersey Builders Association  
Construction Management Association of America - Mid-Atlantic Chapter  
Combined Heat and Power Association  
International District Energy Association  
New Jersey Society of Professional Engineers (8 local NJ chapters)  
New Jersey Association of Energy Engineers (NJ AEE)  
Building Owner and Managers Association (BOMA) of New Jersey  
American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) - NJ Chapter  
Business Action Center  
Compressed Air and Gas Institute  
Delaware Valley Green Building Council (DVGBC)  
Economic Development Association of New Jersey (EDANJ)  
Mechanical Contractors Association of New Jersey (MCANJ)  
National Electrical Contractors Association (NECA) - Northern New Jersey  
National Electrical Contractors Association (NECA) - Penn-Del-Jersey Chapter  
New Jersey Alliance for Action  
New Jersey Business & Industry Association (NJ BIA)  
New Jersey Community Development Corporation  
New Jersey Council for Clean Energy & Energy Efficiency  
New Jersey Energy Coalition  
New Jersey Green Association  
New Jersey Independent Electrical Contractors Association (NJ IEC)  
State of New Jersey Office of Sustainability and Green Energy  
Urban Land Institute - Northern New Jersey  
Biotechnology Industry Organization  
BioNJ  
International Society for Pharmaceutical Engineering - Delaware Valley Chapter  
International Society for Pharmaceutical Engineering - New Jersey Chapter  
Pharmaceutical Research and Manufacturers of America  
APPA - Leadership in Educational Facilities

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Association of Independent Colleges and Universities in New Jersey (AICUNJ)  
New Jersey Association of School Administrators  
New Jersey Association of School Business Officials (NJASBO)  
New Jersey Charter Schools Association  
New Jersey Higher Education Purchasing Association  
New Jersey School Boards Association (NJSBA)  
New Jersey School Buildings and Grounds Association  
Association for Data Center Management Professionals  
Association for Healthcare Foodservice Greater New Jersey Chapter  
New Jersey Restaurant Association  
American Society for Healthcare Engineering (ASHE) of the American Hospital Association  
Healthcare Engineers Association of Southern New Jersey  
Healthcare Facilities Management Society of New Jersey (HFMSNJ)  
Healthcare Facilities Managers Association of the Delaware Valley (HFMA DV)  
New Jersey Hotel & Lodging Association  
The Industrial & Office Real Estate Brokers Association  
National Association of Industrial Office Parks (NAIOP) - New Jersey Chapter  
National Association of Manufacturers - New Jersey office  
New Jersey Food Processors Association (NJFPA)  
Association of Energy Services Professionals (AES-P) Mid-Atlantic Regional Chapter  
National Association of Energy Service Companies (NAESCO)  
National Association of Power Engineers (NAPE)  
Association for Facilities Engineering (AFE) Region 1 Office  
Association for Operations Management (APICS) Midatlantic District  
Eastern Region of the Association of Physical Plant Administrators (ERAPPA)  
Energy Services Coalition (ESC) New Jersey Chapter  
International Facility Management Association (IFMA) New Jersey Chapter  
New Jersey Apartment Association  
Property Owners Association of New Jersey  
New Jersey Affordable Housing Management Association  
American Public Works Association - New Jersey Chapter  
American Water Works (NJ AWWA) New Jersey Section  
Association of Environmental Authorities of NJ  
Municipal Construction Officials of New Jersey  
New Jersey Municipal Management Association  
New Jersey Society of Municipal Engineers  
American Society of Civil Engineers - New Jersey Section  
New Jersey Technology & Manufacturing Association  
American Society of Transportation and Logistics  
Commerce and Industry Association of New Jersey  
Delaware Valley Chapter of the Association of Physical Plant Administrators (DVAPPA)  
New Jersey Manufacturing Extension Program Inc. (NJMEP)  
Refrigeration Service Engineers Society (RSES) - Garden State Chapter  
Air Conditioning Contractors of America (ACCA) - New Jersey  
Air Conditioning Contractors of America (ACCA) Delaware Valley Chapter

New Jersey Chamber of Commerce  
New Jersey Economic Development Authority  
Rutgers Energy Institute  
Healthcare Institute of New Jersey  
New Jersey Association of State Colleges and Universities  
New Jersey Education Association (NJEA)  
Commercial Finance Association - New Jersey Chapter  
Open Data Center Alliance  
National Defense Industrial Association - Delaware Valley Chapter  
National Defense Industrial Association - Picatinny Chapter  
Association for Facilities Engineering (AFE) Middlesex-Monmouth-Ocean Chapter 106  
Association for Facilities Engineering (AFE) Northern New Jersey Chapter 19  
Association for Operations Management (APICS) Central NJ Chapter  
Association for Operations Management (APICS) Northern New Jersey Chapter  
Association for Operations Management (APICS) Princeton South Jersey Chapter  
Association for Operations Management (APICS) West Jersey Chapter  
New Jersey Conference of Mayors  
New Jersey State League of Municipalities  
Non Profit Development Center of Southern New Jersey  
New Jersey Tech Council  
Chemical Sources Association  
Chemistry Council of New Jersey  
New Jersey Department of Environmental Protection  
Refrigeration Service Engineers Society (RSES) - Camden Chapter  
Refrigeration Service Engineers Society (RSES) - North Jersey Chapter  
Refrigeration Service Engineers Society (RSES) - Raritan Valley Chapter  
Refrigeration Service Engineers Society (RSES) - Trenton Chapter  
American Council for an Energy Efficient Economy  
Architects League of Northern New Jersey  
American Planning Association (APA) - NJ Chapter  
Center for Non-Profits  
International Association of Electrical Inspectors (IAEI) - New Jersey Chapter  
Mechanical Contractors Association of South Jersey  
New Jersey Society of Landscape Architects (NJ ASLA)  
State of New Jersey Department of Community Affairs (26 programs)  
Jersey Association of Medical Equipment Services  
Medical Device Manufacturers Association  
New Jersey Association for Middle Level Education  
New Jersey Hospital Association  
Casino Reinvestment Redevelopment Authority  
Metropolitan Real Estate Investors Association  
City of Trenton Division of Economic Development  
New Jersey Association of Counties  
Industrial Asset Management Council  
Telecommunications Industry Association

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Association for Healthcare Foodservice  
New Jersey Tourism Industry Association  
Society of Industrial and Office Realtors  
New Jersey Port Authority  
New Jersey Redevelopment Authority  
Council of Supply Chain Management Professionals  
Customized Logistics and Delivery Association  
Transportation Management Association Council of New Jersey  
New Jersey Farmers' Direct Marketing Association, Inc.  
Northeast Organic Farming Association of New Jersey  
Rutgers New Jersey Cooperative Extension (21 county offices)  
International Association of Electrical Inspectors (IAEI) - New Jersey Skylands Chapter  
International Association of Electrical Inspectors (IAEI) - South Jersey Chapter  
Union County Economic Development Corporation (UCEDC)  
New Jersey Principals and Supervisors Association  
Ocean City Restaurant Association  
International Municipal Signal Association - New Jersey Section  
New Jersey Motor Truck Association  
New Jersey Transit  
American Dairy Association and Dairy Council, Inc. (serves NJ, PA, NY)  
Garden State Dairy Alliance  
New Jersey Agricultural Society  
New Jersey Ag Fairs  
New Jersey Farm Bureau  
New Jersey Vegetable Growers Association, Inc.  
USDA Natural Resources Conservation Service - New Jersey  
Geothermal Heat Pump Initiative

**Appendix B: FY 2016 Budget**

**Appendix B  
FY 2016 Program Budgets**

## Appendix B: FY 2016 Budget

### FY 2016 Proposed C&I Energy Efficiency & CHP/Fuel Cell Program Budget

5/4/2015

	Total Proposed FY 2016 Budget	Admin. and Program Development	Sales, Marketing, Call Centers, Web Site	Training and Technical Support	Rebates, Grants and Other Direct Incentives	Rebate Processing, Inspections, Other Quality Control	Performance Incentives	Evaluation & Related Research
<b>COMMERCIAL &amp; INDUSTRIAL EE PROGRAMS</b>								
C&I New Construction	\$ 2,966,229.94	\$ 237,454.00	\$ -	\$ 356,091.00	\$ 2,251,840.24	\$ 120,844.70	\$ -	\$ -
C&I Retrofit	\$ 51,970,880.80	\$ 772,550.80	\$ -	\$ 384,578.28	\$ 47,425,411.72	\$ 3,388,340.00	\$ -	\$ -
Pay for Performance New Construction	\$ 16,140,835.90	\$ 174,600.00	\$ -	\$ 366,860.08	\$ 15,440,375.82	\$ 159,000.00	\$ -	\$ -
Pay for Performance	\$ 34,771,374.30	\$ 554,800.00	\$ -	\$ 508,334.64	\$ 33,259,239.66	\$ 449,000.00	\$ -	\$ -
Local Government Energy Audit	\$ 3,232,012.50	\$ 220,000.00	\$ -	\$ -	\$ 2,508,012.50	\$ 504,000.00	\$ -	\$ -
Direct Install	\$ 37,661,579.73	\$ 485,000.00	\$ -	\$ 10,000.00	\$ 36,718,079.73	\$ 448,500.00	\$ -	\$ -
Marketing	\$ 1,075,000.00	\$ -	\$ 1,075,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Large Energy Users Program	\$ 17,526,549.36	\$ 138,216.00		\$ -	\$ 17,203,651.64	\$ 184,681.72	\$ -	\$ -
<b>Subtotal C&amp;I EE Programs</b>	<b>\$165,344,462.53</b>	<b>\$ 2,582,620.80</b>	<b>\$ 1,075,000.00</b>	<b>\$1,625,864.00</b>	<b>\$154,806,611.31</b>	<b>\$ 5,254,366.42</b>	<b>\$ -</b>	<b>0.00</b>
<b>COMMERCIAL &amp; INDUSTRIAL CHP PROGRAM</b>								
CHP and Fuel Cell	\$ 20,618,267.85	\$ 50,000.00	\$ -	\$ -	\$ 20,430,960.93	\$ 137,306.92	\$ -	\$ -
<b>Subtotal CHP Program</b>	<b>\$ 20,618,267.85</b>	<b>\$ 50,000.00</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 20,430,960.93</b>	<b>\$ 137,306.92</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL C&amp;I PROGRAM</b>	<b>\$ 185,962,730.38</b>	<b>\$ 2,632,620.80</b>	<b>\$ 1,075,000.00</b>	<b>\$1,625,864.00</b>	<b>\$175,237,572.24</b>	<b>\$ 5,391,673.34</b>	<b>\$ -</b>	<b>\$ -</b>

**Appendix C  
FY 2016 Program Goals**

## Appendix C: FY 2016 Program Goals

Projections for FY 2016 - Committed										
Program	Applications	Annual Electric Savings - Committed		Lifetime Electric Savings - Committed		Gas Savings - Committed		Committed Generation		
		kW	MWh	kW	MWh	Annual DTh	Lifetime DTh	Annual kW	Annual MWh	Lifetime MWh
New Construction	70	1,196	6,815	1,196	103,761	2,597	44,709	0	0	0
Retrofit	1,788	23,120	136,203	23,120	2,170,446	96,143	1,789,618	0	0	0
CHP	14	0	0	0	0	81,365	1,311,705	4,090	30,051	477,010
Direct Install	558	9,245	39,263	9,245	570,056	73,182	1,187,674	0	0	0
LEUP	13	5,572	34,722	5,572	625,003	85,131	1,532,361	0	0	0
P4PEB	46	5,439	26,503	5,439	397,540	138,973	2,501,519	0	0	0
P4PNC	20	7,137	15,048	7,137	272,720	35,956	710,143	0	0	0
LGEA	62	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>2,571</b>	<b>51,708</b>	<b>258,554</b>	<b>51,708</b>	<b>4,139,527</b>	<b>513,348</b>	<b>9,077,729</b>	<b>4,090</b>	<b>30,051</b>	<b>477,010</b>

Projections for FY 2016 - Installed										
Program	Applications	Annual Electric Savings - Installed		Lifetime Electric Savings - Installed		Gas Savings - Installed		Installed Generation		
		kW	MWh	kW	MWh	Annual DTh	Lifetime DTh	Annual kW	Annual MWh	Lifetime MWh
New Construction	86	1,246	7,103	1,246	108,148	3,146	54,154	0	0	0
Retrofit	2,813	19,364	114,079	19,364	1,817,889	93,582	1,741,936	0	0	0
CHP	10	0	0	0	0	73,588	1,186,335	2,849	23,019	365,393
Direct Install	1,271	7,850	33,340	7,850	484,054	72,216	1,171,999	0	0	0
LEUP	12	2,085	13,938	2,085	240,715	4,491	80,843	0	0	0
P4PEB	25	2,889	11,444	2,889	191,213	92,664	1,389,960	0	0	0
P4PNC	15	4,604	8,741	4,604	159,675	57,883	1,113,452	0	0	0
LGEA	245	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>4,477</b>	<b>38,038</b>	<b>188,645</b>	<b>38,038</b>	<b>3,001,694</b>	<b>397,570</b>	<b>6,738,679</b>	<b>2,849</b>	<b>23,019</b>	<b>365,393</b>

Projections for FY 2016 - Emissions Reductions																
Program	Annual Emission Savings - Committed				Lifetime Emission Savings - Committed				Annual Emission Savings - Installed				Lifetime Emission Savings - Installed			
	Tons CO2	Tons NOx	Tons SO2	Lbs Hg	Tons CO2	Tons NOx	Tons SO2	Lbs Hg	Tons CO2	Tons NOx	Tons SO2	Lbs Hg	Tons CO2	Tons NOx	Tons SO2	Lbs Hg
New Construction	4,780	9	20	0.24	73,052	134	306	3.69	5,005	9	21	0.25	76,542	140	319	3.85
Retrofit	97,880	177	402	4.85	1,573,422	2,831	6,398	77.27	82,674	149	336	4.06	1,330,737	2,381	5,359	64.72
CHP	4,317	3	0	0.00	69,601	55	0	0.00	3,905	3	0	0.00	62,948	49	0	0.00
Direct Install	30,629	53	116	1.40	451,330	773	1,680	20.29	26,542	45	98	1.19	391,915	664	1,427	17.23
LEUP	28,169	48	102	1.24	507,048	858	1,842	22.25	9,733	18	41	0.50	168,260	309	710	8.57
P4PEB	25,427	39	78	0.94	403,530	609	1,172	14.15	12,712	18	34	0.41	204,003	301	564	6.81
P4PNC	12,158	21	44	0.54	223,452	376	804	9.71	9,026	14	26	0.31	167,848	249	471	5.68
LGEA	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
<b>TOTALS</b>	<b>203,360</b>	<b>350</b>	<b>762</b>	<b>9.20</b>	<b>3,301,435</b>	<b>5,635</b>	<b>12,203</b>	<b>147.37</b>	<b>149,597</b>	<b>256</b>	<b>556</b>	<b>6.72</b>	<b>2,402,254</b>	<b>4,093</b>	<b>8,849</b>	<b>106.86</b>

\*Committed values identified above represent the net of new projects anticipated to be carried over into FY17. Committed values do not include installed or rejected/cancelled projects anticipated for FY16.