



FY2017 Notice of Changes

Commercial & Industrial Energy Efficiency Programs

The New Jersey Board of Public Utilities, at its June 29, 2016 Board Agenda meeting, approved the New Jersey Clean Energy Program's Fiscal Year 2017 compliance filing which runs from July 1, 2016 through June 30, 2017. The filing contained significant program changes as outlined below. New incentive levels and some program changes will be effective July 1, 2016.

Consistent with prior fiscal year program changes, participants are provided the ability to submit either a FY16 or FY17 application through July 31, 2016 (with the exception of CHP as noted on page 13 of this notice). The program rules, requirements and incentive levels will be consistent with the application form submitted. As of August 1, 2016, the program will no longer accept FY16 applications and participants must use the FY17 forms.

New Incentives and program changes effective July 1, 2016:

NJ SmartStart Buildings

Prescriptive Lighting

- The incentives for LED screw-in/plug-in style lamps are reduced from \$10 to \$5 per lamp for specific types (A15, A19, A21, BR30, BR40, R40, B13, BA10, F15, MRX16). All other LED screw-in/plug-in maintain the current \$5/lamp incentive.

Performance Lighting

- The baseline qualification requirement for new construction and major gut-rehab lighting projects change from 5% over ASHRAE 90.1-2007 to simply exceeding ASHRAE 90.1-2013. The existing incentive structure will be maintained; lesser of \$30 per eligible fixture or \$1/Watt over the LPD baseline per qualified area.

Electric Chillers

- Incentives for existing and new construction buildings have been separated to reflect the changes to the State energy code (ASHRAE 90.1-2013).
- The base incentive for water-cooled centrifugal chillers <150 tons is increased from \$12 to \$24 per ton. The performance incentive for this same unit is reduced from \$4.00 to \$2.75 per ton.

Electric Chiller Incentives

Proposed FY17 Incentives									
Type	Capacity	Existing Building				New Construction			
		Constant Speed		Variable Speed		Constant Speed		Variable Speed	
		Base \$/ton	Perf \$/ton	Base \$/ton	Perf \$/ton	Base \$/ton	Perf \$/ton	Base \$/ton	Perf \$/ton
AC	tons < 150	\$20.00	\$3.50	\$90.00	\$4.00	\$10.00	\$3.50	\$45.00	\$4.00
AC	tons ≥ 150	\$20.00	\$2.75	\$92.00	\$4.00	\$10.00	\$2.75	\$46.00	\$4.00
WC positive disp	tons < 75	\$13.00	\$2.25	\$40.00	\$2.50	\$6.50	\$2.25	\$20.00	\$2.50
WC positive disp	75 ≤ tons < 150	\$20.00	\$2.00	\$43.00	\$2.00	\$10.00	\$2.00	\$21.50	\$2.00
WC positive disp	150 ≤ tons < 300	\$17.00	\$2.00	\$43.00	\$2.00	\$8.50	\$2.00	\$21.50	\$2.00
WC positive disp	300 ≤ tons < 600	\$15.00	\$2.25	\$37.00	\$2.00	\$7.50	\$2.25	\$18.50	\$2.00
WC positive disp	tons ≥ 600	\$30.00	\$2.00	\$44.00	\$2.00	\$15.00	\$2.00	\$22.00	\$2.00
WC centrifugal	tons < 150	\$24.00	\$2.25	\$24.00	\$2.75	\$12.00	\$2.25	\$12.00	\$2.75
WC centrifugal	150 ≤ tons < 300	\$10.00	\$2.00	\$30.00	\$2.50	\$5.00	\$2.00	\$15.00	\$2.50
WC centrifugal	300 ≤ tons < 400	\$8.00	\$2.00	\$20.00	\$2.00	\$4.00	\$2.00	\$10.00	\$2.00
WC centrifugal	400 ≤ tons < 600	\$8.00	\$2.00	\$25.00	\$2.00	\$4.00	\$2.00	\$12.50	\$2.00
WC centrifugal	tons ≥ 600	\$8.00	\$2.00	\$25.00	\$2.00	\$4.00	\$2.00	\$12.50	\$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.

Unitary HVAC

The program changes for the prescriptive HVAC application reflect the new State building code and are intended to promote higher efficiency equipment through tiered incentives for many of the eligible equipment categories.

- The size categories match those identified by ASHRAE 90.1-2013.
- The Split Systems and Single Package Units categories are separated into their own respective categories.
- Package Terminal Systems are divided into Package Terminal Air Conditioning (PTAC) and Package Terminal Heat Pump (PTHP).
- Single Package Vertical Air Conditioners (SPVAC) and Single Package Vertical Heat Pumps (SPVHP) are new categories for FY17.
- The definition of Central DX Air Conditioning is changed from > 30 tons to > 20 tons.
- Proposed equipment must meet all efficiency requirements as stated in the tables below.
- A second tier higher efficiency requirement with an associated higher incentive has been established for all equipment categories except for the Package Terminal equipment. For Unitary HVAC, Central DX AC and Air Source Heat Pumps in nearly every case the first tier incentive and efficiency requirements are the same as in the FY16 program. For those categories, the existing building and new construction incentives are also the same.
- For Packaged Terminal Systems the size categories are expanded considerably to allow consistency with how ASHRAE determines unit efficiency. The existing buildings and new construction incentives are all less than the FY16 incentives.
- For Package Terminal Systems and Single Package Vertical systems, the new construction incentives are all less than the existing building incentives.

Unitary HVAC Incentives

SmartStart Equipment Type	Cooling Capacity tons	Incentive Tier	Existing Building and New Construction					Incentive \$/ton
			Minimum Qualifying Efficiency					
			SEER	HSPF	EER	IEER	COP	
Unitary HVAC Split System	< 5.4	1	14.0					\$92
Unitary HVAC Split System	< 5.4	2	16.0					\$105
Unitary HVAC Single Package	< 5.4	1	14.3					\$92
Unitary HVAC Single Package	< 5.4	2	16.0					\$103
Unitary HVAC Single Package or	> 5.4 and < 11.25	1			11.5	13.0		\$73
Unitary HVAC Single Package or	≥ 5.4 and < 11.25	2			12.5	14.0		\$79
Unitary HVAC Single Package or	≥ 11.25 and < 20	1			11.5	12.4		\$79
Unitary HVAC Single Package or	≥ 11.25 and < 20	2			12.0	14.0		\$89
Central DX AC	> 20 and < 63	1			10.5	11.6		\$79
Central DX AC	≥ 20 and < 63	2			11.0	12.5		\$85
Central DX AC	≥ 63	1			9.7	11.2		\$72
Central DX AC	≥ 63	2			10.0	12.0		\$77
Air Source HP Split System	< 5.4	1	14.3	8.4				\$92
Air Source HP Split System	< 5.4	2	15.5	8.5				\$100
Air Source HP Single Package	< 5.4	1	14.3	8.2				\$92
Air Source HP Single Package	< 5.4	2	15.5	8.5				\$100
Air Source HP Single Package or	> 5.4 and < 11.25	1			11.5	12.2	3.4	\$73
Air Source HP Single Package or	> 5.4 and < 11.25	2			12.1	12.8	3.5	\$77
Air Source HP Single Package or	≥ 11.25 and < 20	1			11.5	11.6	3.3	\$79
Air Source HP Single Package or	≥ 11.25 and < 20	2			11.7	15.0	3.3	\$82
Air Source HP Single Package or	≥ 20	1			9.5	10.5	3.2	\$79
Air Source HP Single Package or	> 20	2			9.7	12.0	3.2	\$82

Unitary HVAC Incentives (continued)

SmartStart Equipment Type	Cooling Capacity Btu/hr	Incentive Tier	Existing Building			New Construction		
			Minimum Qualifying Efficiency		Incentive \$/ton	Minimum Qualifying Efficiency		Incentive \$/ton
			EER	COP		EER	COP	
PTAC	< 7,000	1	12.0		\$40	12.0		\$20
PTAC	≥ 7,000	1	12.0		\$40	12.0		\$20
PTAC	≥ 8,000	1	11.7		\$40	11.7		\$20
PTAC	≥ 9,000	1	11.4		\$40	11.4		\$20
PTAC	≥ 10,000	1	11.1		\$40	11.1		\$20
PTAC	≥ 11,000	1	10.8		\$40	10.8		\$20
PTAC	≥ 12,000	1	10.5		\$40	10.5		\$20
PTAC	≥ 13,000	1	10.2		\$40	10.2		\$20
PTAC	≥ 14,000	1	9.9		\$40	9.9		\$20
PTAC	≥ 15,000	1	9.6		\$40	9.6		\$20
PTHP	< 7,000	1	12.0	3.4	\$40	12.0	3.4	\$20
PTHP	≥ 7,000	1	12.0	3.4	\$40	12.0	3.4	\$20
PTHP	≥ 8,000	1	11.7	3.3	\$40	11.7	3.3	\$20
PTHP	≥ 9,000	1	11.4	3.3	\$40	11.4	3.3	\$20
PTHP	≥ 10,000	1	11.1	3.2	\$40	11.1	3.2	\$20
PTHP	≥ 11,000	1	10.8	3.2	\$40	10.8	3.2	\$20
PTHP	≥ 12,000	1	10.5	3.1	\$40	10.5	3.1	\$20
PTHP	≥ 13,000	1	10.2	3.1	\$40	10.2	3.1	\$20
PTHP	≥ 14,000	1	9.9	3.0	\$40	9.9	3.0	\$20
PTHP	≥ 15,000	1	9.6	3.0	\$40	9.6	3.0	\$20

Unitary HVAC Incentives (continued)

SmartStart Equipment Type	Cooling Capacity tons	Incentive Tier	Existing Building			New Construction		
			Minimum Qualifying Efficiency		Incentive \$/ton	Minimum Qualifying Efficiency		Incentive \$/ton
			EER	COP		EER	COP	
Water Source Heat Pump	< 1.4	1	12.4	4.3	\$40	12.4	4.3	\$20
Water Source Heat Pump	< 1.4	2	14.0	4.8	\$45	14.0	4.8	\$23
Water Source Heat Pump	≥ 1.4 and < 5.4	1	13.3	4.3	\$60	13.3	4.3	\$30
Water Source Heat Pump	≥ 1.4 and < 5.4	2	15.0	4.5	\$68	15.0	4.5	\$34
Water Source Heat Pump	≥ 5.4 and < 11.25	1	13.3	4.3	\$80	13.3	4.3	\$40
Water Source Heat Pump	> 5.4 and < 11.25	2	15.0	4.5	\$90	15.0	4.5	\$45
SPVAC	< 5.4	1	10.2		\$45	10.2		\$10
SPVAC	< 5.4	2	10.7		\$47	10.7		\$12
SPVAC	≥ 5.4 and < 11.25	1	10.2		\$45	10.2		\$10
SPVAC	≥ 5.4 and < 11.25	2	10.7		\$47	10.7		\$12
SPVAC	≥ 11.25 and < 20	1	10.2		\$45	10.2		\$10
SPVAC	> 11.25 and < 20	2	10.7		\$47	10.7		\$12
SPVHP	< 5.4	1	10.2	3.1	\$45	10.2	3.1	\$10
SPVHP	< 5.4	2	10.7	3.2	\$47	10.7	3.2	\$12
SPVHP	≥ 5.4 and < 11.25	1	10.2	3.1	\$45	10.2	3.1	\$10
SPVHP	> 5.4 and < 11.25	2	10.7	3.2	\$47	10.7	3.2	\$12
SPVHP	≥ 11.25 and < 20	1	10.2	3.1	\$45	10.2	3.1	\$10
SPVHP	≥ 11.25 and < 20	2	10.7	3.2	\$47	10.7	3.2	\$12

Ground Source Heat Pumps

- The Ground and Ground Water Source Heat Pump equipment categories and incentives have been revised to reflect the changes to the C&I energy code. Overall incentives have been reduced from FY16.
- Equipment must meet both EER and COP efficiency requirements to qualify for incentives.

Ground and Ground Water Source Heat Pump Incentives

SmartStart Equipment Type	Cooling Capacity tons	Incentive Tier	Existing Building			New Construction		
			Minimum Qualifying Efficiency		Incentive \$/ton	Minimum Qualifying Efficiency		Incentive \$/ton
			EER	COP		EER	COP	
Groundwater Source Heat Pump	< 11.25	1	18.4	3.7	\$80	18.4	3.7	\$40
Groundwater Source Heat Pump	< 11.25	2	22.0	3.9	\$96	22.0	3.9	\$48
Ground Source Heat Pump	< 11.25	1	14.4	3.2	\$80	14.4	3.2	\$40
Ground Source Heat Pump	< 11.25	2	18.0	3.6	\$100	18.0	3.6	\$50

Variable Frequency Drives (VFD)

- The incentive structure is reformatted to aid customer use with some minor incentive revisions.
- For all VFD measures except air compressors, the maximum controlled threshold is 50HP. VFDs controlling more than 50HP, except related to air compressors, will be reviewed through the custom measure path.
- For new air compressors with VFDs, prescriptive incentives will be provided for units up to 200HP. VFDs controlling air compressor motors exceeding 200HP will be reviewed through the custom measure path.
- Centrifugal Fans on VAV Systems / Boiler Fans
 - o 5 HP – 7.5 HP— slightly increased incentives on average
 - o 10 HP – 15 HP— decreased incentives on average
 - o 20 HP – 50 HP— decreased incentives on average

- o 60 HP and above have been moved to the custom SmartStart program
- Centrifugal Fans on CV Systems
 - o 10 HP – 50 HP— slightly increased incentives on average
 - o 60 HP and above have been moved to the custom SmartStart program
- Cooling Tower Fans
 - o 10 HP – 50 HP— slightly increased incentives on average
 - o 60 HP and above have been moved to the custom SmartStart program
- Chilled Water Pumps
 - o 20 HP – 50 HP— slightly increased incentives on average
 - o 60 HP and above have been moved to the custom SmartStart program
- Boiler Feed Water Pumps
 - o 5 HP – 7.5 HP— slightly increased incentives on average
 - o 10 HP – 15 HP— decreased incentives on average
 - o 20 HP – 50 HP— decreased incentives on average
 - o 60 HP and above have been moved to the custom SmartStart program
- Air Compressor Specific Changes
 - o The standardized VFD incentive table decreases total incentive value for all eligible projects.
 - o Greater than 200 HP have been moved to the custom SmartStart program
- Commercial Kitchen Hoods
 - o The standardized VFD incentive table decreases total incentive value for all eligible projects.

Variable Frequency Drives Incentives

Motor Size (HP)	Proposed Incentive (\$)
0.5	\$50
1	\$75
2	\$100
3	\$200
4	\$300
5	\$900
7.5	\$1,000
10	\$1,100
15	\$1,200
20	\$1,300
25	\$1,400
30	\$1,500
40	\$2,500
50	\$3,000
60	\$3,500
75	\$4,000
100	\$5,000
200	\$7,000

Eligible controlled horsepower with a single VFD, by types of usage

VAV - Variable Air Volume HVAC System:	5 HP ≤ 50 HP
CV - Constant Volume HVAC System:	0.5 HP ≤ 50 HP
T - Cooling Tower:	10 HP ≤ 50 HP
P - Chilled Water Pump:	20 HP ≤ 50 HP
A - Air Compressor:	25 HP ≤ 200 HP
BP - Boiler Feed Water Pump:	5 HP ≤ 50 HP
BF - Boiler Fan Motor:	5 HP ≤ 50 HP
K- Kitchen Hood:	0.5 HP ≤ 50 HP

Notes:

- Controlled HP is the cumulative motor HP controlled by each VFD.
- Controlled HP less than the listed eligible values are ineligible for incentives.
- Controlled HP more than the listed eligible values should use the SmartStart Custom program.
- If the controlled HP falls in between the HP listed on the VFD incentive table, the incentive is based on the lower controlled HP listed.

Gas Water Heating

- The table below represents the efficiency and incentive structure for tank-style gas water heating equipment.
- The revised efficiency requirements for tank-style equipment are consistent with the new energy code (ASHRAE 90.1-2013) and AHRI input rating categories. The capacity and efficiency values must be documented by the manufacturer’s published ratings or a certificate from the AHRI Directory.

Gas Water Heating Incentives

Capacity	Efficiency	Incentive \$ / MBh
≤ 75,000 Btu/h	≥ 0.67 EF	\$1.75
≤ 75,000 Btu/h	≥ 0.80 EF	\$3.50
> 75,000 Btu/h	≥ 82% Et	\$1.75
> 75,000 Btu/h	≥ 92% Et	\$3.50

Custom Measures

- The FY16 custom program required that projects exceed efficiency ratings by at least 2%, per the ASHRAE 90.1-2007 code, as applicable. Due to the energy code change, ASHRAE 90.1-2013 will replace 90.1-2007 as the baseline for FY17. Existing building and new construction projects must demonstrate that the proposed measure(s) exceed ASHRAE 90.1-2013 or industry standards (CEE, EPA ENERGY STAR, Others) by at least 2% to be considered for program incentives.

Local Government Energy Audit

The following change will provide further detail regarding QA/QC of LGEA audits, which will be performed by TRC for FY17:

On an annual basis AEG will accompany each LGEA auditor on a site visit to a randomly selected LGEA applicant's facility to verify that the audit is conducted in accordance with proper protocols and to ensure the accuracy of TRC's audit in documenting the facility's detailed building survey. AEG will also regularly conduct technical reviews of full audit reports based on a pre-determined percentage, perform file reviews on a sampling of applications prior to incentive payments, and will review audit pricing for consistency and as compared to LGEA historical data.

Direct Install Program

The Program Administrator is working with the BPU to resume implementation of this program. The following changes are in place for this program in FY17:

- Program pricing: The program administrator has released Request for Proposals (RFPs) to obtain program pricing for all labor and materials. For:
 1. Installation Contractor Service (includes HVAC)
 2. Statewide Lighting Equipment Vendor
 3. Statewide Refrigeration Equipment Vendor

Contractors and Vendors will be selected via an open and competitive bidding process.

- Allow customers to use their own contractor - If an applicant wishes to utilize their own contractor, that contractor must meet the Program requirements, agree to the established pricing and complete training. If the applicant's contractor is unable to meet these requirements, the applicant will be given the option to proceed using one of the approved Participating Contractors (as referenced above) for that specified territory.

Additional details regarding the program design, equipment and contractor selection is available in the RFPs referenced above. The Board of Public Utilities will continue to evaluate additional program changes following the re-launch of the program.

Pay for Performance - Existing Buildings

There are currently no changes for this program in FY17.

Pay for Performance - New Construction

FY17 Pay for Performance applications will be available July 1, 2016. Partners will go through training on the new program process mid-July through August. Participation applications may be submitted through P4P Partners.

The Pay for Performance - New Construction (P4P NC) program design has been modified to set minimum performance targets over the new state code (i.e. ASHRAE 90.1-2013), simplify modeling requirements, reduce

review time, emphasize actual achieved performance of buildings after construction, and align the program with other rating authorities such as LEED, ENERGY STAR, and ASHRAE Building Energy Quotient.

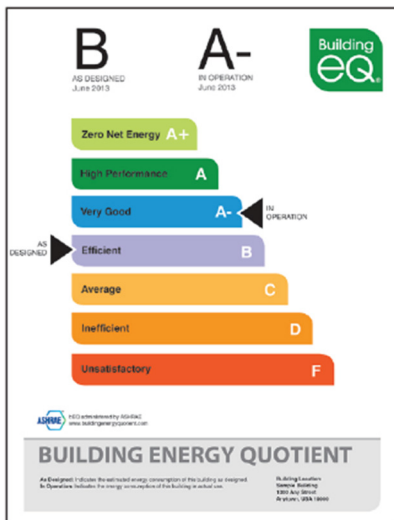
Partners are required to develop and submit project deliverables as outlined below in order to secure incentives for participants. All Partners currently qualified for New Construction are required to attend a training webinar to understand the new program requirements.

Modeling Requirements

Under the FY16 program, a Partner had to develop a baseline-compliant design following ASHRAE 90.1-2007 Appendix G and then model improvements to represent the proposed design. Under the new FY17 program, Partners may comply with modeling requirements by following either of the paths below:

- **Path 1** - Under this path, the Partner will develop a single energy model representing the proposed project design using prescribed modeling assumptions that follow *ASHRAE Building Energy Quotient (bEQ) As-Designed*¹ simulation requirements. Proposed design simulation results, including Energy Use Intensity (EUIstandard), will be measured against the median EUI for the building type (EUImedian) to evaluate the Performance Score. Median value (score of 100) is set to the national median EUI from CBECS for that building type based on ASHRAE 100.

$$\text{Performance Score} = (\text{EUIstandard} / \text{EUI median}) \times 100$$



Scale Range	Rating	Description
≤ 0	A+	Zero Net Energy
1-25	A	High Performance
26-55	A-	Very Efficient
56-85	B	Efficient
86-115	C	Average
116-145	D	Inefficient
>145	F	Unsatisfactory

- **Path 2** - Under this option the Partner will model a baseline and proposed building using ASHRAE 90.1-2013 Appendix G modified by Addendum BM.

Addendum BM sets a common baseline building approach that will remain the same for ASHRAE 90.1-2013 and all future iterations of ASHRAE 90.1, and is roughly equivalent to ASHRAE 90.1-2004. To comply with ASHRAE

¹ <http://buildingenergyquotient.org/asdesigned.html>

90.1-2013, a proposed building has to have energy cost savings of 11-40% from the Addendum BM baseline, depending on the building type and climate zone.

The Addendum BM modeling approach is technically similar to the FY16 program offering and less challenging than the ASHRAE 90.1-2013 Appendix G approach without Addendum BM accepted. Furthermore, LEED New Construction will incorporate Addendum BM into its modeling requirements. Adopting Addendum BM as a program compliance path will simplify modeling rigor for Partners participating in both P4P and LEED, which is common. In addition, aligning with LEED will reduce program administration overhead due to opportunities for utilizing LEED templates as the basis for P4P submittals.

When New Jersey adopts a future version of ASHRAE 90.1 as its energy code (e.g. 2016), an added benefit is that the program does not need to be redesigned. Instead, the minimum performance target to be eligible for incentives would be adjusted.

Minimum Performance Target

The FY16 program required a minimum 15% energy cost savings from an ASHRAE 90.1-2007 compliant baseline. Under the FY17 program the Minimum Performance Target is set to 5% for commercial and industrial buildings and 15% for multifamily buildings compared to ASHRAE 90.1-2013 baseline. This target has the following equivalent values for the compliance paths described above:

- Path 1 - Proposed design will be required to meet a minimum score of 68².
- Path 2 – Proposed design will be required to meet specified Performance Cost Index (PCI)³ value, which will vary depending on building type. For example, multifamily buildings will have to meet a minimum PCI of 0.74, which equates to a 15% improvement over ASHRAE 90.1-2013 and 26% over ASHRAE 90.1-2004 (BM baseline). Commercial office buildings will have to meet a minimum PCI of 0.71, which equates to a 5% improvement over ASHRAE 90.1-2013 and 29% over ASHRAE 90.1- 2004 (BM baseline)⁴.

Measure Requirements

The FY16 program required at least two unique measures where lighting/lighting controls cannot make up more than 50% of total energy cost savings. Under the FY17 program each project, regardless of compliance path selected, must have at least one measure addressing each of the following building systems: envelope, heating, cooling, and lighting (e.g. increased insulation, improved HVAC efficiency, lighting power density below code requirements, etc.). Buildings that are not heated (e.g. refrigerated warehouse) or not cooled (e.g. warehouse) are not required to have a measure addressing the missing building system. Measures are defined as components that exceed ASHRAE 90.1-2013 requirements.

² Scores subject to change due to anticipated updates to bEQ program by ASHRAE.

³ Performance Cost Index: Addendum BM establishes a new formula to evaluate building performance called the Performance Cost Index (PCI). PCI is equivalent to 1 - Performance Rating. Under the current P4P NC program, a 15% energy cost savings from ASHRAE 90.1-2007 is equal to $1 - .15 = 0.85$ PCI. A PCI of 1.0 is equal to baseline of ASHRAE 90.1-2004.

⁴ PCI subject to change slightly to align with the final PNNL / LEED technical documents.

Incentives

P4P New Construction Proposed Incentive Structure

	Cost reduction over 90.1-2013 Baseline	Incentive by Building Type Per Square Foot	
Minimum Performance Requirement	15% Multifamily 5% All other	Industrial/High Energy Use Intensity	Commercial and Multifamily
Incentive 1 Proposed Energy Reduction Plan	+ 0 - 1.9% (Tier 1)	\$0.10	\$0.08
	+ 2 - 4.9% (Tier 2)	\$0.12	\$0.10
	+ 5% or greater (Tier 3)	\$0.14	\$0.12
	Max	\$50,000.00	
	Pre-Design Bonus	\$0.02	
	Max	\$10,000.00	
Incentive 2 As-Built Energy Reduction Plan and Cx Report	+ 0 - 1.9% (Tier 1)	\$1.00	\$0.80
	+ 2 - 4.9% (Tier 2)	\$1.20	\$1.00
	+ 5% or greater (Tier 3)	\$1.40	\$1.20
	Max	75% Measure Incremental Cost	
Incentive 3 Building Performance		\$0.40	\$0.35
	Max	25% Measure Incremental Cost	

- Incentive #1, Proposed Energy Reduction Plan (ERP): Will be paid per the table above upon successful submittal and approval of the Proposed ERP. Proposed ERP will follow the previously described modeling compliance paths, meeting minimum performance target and measure requirements.

- Incentive #1 Pre-Design Bonus: Projects that are in pre-design or schematic design may be eligible for a higher Incentive #1. The goal is to incentivize applicants to critically think about their building design from an energy efficiency standpoint early in the process where changes are easier to make, thereby supporting high-performance, cost-effective project outcomes. In order to qualify, Partner will need to work with the applicant beginning in pre-design and continuing throughout the design phases. They will perform a preliminary “simple box” energy modeling analysis before the completion of schematic design that explores how to reduce energy loads in the building and accomplish related sustainability goals by questioning default assumptions. They will then document how this analysis informed building design decisions relative to owner’s project requirements, basis of design, and eventual design of the project. This submittal shall be submitted after Application approval but prior to the Proposed Energy Reduction Plan. Although pre-construction inspections are not routinely performed in this program, the Program Administrator may inspect projects applying for this bonus.

- Incentive #2 As-Built ERP and Commissioning (Cx): Will encompass any design changes that occurred during construction. Minimum performance target must still be met. A Commissioning Report will be required at this stage to support installed equipment and ensure there are no major outstanding operational issues. Invoices for measures, or equivalent documents (e.g. AIA documents), will be collected to support measure costs, partner fees, and other eligible project costs. A post-inspection will be conducted by the Program Administrator to verify on-site equipment.

- Incentive #3 Building Performance: The purpose of this incentive is to assess the energy performance of the project building based on its first year of operation, and promote quality construction and energy efficient operation and maintenance practices resulting in low post-construction energy use. Projects may be eligible for

this incentive if they can achieve a score of 75 or higher through ENERGY STAR Portfolio Manager and show proof of receiving ENERGY STAR Certification. Building types not eligible for ENERGY STAR Certification can qualify for this incentive by obtaining ASHRAE Building Energy Quotient (bEQ) In-Operation Certification and receive a score of 68 or less.

- Projects pursuing compliance Path 1 are required to meet Performance Scores equivalent to the above cost reduction tiers as shown below:

Equivalent bEQ Targets

bEQ Target Score*	Cost reduction over 90.1-2013 Baseline
68	15% Multifamily 5% All other
68-66	+ 0 - 1.9% (Tier 1)
65-63	+ 2 - 4.9% (Tier 2)
62 OR LESS	+ 5% or greater (Tier 3)

- Projects pursuing compliance Path 2 are required to meet Performance Cost Index (PCI) value equivalent to the above cost reduction tiers, which will vary depending on building type as shown below:

Equivalent PCI Targets

Maximum Performance Cost Index (PCI)				
Building Type	Baseline	Tier 1	Tier 2	Tier 3
	PCI	0-2%	2-5%	5%+
Multifamily	0.87	0.74	0.72	0.70
Healthcare/Hospital	0.74	0.70	0.69	0.66
Hotel/Motel	0.75	0.71	0.70	0.68
Office	0.74	0.71	0.69	0.67
Restaurant	0.78	0.74	0.72	0.70
Retail	0.64	0.61	0.60	0.58
School	0.63	0.60	0.59	0.57
Warehouse	0.68	0.65	0.64	0.61
All Others	0.71	0.68	0.66	0.64

- Incentives are capped per the table above. All other incentive caps remain unchanged.

Core and Shell vs. Tenant Fit-Out Considerations

The P4P NC program is unique in that the incentive is based on conditioned square footage. Although there is a minimum energy savings threshold, by design, the P4P NC program is meant to cover all energy efficiency measures within an assigned area/building(s). Therefore, P4P NC projects are required to evaluate the whole building design. Further, if a P4P NC Application is submitted to the program, that same building(s) cannot also

submit applications to other programs. An exception to this rule may apply to eligible projects pursuing Core & Shell separate from Tenant fit-out improvements, which may fall into one of two scenarios:

- **Project Scenario 1: Core & Shell and Tenant Fit-out are combined:** In this scenario, all aspects of the design (whole building) must be included under a single P4P NC Application and treated as a single project. This may apply where:
 - o Developer is funding and constructing both Core & Shell and Tenant fit-out.
 - o High performance systems are specified and funded for the Tenant space separate from Core & Shell, but the building owner and tenant come to an agreement to include both scopes of work under a single project. Projects under this scenario will follow all Program Guidelines as typical.
- **Project Scenario 2: Core & Shell Separate from Tenant Fit-out:** This scenario applies when the Core & Shell work is known but the tenant space development is unknown and/or is funded separately. Therefore, the Core & Shell is treated as a separate project from the Tenant fit-out.

For most cases, a building may apply for P4P NC for either Core & Shell or Tenant fit out(s), not both. **The determining factor depends on which scope will include design and construction of the central HVAC system**, in which case:

- o P4P NC incentives apply to all conditioned square footage of the building serviced by the HVAC in the project's scope of work.
- o The project scope applying for P4P NC (e.g. Core & Shell OR Tenant Fit-out) must be able to meet all requirements for P4P NC (e.g. 15% energy cost savings) on its own.
- o Any Tenant fit-out OR Core & Shell work not included in P4P NC, (and connected to a non-residential electric/gas account paying into the SBC), may seek incentives through the SmartStart Prescriptive or Custom Measure programs for eligible equipment.

Modeling Considerations

For Core & Shell projects applying to P4P NC, tenant spaces are NOT to be excluded from the whole building model, but instead must be modeled as energy neutral. In addition, these spaces shall be modeled using set points and schedules that are typical of the space type. Core & Shell systems shall follow Program Guidelines for establishing baseline and proposed systems within the model.

For Tenant fit-outs applying to P4P NC, the envelope included in the Core & Shell scope is treated as an “unmodified existing condition” and must be modeled to match the Core & Shell design in both the baseline and proposed models, or ASHRAE stipulated values if details are unknown.

Large Energy Users Program

There are currently no changes for this program in FY17.

Combined Heat & Power

The following changes to the Combined Heat & Power (CHP) Program which will become effective on August 1st, 2016. Program applications and guidelines will be available on that date.

- Incentives for Biopower CHP Systems (100% renewable-fueled or mixed fuel systems)
- Clear program definitions around CHP and Waste Heat to Power (WHP) projects
- Fuel Cell without Heat Recovery are suspended from program participation until further evaluation
- Technology-neutral incentive levels

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/kW)	% of Total Cost Cap per project	\$ Cap per project
Powered by non-renewable or renewable fuel source Gas Internal Combustion Engine Gas Combustion Turbine Microturbine Fuel Cells with heat recovery	≤500 kW	\$2,000	30-40%	\$2 million
	>500 kW – 1 MW	\$1,000		
	>1 MW – 3 MW	\$550	30%	\$3 million
	>3 MW	\$350		

- Pay for Performance (P4P) and comprehensive energy efficiency project adders and enhanced project caps eliminated
- 30/50/20 Incentive payment
 - 30% when equipment purchased
 - 50% when system installed
 - 20% upon acceptance and confirmation that the project is achieving the required performance thresholds based on twelve (12) months of continuous operating data submitted within 24 months of installation
- All new projects must pass a cost-effectiveness test
 - 10 year simple payback or less
 - Inclusive of federal tax benefits and program incentive
- All new projects must contain cost-data for islanding capabilities, regardless of whether the project has islanding capabilities or not
- New Distributive Energy Resources (DER) Budget Category which includes CHP, Electric Storage and Wind

Renewable Electric Storage

- Rutgers University LESS is developing a quantifiable methodology to evaluate which electric storage projects should receive incentives. It is expected that Electric Storage Program will be modified in FY17 based on the results of this evaluation.

Customer-Tailored Energy Efficiency Pilot

In FY17 the Program Administrator Team will design and launch a pilot program to better serve the needs of specific to commercial and industrial customers whose usage is too large for them to qualify for the Direct Install program, but too low for the Large Energy Users Program. There are likely significant energy efficiency opportunities at the facilities that these customers operate, and while the NJCEP clearly offers programs in which they can participate, the existing mix of available programs may not provide the tools that will allow these customers to maximize their efficiency.

To address this, the Commercial and Industrial Customer-Tailored Energy Efficiency Pilot Program (C&I CTEEP) will employ Account Management to engage targeted customers in the mid-large energy cost category. Rather than simply contacting these customers with program information, the Account Managers will establish regular communications with these customers to better understand the specific energy efficiency opportunities and barriers at play. The C&I CTEEP will use a custom approach to assisting customers in overcoming those barriers with the goal of obtaining commitments to proceed with projects based on a variable mix of technical assistance, financial analysis, design incentives, and measure incentives. Recognizing that both efficiency opportunities and the barriers to addressing them can vary dramatically from customer to customer, the Account Manager will work closely with decision makers at participating customer facilities to identify a range of energy efficiency projects that can be incorporated into capital planning, along with a package of support that will result in the desired efficiency improvements being installed. Incentive caps will be consistent with caps for other C&I participants.

In addition to securing commitments for significant energy efficiency projects for customers who might not otherwise participate at the level envisioned, the C&I CTEEP will gather information about the unique needs of customers in the mid-large energy cost category to maximize program impacts and benefits. The information gathered through implementation of this pilot, along with data from the C&I baseline study to be conducted in FY17, will be a vital tool in the development of robust C&I program models in the FY18-21 strategic plan.

The Program Administrator Team will present pilot program details for Board consideration within the first quarter of FY17.

If you have questions regarding program changes or effective dates, contact us at 866-NJSMART (657 6278).