



Getting Started on Energy Actions: Funding and Incentives from New Jersey's Clean Energy Program Webinar

November 6, 2019



Webinar Panelists

Zenon Tech-Czarny
Sustainable Jersey

Tony O'Donnell
TRC, New Jersey's Clean Energy Program

Tracey Woods
Sustainable Jersey



Topics

- Sustainable Jersey Energy Efficiency Actions
 - Energy Tracking and Management Action
 - Demonstration of Energy Star Portfolio Manager
 - Energy Efficiency for Municipal/School Facilities Actions
 - Commercial Energy Efficiency Outreach Action
- Incentives- Governmental and Commercial
- Case studies/Participation Rates



Energy Tracking and Management Action

For base 10 points

- Building portfolio
 - Address
 - Date built
 - Square footage
 - Use
 - Schedule of occupancy
 - Utility account numbers
- Most recent twelve-months of energy use data for all buildings
 - Energy Star Portfolio Manager (ESPM)
 - Share ESPM Account with Sustainable Jersey

For additional 10 points

- Benchmarking report for each building in the inventory
 - ESPMor
 - NJCEP Benchmarking Report
- Demonstrate ongoing Energy Tracking and Management system
 - Identify staff responsible
 - Identify frequency (monthly, quarterly)



Spotlight: Chatham

Energy Tracking and Management **20 Points** **Bronze Priority** **Silver Priority**

Program Summary:

CHATHAM BOROUGH'S ENERGY TRACKING & MANAGEMENT Chatham Borough has been tracking municipal energy usage for our three main facilities since 2009, using the Energy Star Portfolio Manager system. Data is input monthly for all three Chatham Borough facilities; the Municipal Building and Police Department, Public Works and Water Plant, and Fire Department, based on invoices received from our gas and electricity vendors. Data from the Energy Star Portfolio Manager system is shared with Sustainable Jersey's Tony O'Donnell, who was given read access. Thanks to this data, Chatham Borough has been able to track the effects of the energy efficiency upgrades that were installed over the past few years following the recommendations of the LGEA audits conducted in 2010. In 2011, energy efficient furnaces were installed in the Municipal Building, allowing the Borough to automatically control and program heating and cooling throughout the building, thereby reducing energy consumption. Energy efficient lightbulbs were also installed in 2011-2012. In 2015, old drafty windows were replaced in the Municipal Building, an historical landmark building. Energy data comparisons were presented to the Chatham Borough Council in May 2012, and quarterly progress reports will be provided to the administration who will work with the Green Team, Public Works and the Borough Engineer to further improve Chatham Borough's energy efficiency. In addition, as the Chatham Borough water plant represents 63% of the Source EUI of its three main facilities, separate and more detailed tracking is performed on the daily gallons pumped by the plant, which drive the energy expenditure. This data has allowed management to recognize pipe leakages, which are repaired as they occur. This data is reported monthly by the Director of Public Works to the Mayor, Borough Council and Administrator. The Borough of Chatham is requesting 20 points for this category, because of the clear demonstrated use of a reliable system to track its energy consumption monthly for the past eight years, and use of a baseline to track and report on our progress, as well as the implementation of energy efficiency improvement projects over the past years.

- Good data tracking
- Continuous use of ENERGY STAR Portfolio Manager for ten years
- Description explains
 - what was accomplished
 - system used
 - points applied for
 - ongoing ETM system

Spotlight: Gloucester

Sample Building Portfolio

a. Name and address

b. Description

square footage

year built

occupancy/use schedule

c. List of utility accounts

1. **Municipal Building - 1261 Chews Landing Road, Gloucester Township, NJ 08012**

Stories and Area (sf) - Two-story building with 43,000 sf. There are two buildings attached; offices in 1973 and police building in 1976.

Building condition -

Roof

The roof is mostly flat, built up rubber roof where the majority of the HVAC exits are.

Walls

The whole building is a brick exterior with a concrete interior construction.

Windows

The windows in the facility are in average condition, most windows are 1/4' single pane glass with aluminum frames.

Facility Use And Occupancy

Description

The building is comprised of administrative offices, lounges, courtrooms, holding areas, and surveillance areas.

Hours

Monday – Thursday 8:00 am to 5:45 pm. The police building (1/3) is in use 24 hours a day, 7 days a week. The building is occupied with 120 employees.

HVAC Systems The building is heated mainly through a baseboard heat and hot water fan coil unit that is offered hot water by a central boiler plant located beneath the police building. The building uses one (1) Weil McLain gas-fired boiler that has an input of 2,049 MBH and an output of 1,632. The boiler efficiency is 80%.

The cooling for the police building utilizes two (2) 20-ton Drake Refrigeration Inc. Air-cooled chillers. The courtroom is cooled by one (1) 5-ton York packaged A/C unit with 125 MBH of gas heat, one (1) 20-ton packaged A/C unit with 400 MBH of gas heat and one (1) 13-ton packaged A/C unit with 250 MBH of gas heat (CEG.) Continuing on the police building, the communications building is cooled by a 3-ton York condensing unit. Lastly, one (1) 2.5-ton Fujitsu split system serves the server room.

Currently, 11 Coleman cooling units with 7 kW electric heat strips provide the municipal offices. With the heat strips they go to; one (1) 2-ton unit, eight (8) 2.5 ton units, and two (2) 3-ton units. In addition, there are two (2) Trane 15 ton split systems condensing unit, which cools the council room.

Lighting - Lighting is good in the Municipal Building. Recently the lighting fixtures were replaced with T-8 energy efficiency fluorescent fixtures by in house employees, saving on costs of installation.



Building Portfolio: Options

Bernards Township Building Portfolio

Building	Address	Description	Area (sf)	Year Built	Usage Schedule	Utility Account
Townhall	1 Collyer Lane	Municipal Offices	14,433	1913	8:00am-4:30pm, M-F	JCP&L 10 00 PSE&G 73 381 138 07
DPW/Engineering	277 South Maple Ave	Department of Public Works & Engineering Services Building	22,260	1983	8:00am-4:30pm, M-F	JCP&L 10 00 PSE&G 73 381 138 07
Library	32 S. Maple Ave.	Library	26,900	1974	9:30am-9:00pm, M-T 9:30am-5:00pm, F 10:00am-5:00pm, S 1:00pm-4:00pm, S	JCP&L 10 00 PSE&G 73 381 138 07
Police	1 Collyer Lane	Police Dept.	6,328	1990	24/7	JCP&L 10 00 PSE&G 73 381 138 07
Health Dept.	262 S. Finley Ave.	Health Dept.	2,337	1913	8:00am-4:30pm, M-F	JCP&L 10 00 PSE&G 73 381 138 07
BTSA Plant	726 Martinsville Rd.	Sewer Treatment Plant	11,330	1970	6:30am-3:00pm, M-F 6:30am-10:30am S,S	JCP&L 10 00 07 2578 82 PSE&G 73 381 160 08

Bogota Energy Tracking and Management System					
Address	Building	Built	Usage	Sq Ft	Account #
164 Central Ave	Fire House	1915	4 hrs/day	3800	6758820602
	Electric (KW)	Gas (T)			
	Aug-16	2526	12.569		
	Sep-16	2495	13.643		
	Oct-16	1831	67.63		
	Nov-16	1834	212.476		
	Dec-16	1834	496.477		
	Jan-17	1877	792.615		
	Feb-17	1613	628.021		
	Mar-17	1651	557.792		
	Apr-17	1630	363.458		
	May-17	1589	165.08		
	Jun-17	1995	48.26		
	Jul-17	2644	25.078		

Building Description	Street Address	Total Building Area (sq. feet)	Year Built	Hours of Operation	Used for	NJNG Account	JCPL Account Number
MUNICIPAL BUILDING	1 EAST END AVE	2188	1995	30 hours/week	Administrative Offices and Meeting Hall	7.4641E+10	100018315026
MUNICIPAL COURT (BORO HALL ANNEX)	1 EAST END AVE	1530	1996	31 hours/week	Administrative Offices and Meeting Hall	07464108001	100018319176
POLICE / EOC BUILDING	1 EAST END AVE	2509	1995	168 hours/week	Administrative Offices	7.4641E+10	100051897005
PUBLIC LIBRARY	121 CENTRAL AVENUE	1699	1990	32 hours/week	Public Library and Events	5.4632E+10	100018522316
WATER TREATMENT PLANT	130 LAKE ROAD	1094	1934	168 hours/week	Water Treatment	2.2001E+11	100089577777
PUBLIC WORKS GARAGE	130 LAKE ROAD	4632	1980	28 hours/week	Workshop	7.4642E+10	100017872423
PAVILLION & DOCK	CENTRAL AVENUE & RIVER AVENUE	5980	1990	Night Lighting	Recreation	-	100070050685
BOARDWALK & DOCK STRUCTURE	CENTRAL AVENUE & RIVER AVENUE	38760	1990	Night Lighting	Recreation	-	100059797884

Chatham Energy Star Portfolio Manager

ENERGY STAR® PortfolioManager®

Welcome Account | Notifications | ENERGY STAR | Settings | Notifications | Help | Sign Out

MyPortfolio | Sharing | Reporting | Recognition

Municipal Building and Police Department

54 Fairmount Avenue, Chatham, NJ 07928 | [Map It](#)

Portfolio Manager Property ID: 2789839

Year Built: 1910

[Edit](#)

[Not eligible to apply for ENERGY STAR Certification](#)

[Change Metric](#)

Weather Normalized Source EUI (kBtu/ft²)

Current: 125.2

Summary | Details | **Energy** | Water | Waste & Materials | Goals

Meter Summary

2 Energy Meters Total

2 - Used to Compute Metrics

[Add A Meter](#)

Current Energy Date
Apr 30, 2019

[Enter Your Bills](#)

Energy Use by Calendar

Site Energy (kBtu)

2018

100k

50

0

Jul '14 Jan '15 Jul '15 Jan '16

→ Natural Gas

Four Ways to Enter Bill Data

1. Manually
2. Use our [simple spreadsheet](#) (one

Dashboard (Metrics current as of 05/30/2019 12:21 PM EDT) [Refresh Metrics](#)

Search by ID or Name

Chatham Borough (3) | Energy Highlights | [Refresh Metrics](#)

[Add/Edit/Delete Groups](#) | [Add/Edit/Delete Views](#)

Name	Energy Current Date	ENERGY STAR Score	Site EUI (kBtu/ft²)	Source EUI (kBtu/ft²)
Chatham Borough Fire Department 2787614	03/31/2019	NA	87.0	137.2
Municipal Building and Police Department 2789839	03/31/2019	NA	61.8	125.2
Water Plant 2789840	03/31/2019	NA	244.8	586.3

First Previous Page 1 of 1 Next Last 100 View 1 - 3 of 3



Share Your ESPM Account with Sustainable Jersey (sustainablejersey)

ENERGY STAR Portfolio Manager

MyPortfolio | Sharing | Reporting | Recognition

Add Contact

There are two ways to add a contact. First, search below to see if the contact you would like to add has a Portfolio Manager account. If you find the person, send a Connection Request, and when they accept the request, they will be added to your Contacts. Second, if the contact you would like to add does not have a Portfolio Manager account, then you can create an entry within your personal contacts.

Find Contact in Portfolio Manager

Search using any of the criteria below:

Name:

Organization:

Username:

Email:

Connecting with Other Users

If you think your contact already has an account in Portfolio Manager, search for them. If you find the person, send a Connection Request, and if they accept they will be added to your Contacts. You can learn [more about contacts](#) information with your contacts.

Keeping Personal Contacts

If the contact you want to add does not have a Portfolio Manager account, you can still add them as your personal contact.

ENERGY STAR Portfolio Manager

Welcome, SUSTAINABLEJERSEY | Account | Notifications | ENERGY STAR | Contacts | Help | Sign Out

MyPortfolio | Sharing | Reporting | Recognition

Share (or Edit Access to) Properties

Sometimes, it's really important to be able to share your property with someone else. Maybe they need to help monitor your property, enter energy information (perhaps automatically) or process applications for recognition. If this sounds like what you need, start out by selecting the property(ies) that you'd like to share and who you'd like to share with them. If you have already shared properties, you can also use this form to add people's access to your properties.

Select Properties

We'll get into the details of the level of access later. For now, which properties do you want?

Select People (Accounts)

Which people (accounts) do you want to share these properties with (or modify their current access to)? The access for each can be different and you'll be able to specify that on the next page.

Select contacts from my contacts book:

Choose Permissions

If you only need to choose one permission (because you are doing a single share or you want to give the same permissions for all of your shares), select "Bulk Sharing." If you need to assign different permissions or share with Data Exchange providers, select the 2nd option.

Bulk Sharing ("One-Size-Fits-All") - I only need to choose one permission (either Read Only Access or Full Access) and I want to choose the same permission for all of my share requests.

Read Only Access

Full Access

Custom Access (providers are all shared at the same level)

Exchange Data (You can choose to bulk for exchanging data [here](#) or you can assign permissions one by one for each property using the radio button below.)

Remove Access

Personalized Sharing & Exchange Data ("Custom Orders") - I need to give different permissions for different share requests, and/or I need to give Exchange Data permission.

Sharing with Accounts

In order to share properties with others (either individuals or organizations), you need to be "connected" with them. To make a connection, go to the "Add Contact" or "Add Organization" page and search for them within Portfolio Manager (they need to have a Portfolio Manager account). Once you find them, send a "Connect" request. After they accept your connection request, they will show up on the list to the left.

Exchanging Data

To get started, first [connect with or connect to the exchange data](#). Once you are connected, their name will appear on the selection list on the left. Note: you can now share in bulk for [exchanges data](#).

Who gets to Share Forward?

Full Access - Automatically includes "Share Forward" rights.

Read Only - Automatically does NOT include "Share Forward" rights.

Custom - You decide, along with the individual permissions for property, make, goals and recognition permissions.

Exchange Data - You decide, along with the individual permissions for property, make, goals and recognition permissions.

ENERGY STAR Portfolio Manager

Welcome, SUSTAINABLEJERSEY | Account | Notifications | ENERGY STAR | Contacts | Help | Sign Out

MyPortfolio | Sharing | Reporting | Recognition

My Shared Properties (0)

Sharing Notifications (0)

You have no new notifications.

Overview of Shared Properties [Learn more about Sharing Properties](#)

www.energystar.gov/sites/default/files/tools/How%20to%20Share%20Properties%20with%20Other%20Users%20in%20Portfolio%20Manager May%202019 Final 508.pdf



Benchmarking

- ENERGY STAR Portfolio Manager (ESPM)
- NJCEP Benchmarking Report
→ njcleanenergy.com

Energy Performance Benchmarking Report For:

Public Works Building
25 North Jefferson Road
Whippany, NJ 07981

Prepared by
TRC
TRC Energy Services, NJCEP C&I Marketing Manager

Report Generated August 1, 2014

ENERGY STAR Statement of Energy Performance

27
ENERGY STAR® Score¹

Highland Park Municipal Building (Borough Hall)

Primary Property Type: Office
Gross Floor Area (ft²): 15,820
Built: 1976

For Year Ending: December 31, 2018
Date Generated: April 08, 2019

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting climate and business activity.

Property & Contact Information

Property Address	Property Owner	Primary Contact
Highland Park Municipal Building (Borough Hall) 221 S. 5th Avenue Highland Park, New Jersey 08904 Property ID: 8308319	() - () - ()	() - () - ()

Energy Consumption and Energy Use Intensity (EUI)

Site EUI	Annual Energy by Fuel	National Median Comparison
68.8 kBtu/ft ²	Natural Gas (kBtu) 521,508 (48%) Electric - Grid (kBtu) 543,685 (50%) Electric - Solar (kBtu) 23,911 (2%)	National Median Site EUI (kBtu/ft ²) 52 National Median Source EUI (kBtu/ft ²) 99.9 % Diff from National Median Source EUI 32%
Source EUI 132.4 kBtu/ft ²		Annual Emissions Greenhouse Gas Emissions (Metric Tons CO ₂ /year) 83

Energy Benchmarks & Comparisons:

As stated on the previous page, the Example NJ Office Building was benchmarked using the U.S. Environmental Protection Agency's *Portfolio Manager*. Energy intensities, emissions and national average comparisons are calculated using this software.

Energy Intensity	Your Building	National Average Office Building
EPA ENERGY STAR Score	39	50
Site Energy Intensity (kBtu/ft ²)	115.8	103.0
Source Energy Intensity (kBtu/ft ²)	296.0	263.0

Energy Efficiency for Facilities Action

- **5 points** – ASHRAE Level 2 (LGEA) Audit on at least one building
- **10 points** - ASHRAE Level 2 (LGEA) Audit on at all buildings
- **15 points** – Upgrade work at least one building, 10% decrease use
- **20 points** - LGEA all buildings, PLUS Upgrade one building 10% decrease
- **30 points** - Efficiency upgrades; 10%-19% decreased energy use
- **40 points** - Efficiency upgrades; 20%-29% decreased energy use
- **50 points** - Efficiency upgrades; at least 30% decreased energy use



Local Government Energy Audit

Free ASHRAE Level 2 Audit available to NJ municipalities, counties, public schools and other public entities; whole building system assessment

Advantages:

- ASHRAE Level 2 Audit
- Identifies wide array of conservation measures/significant energy savings
- Evaluates building portfolio for NJCEP incentives
- Mandatory first step in Energy Savings Improvement Plan

Disadvantages:

- Process takes time
- May direct applicants to Direct Install anyway
- Requires more time, attention, and resources from applicant

Likely Candidate:

- At least one building in portfolio has AVERAGE Peak Demand above 200KW
- Entity is considering ESIP or large capital investment project



Direct Install

Direct Install incentive program includes a walk through audit and an incentive of up to 80% off the cost of specific equipment upgrades.

Advantages:

- 14 Months utility data only needed documentation
- Turnkey Process-guided by state selected contractor

Disadvantages:

- Less thorough audit (not ASHRAE level 2)
- Limited range eligible upgrades, lighting/ HVAC
- Missed opportunity for larger energy usage reduction project

Likely Candidate:

- Largest Building has AVERAGE Peak Demand of less than 200KW
- Larger project not possible politically/financial
- Incentive included as part of larger (ESIP Project)



Picking a Path To Incentives

Direct Install Application/Audit:

- Walk-through analysis
- Evaluates buildings for incentives offered by Direct Install program
- Mainly lighting and HVAC upgrades
- Audit (without doing upgrades) does not qualify for points

ASHRAE Audit Level 2 (Local Government Energy Audit):

- Full building system analysis, detailed energy calculations and financial analysis
- Wide array of Energy Conservation Measures evaluated

NJCEP offers free Level 2 audits through the Local Government Energy Audit



Waterford's LGEA

Local Government Energy Audit (LGEA)
 free ASHRAE Level 2 Audit
 New Jersey's Clean Energy Program

<http://njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit>

14 months energy bills required for application

Potential Post-Implementation Costs

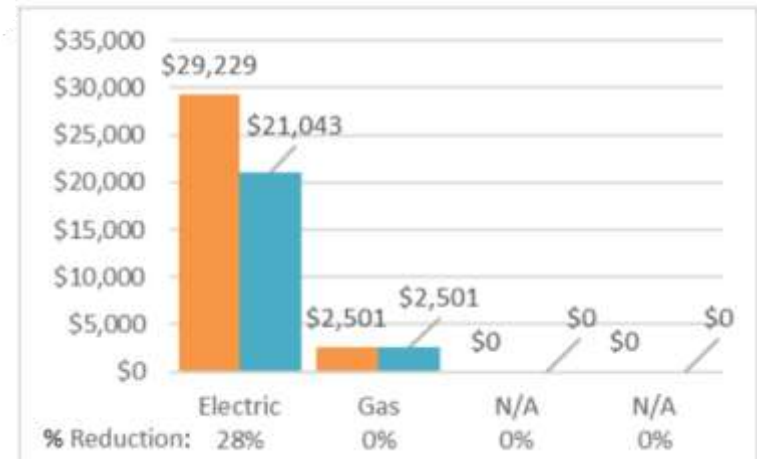


Figure 3 – Summary of Energy Reduction Opportunities

Energy Conservation Measure		Recommend?	Annual Electric Savings (kWh)	Peak Dem and Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			29,533	6.7	0.0	\$4,947.48	\$22,665.86	\$3,050.00	\$19,615.86	4.0	29,740
ECM 1	Install LED Fixtures	Yes	9,572	1.5	0.0	\$1,603.54	\$10,156.03	\$1,000.00	\$9,156.03	5.7	9,639
ECM 2	Retrofit Fixtures with LED Lamps	Yes	19,961	5.2	0.0	\$3,343.93	\$12,509.82	\$2,050.00	\$10,459.82	3.1	20,101
Lighting Control Measures			4,044	1.0	0.0	\$677.48	\$8,076.00	\$945.00	\$7,131.00	10.5	4,072
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	3,603	0.9	0.0	\$603.59	\$7,676.00	\$945.00	\$6,731.00	11.2	3,628
ECM 4	Install High/Low Lighting Controls	Yes	441	0.1	0.0	\$73.89	\$400.00	\$0.00	\$400.00	5.4	444
Motor Upgrades			132	0.0	0.0	\$22.05	\$1,229.49	\$0.00	\$1,229.49	55.8	133
ECM 5	Premium Efficiency Motors	Yes	132	0.0	0.0	\$22.05	\$1,229.49	\$0.00	\$1,229.49	55.8	133
Variable Frequency Drive (VFD) Measures			15,157	1.3	0.0	\$2,538.11	\$9,827.55	\$0.00	\$9,827.55	3.9	15,263
ECM 6	Install VFDs on Hot Water Pumps	Yes	10,180	1.3	0.0	\$1,705.45	\$6,551.70	\$0.00	\$6,551.70	3.8	10,252
ECM 7	Install VFDs on Cooling Tower Fans	Yes	4,976	0.0	0.0	\$833.67	\$3,275.85	\$0.00	\$3,275.85	3.9	5,011
TOTALS			48,866	9.0	0.0	\$8,186.12	\$41,798.90	\$3,995.00	\$37,803.90	4.6	49,207

* - All incentives presented in this table are based on NJ Smart Start Building equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

** - Simple Payback Period is based on net measure costs (i.e. after incentives).

Glen Rock's Direct Install Project, 20 Points

Direct Install incentive
ambulance building- \$7,527

46.9% less electrical usage
17.3% less gas usage

Energy values are estimates. Actual savings will vary. Incentives and payback periods subject to program rules and Participant Agreements.

New Jersey Office of Clean Energy
Direct Install Program
Energy Assessment Tool (V2.0)

General Project Information

Participating Customer: Glen Rock Volunteer Ambulance Corp
Contractor / Project #: 11933
Facility Name: Glen Rock Ambulance Corp Building
Street Address: 200 S Maple Ave
City / Zip Code: Glen Rock, NJ 07433
Is this facility publicly owned?: No

Facility Type: Other
Total Facility Square Footage: 3,000
Avg Weekly Hrs of Operation: 40
of Full-time Employees: 10
Year Constructed: 1980
Tax Exempt?: Y
Project Financing Code: Y

Electric Utility Information

Electric Provider: PSE&G
Service Class: GEP
Account #: 2870690801
Billing Period Start Date: 09/01/19
Billing Period End Date: 09/14/19
Billing Period kWh Consumption: 1740
Billing Period Total Cost: \$187.14
Total Taxes + Fees on Bill: 14.22
Gas + Average Cost (\$/therm): 184

Gas Utility Information

Gas Provider: PEDELT
Service Class: G255 20201
Account #: 6738533406
Billing Period Start Date: 11/17/18
Billing Period End Date: 12/14/18
Billing Period Therm Consumption: 88
Billing Period Total Cost: \$154.13
Total Taxes + Fees on Bill: 17.78
Gas + Average Cost (\$/therm): \$0.953

Propane Information

Annual Consumption (Gallons):
Annual Cost:
Annual Taxes + Fees on Bill:
Propane + Average Cost (\$/Gallon): \$0.600

Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer	Simple Payback (Yrs)
Lighting Measures Total:	11,562	kWh	\$2,125.50	\$4,622.72	\$3,235.90	\$1,386.82	0.65
Motors & VFD Measures Total:	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00	0.00
HVAC Electric Measures Total:	1,585	kWh	\$291.32	\$6,110.00	\$4,277.00	\$1,833.00	6.29
Refrigeration Measures Total:	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00	0.00
ELECTRIC MEASURES:	13,147	kWh	\$2,416.82	\$10,732.72	\$7,512.90	\$3,219.82	1.33
GAS MEASURES:	285	Therms	\$271.66	\$20.60	\$14.42	\$6.18	0.02
OIL MEASURES:	0	Gallons	\$0.00	\$0.00	\$0.00	\$0.00	0.00
TOTAL PROPANE MEASURES:	0	Gallons	\$0.00	\$0.00	\$0.00	\$0.00	0.00
CONVERSION MEASURES (OIL):	0	Gallons	\$0.00	\$0.00	\$0.00	\$0.00	0.00
CONVERSION MEASURES GAS:	0	Therms	\$0.00	\$0.00	\$0.00	\$0.00	0.00
COMBINED PROJECT TOTALS:			\$2,688.48	\$10,753.32	\$7,527.32	\$3,226.00	1.20

Secondary

Measure	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer	Simple Payback (Yrs)
Lighting	\$4,622.72	\$3,235.90	\$1,386.82	0.65
Motors & VFD	\$0.00	\$0.00	\$0.00	0.00
HVAC Electric	\$6,110.00	\$4,277.00	\$1,833.00	6.29
Refrigeration	\$0.00	\$0.00	\$0.00	0.00
ELECTRIC MEASURES	\$10,732.72	\$7,512.90	\$3,219.82	1.33
GAS MEASURES	\$20.60	\$14.42	\$6.18	0.02
OIL MEASURES	\$0.00	\$0.00	\$0.00	0.00
PROPANE MEASURES	\$0.00	\$0.00	\$0.00	0.00
CONVERSION MEASURES (OIL)	\$0.00	\$0.00	\$0.00	0.00
CONVERSION MEASURES GAS	\$0.00	\$0.00	\$0.00	0.00
COMBINED PROJECT TOTALS	\$10,753.32	\$7,527.32	\$3,226.00	1.20

PROJECT INC YES: 1.24

Estimated Reduction in Total Energy Consumption



20 Points- Neptune Smart Start Case Study

- Neptune Municipal Complex Project:
 - Boiler & hot water heater replacement, new variable frequency drives & AC units
- \$6,600 in Smart Start rebates
- Estimated Savings of **\$8,828** annually



Neptune High-efficiency boilers



Delran School District ESIP, 50 Points

Building	Building area in square feet	Baseline Energy Usage Data from Energy Audit Date ----->		total kbtu per month	Baseline EUI	Energy Usage Data Most recent 12 months Dated----->			total kbtu per month	Current EUI	% Change EUI in Facility	Weighted
		Enter your grid purchased electricity (kWh) in this column	Enter your natural gas (therms) in this column			12/1/2016	Enter your grid purchased electricity (kWh) in this column	Enter your natural gas (therms) in this column				
High School	138,441	2,148,692	79,690	31,394,595	226.8	926,076	65,720	688,118	19,173,737	138.5	-38.9%	-14.37%
Intermediate School	64,444	915,059	18,950	11,796,273	183.0	451,275	23,880	310,942	8,404,878	130.4	-28.7%	-4.94%
Elementary School	74,014	564,767	22,050	8,367,756	113.1	240,434	29,340	165,310	6,221,591	84.1	-25.6%	-5.06%
Middle School	98,123	876,469	47,450	14,375,211	146.5	342,055	48,840	315,558	9,870,941	100.6	-31.3%	-8.20%
												-32.57%

Adapted from Solar Oregon's site EUI calculator for homes <http://solaroregon.org/downloads/eui-calculator/view>

- Reduced energy use over 30%
- Adds \$31K to the district's operating budget
- \$275,000 in rebates and incentives from New Jersey's Clean Energy Program and the PJM Energy Efficiency Credit



Delran School District ESIP

Energy Conservation Measure (ECM)	Delran High School	Delran Middle School	Delran Intermediate School	Millbridge Elementary School
Hot Water Pump Variable Frequency Drives & Control Valve Upgrades				
BAS Upgrade				
Retro-commissioning - D Wing				
Lighting Upgrade - Interior				
Lighting Upgrade - Exterior				
Urinal Replacement - Faculty Lounge & Boys Locker Room				
Building Envelope				
Walk-In Cooler & Freezer Controls				
Vending Miser				
Plug Load Controllers				
Solar PPA				
Water Conservation				

Project includes building envelope, solar PPA, retro-commissioning





New Jersey's Clean Energy Program™

Clean Energy and Efficiency Opportunities for
Commercial, Industrial, and Institutional Buildings

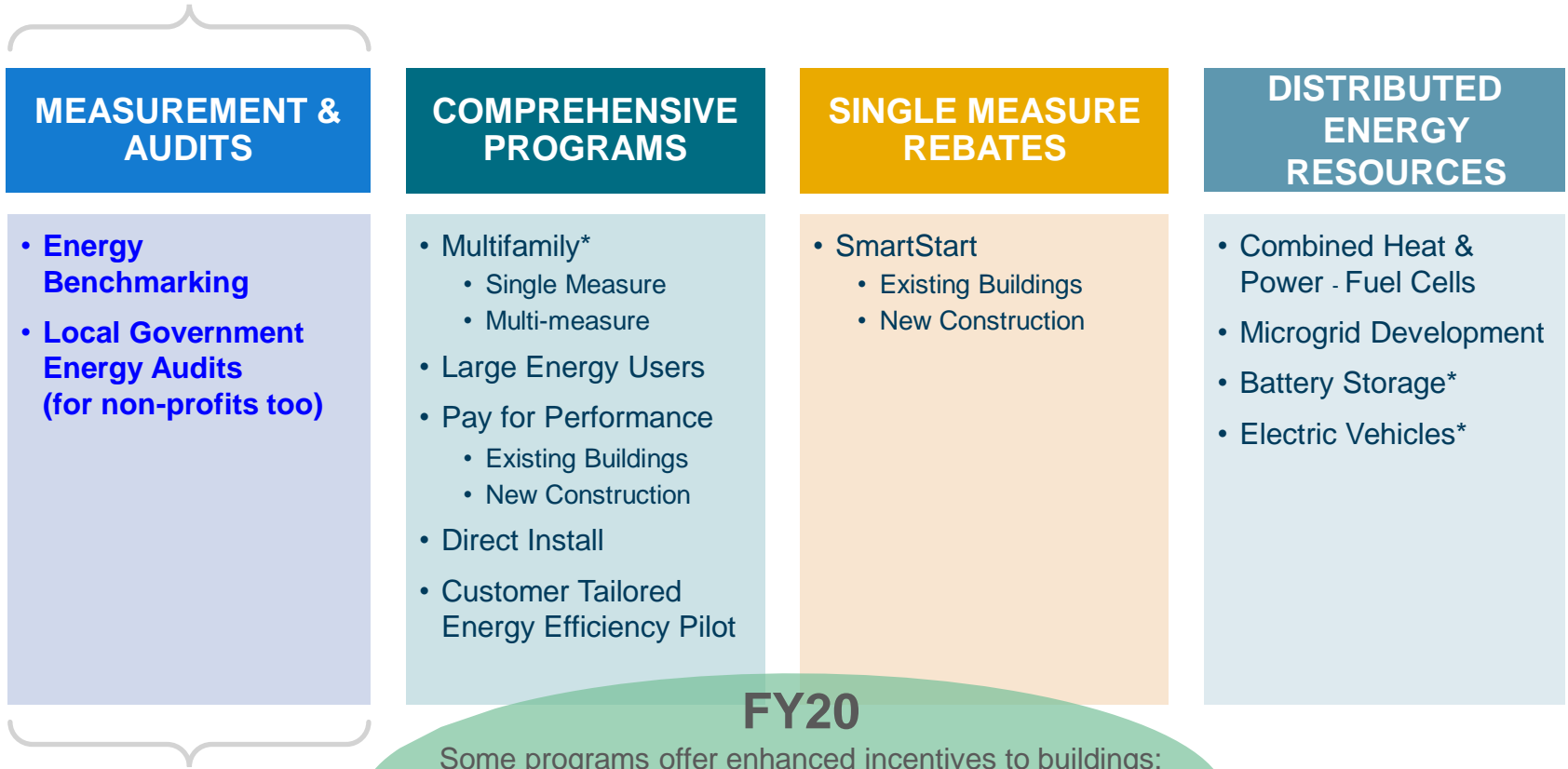


November 6, 2019



C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily



** coming soon!*

Definitions: UEZs and OZs

FY20

Some programs offer enhanced incentives to buildings:

- in a **UEZ** or **OZ**
- owned or operated by a **municipality**
- owned or operated by a **K-12 public school**

Press Room | Library | FAQs | Calendar | News

HOME RESIDENTIAL COMMERCIAL, INDUSTRIAL, LOCAL GOV & MULTIFAMILY RENEWABLE ENERGY

NEW JERSEY'S CLEAN ENERGY PROGRAM

ABOUT NJCEP

BOARD OF PUBLIC UTILITIES

REBATES & PROMOTION

NJCEP POLICY UPDATES & REQUEST FOR COMMENTS

About New Jersey's Clean Energy Program

New Jersey's Clean Energy Program is a statewide program that offers financial incentives, programs and services for New Jersey residents, business owners and local governments to help them save energy, money and the environment.

Rebate Quicklinks

Appliances: Refrigerator / Water Heater / Clothes Washer / Dryer / More

Program Updates

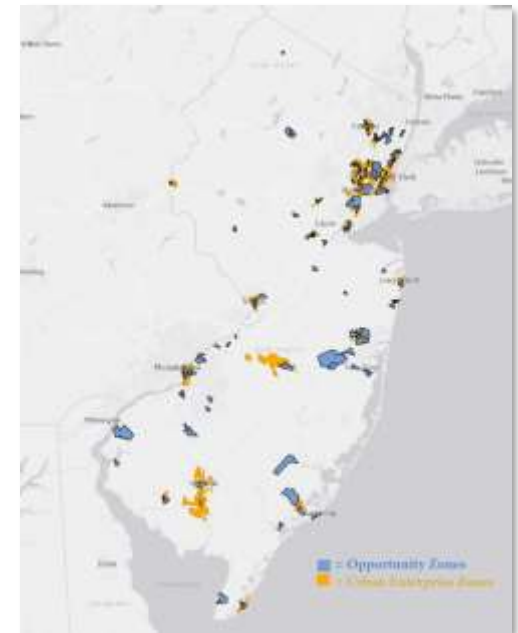
Enhanced Rebates Announced

in New Jersey

Solar Transition Stakeholder Workshops

Community Solar Energy Pilot Program

Eligibility Basis	Criteria
➤ Located in an Urban Enterprise Zone (UEZ)	<p>The building where equipment is or will be installed must be located within the bounds of an Urban Enterprise Zone (UEZ). Please follow the steps below to confirm your facility is within the qualifying zone.</p> <p>The building location must be checked against the NJ Community Asset Map.</p> <ol style="list-style-type: none"> 1. Enter the address of your building in the field at the top of the map. 2. Under the Layers menu on the left side of the screen, scroll down to Urban Enterprise Zones and <i>check</i> to enable the layer. 3. Print or save a screenshot of the page to include with your submission. <p>For the avoidance of doubt, companies do not need to become a Certified UEZ Business to be eligible for enhanced incentives from NJCEP.</p>
➤ Located in an Opportunity Zone (OZ)	<p>The building where equipment is or will be installed must be located within the bounds of an Opportunity Zone (OZ). Please follow the steps below to confirm your facility is within the qualifying zone.</p> <p>The building location must be checked against the NJ Community Asset Map.</p>



[Click here for a link to NJ Community Asset Maps](#)

Benchmarking

NJCleanEnergy.com/BENCHMARKING

MEASUREMENT &
AUDITS

WHO Commercial, Industrial, Agricultural, Government, 501(c)(3) Non-Profit, and Institutional Entities

COST Free

WHY

- Compare your building to other similar buildings nationally
- Suggestions for improving operations and maintenance
- Personalized incentive program eligibility and account manager follow-up support
- ENERGY STAR® Portfolio Manager account setup and score

Great opportunity to be a leader in benchmarking energy and water use, prior to the 2024 deadline.



Benchmarking

NJCleanEnergy.com/BENCHMARKING

MEASUREMENT & AUDITS

Energy Consumption & Cost

Analysis Period: July 2018 – June 2019

Energy Benchmark	Example Building	Average Building
EPA Portfolio Manager Score	46	50
Site Energy Intensity ¹ (kBtu/sf)	85.8	82.2
Source Energy Intensity ² (kBtu/sf)	88.3	80.8
Energy Cost	\$13,841	\$13,082
Total GHG Emissions (Metric Tons CO ₂ e)	43	40

U.S. EPA Portfolio Manager Account:

Your building was benchmarked using the U.S. Environmental Protection Agency's (EPA's) Portfolio Manager tool. The impact of factors outside of your control, such as location, occupancy and operating hours, are removed. Some building types will be provided with a 1-100 ranking of a building's energy performance relative to the national building market.

46 Your building received an EPA benchmark score of 46. Using the U.S. EPA's building type guidelines, the score is slightly below average when compared to other warehouse/distribution buildings in the United States.

Understanding and tracking energy consumption is one of the first steps in an energy reduction plan. Portfolio Manager is an energy management tool that allows you to track and assess energy and water consumption across your entire portfolio of buildings in a secure online environment. We encourage you to use Portfolio Manager to track your energy and water consumption month to month. An account has been set up for Example NU Commercial Building. The login information is as follows:

Website: <http://www.eportmanager.dowjones.com/pm/>
 User Name: ExampleCommercialBuilding
 Password: SavingEnergy2019

¹ Site Energy Intensity is a measure of a building's annual energy utilization per square foot. Site energy intensity score is a good measure of a building's energy use, and is adjusted regularly for comparison of energy performance for similar building types.

² Source Energy Intensity is a measure of the building's energy usage in addition to the transmission, delivery and production losses.

Energy Consumption & Cost



Energy Cost:

The annual energy cost for Example NU Commercial Building is \$13,841 (\$5,138 natural gas + \$8,702 electricity). Example NU Commercial Building spends \$1.38 per square foot to power the building. The estimated average annual energy cost for a building of similar square feet, type, and usage is \$13,082. Therefore, your building's energy costs are slightly higher than average when compared to other warehouse/distribution buildings nationwide.

Electricity costs make up 63% of your building's total annual energy cost. Natural gas costs make up 37% of your building's total annual energy cost.

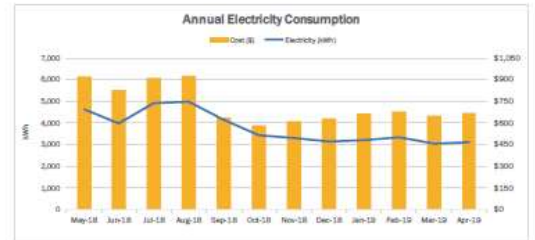
Carbon Emissions:

The energy consumption for Example NU Commercial Building is equivalent to carbon emissions of 43 metric tons of CO₂, compared to the national average of 40 metric tons of CO₂ for a similar building type. Your building's GHG emissions are slightly higher than average.

If you improved your building's energy usage to meet ENERGY STAR level the energy savings would be equivalent reducing carbon emissions by 18 metric tons of CO₂. This reduction would be equivalent to:



Energy Consumption & Cost



Electricity Usage:

The annual electricity consumption for Example NU Commercial Building is 4.5 kWh per square foot. This amount of electricity is reasonable compared to similar building types in New Jersey.

Electricity Cost:

The property's electricity rate is slightly higher than the state average of \$0.17/kWh. It may be beneficial to contact your electric provider or a third-party provider to discuss rate options.

Usage	Electricity Use Description		Example Building	Area of Concern Scale
	COST	Annual Usage (kWh)	Annual Usage per Sq. Ft. (kWh/sf)	
Annual Cost (\$)		Annual Cost per Sq. Ft. (\$/sf)	\$8,702 \$0.87	Medium
Average Annual Cost (\$/kWh)			\$0.19	

Summary & Recommendations:

The amount of electricity shown above is slightly lower than average. However, the cost of that electricity is higher than average. As mentioned, it may be beneficial to contact your electric provider to discuss rate options. If not already in use, ENERGY STAR® products, LED and other lighting technologies could reduce the power demand needed and lower monthly electricity bills.

Local Government Energy Audit

NJCleanEnergy.com/LGEA

MEASUREMENT &
AUDITS

WHO Local Government, New Jersey Colleges and Universities, and 501(c)(3) Non-Profit buildings with an average yearly demand >200kW*

INCLUDES
BENCHMARKING

COST Free

WHY

- Inventory of all energy-consuming equipment and line by line program eligibility, savings and costs
- Comprehensive utility bill analysis
- Facility benchmarking
- Feasibility for solar and combined heat & power

INCENTIVE CAP

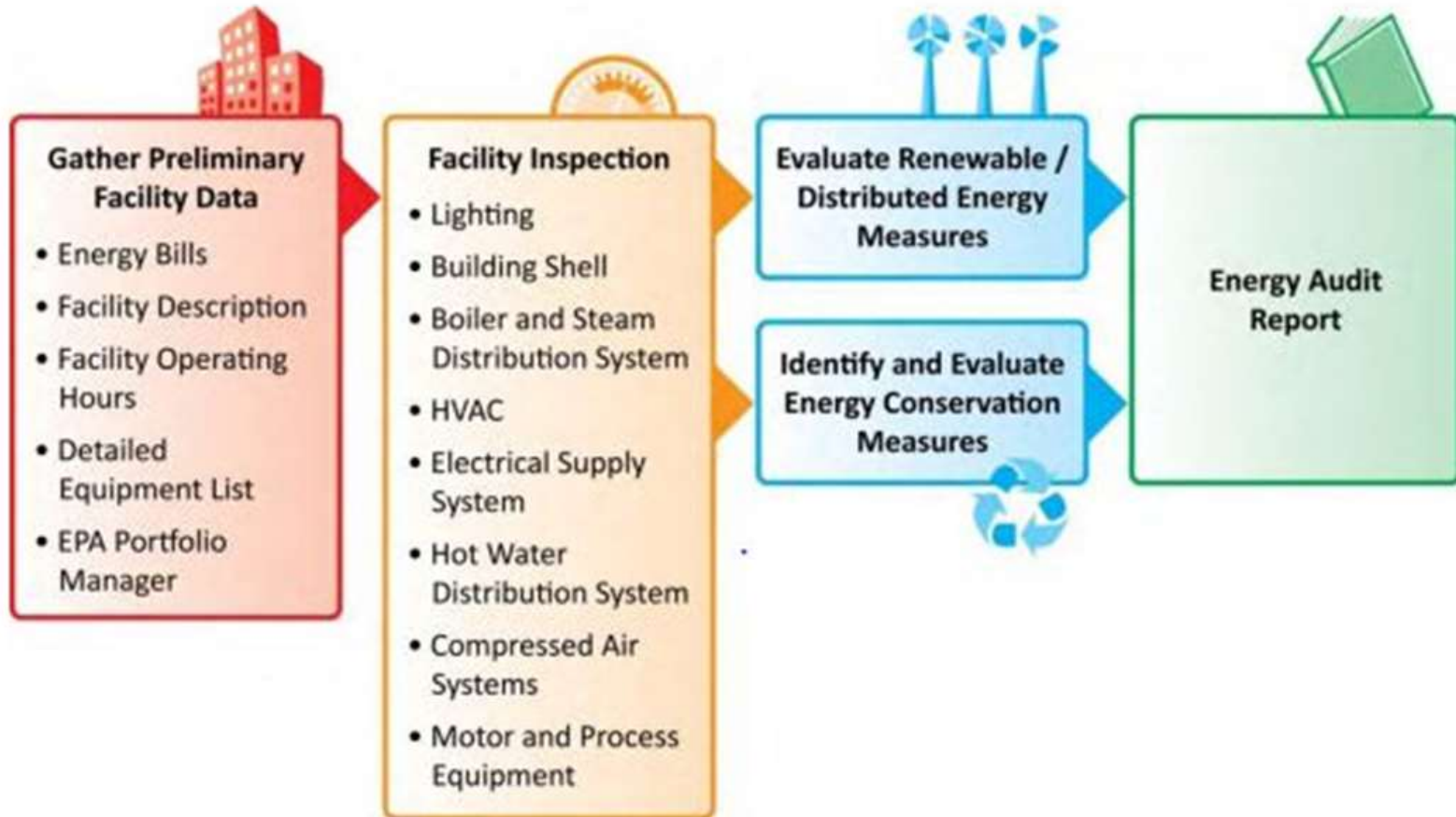
- \$100,000 per entity (covers most small to large entities)
- \$300,000 per 501(c)(3) hospital
- \$300,000 per entity interested in ESIP

* Inquire about the waivers available to buildings \leq 200kW average

Local Government Energy Audit

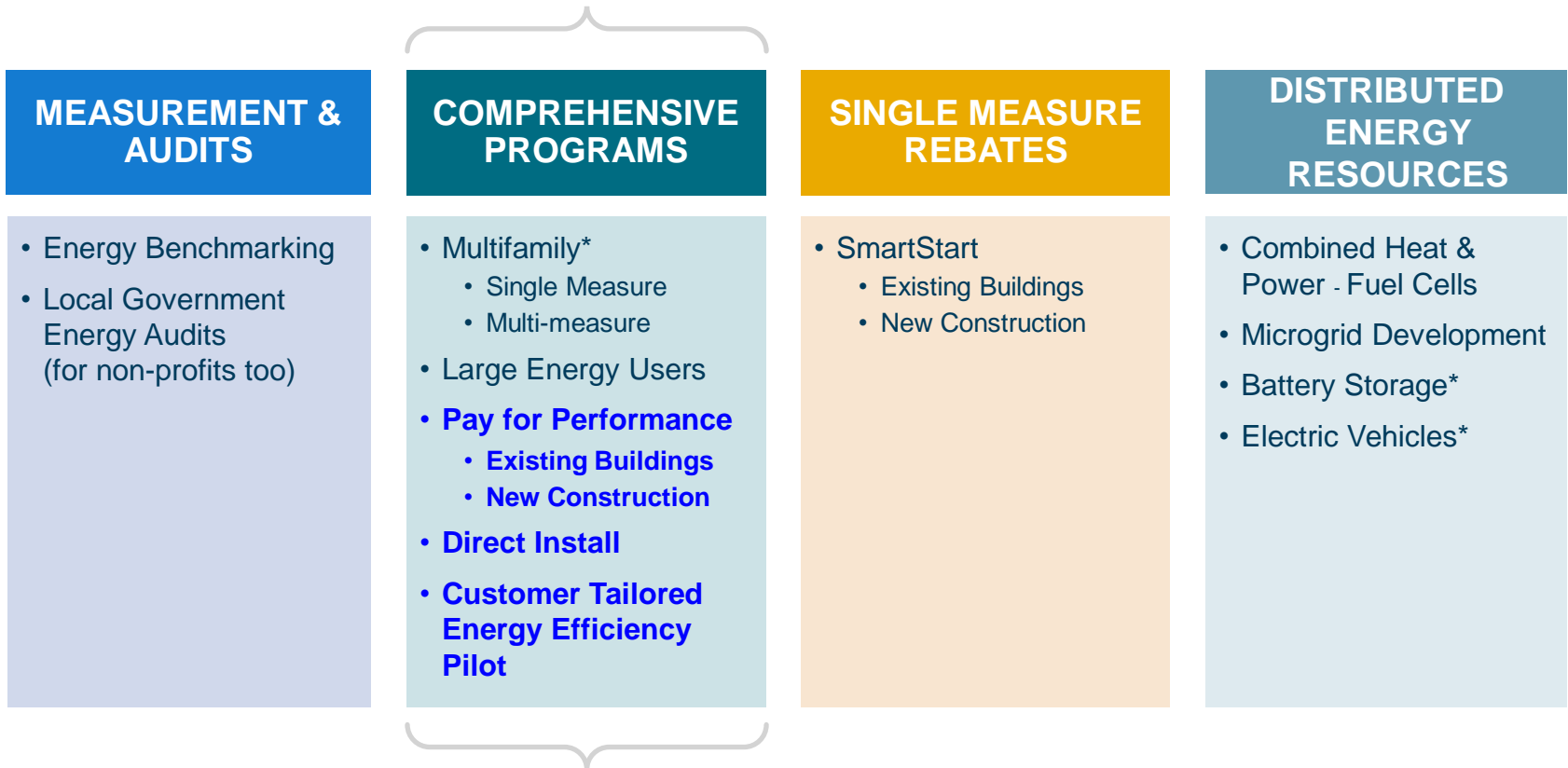
MEASUREMENT &
AUDITS

NJCleanEnergy.com/LGEA



C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily

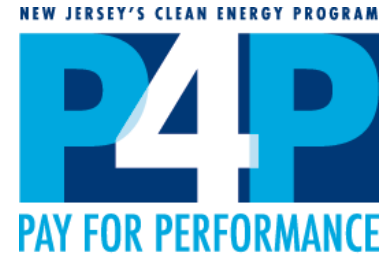


** coming soon!*

Pay for Performance

NJCleanEnergy.com/P4P

COMPREHENSIVE
PROGRAMS



WHO

Large C&I existing buildings or new construction seeking two or more energy efficiency measures with a minimum 15% savings

SIZE TO QUALIFY

Annual peak demand 200+ kW in the previous year for existing buildings or over 50,000 square feet of planned new construction

ABOUT

A pre-approved Participating Partner will streamline the program and guide users through the program phases

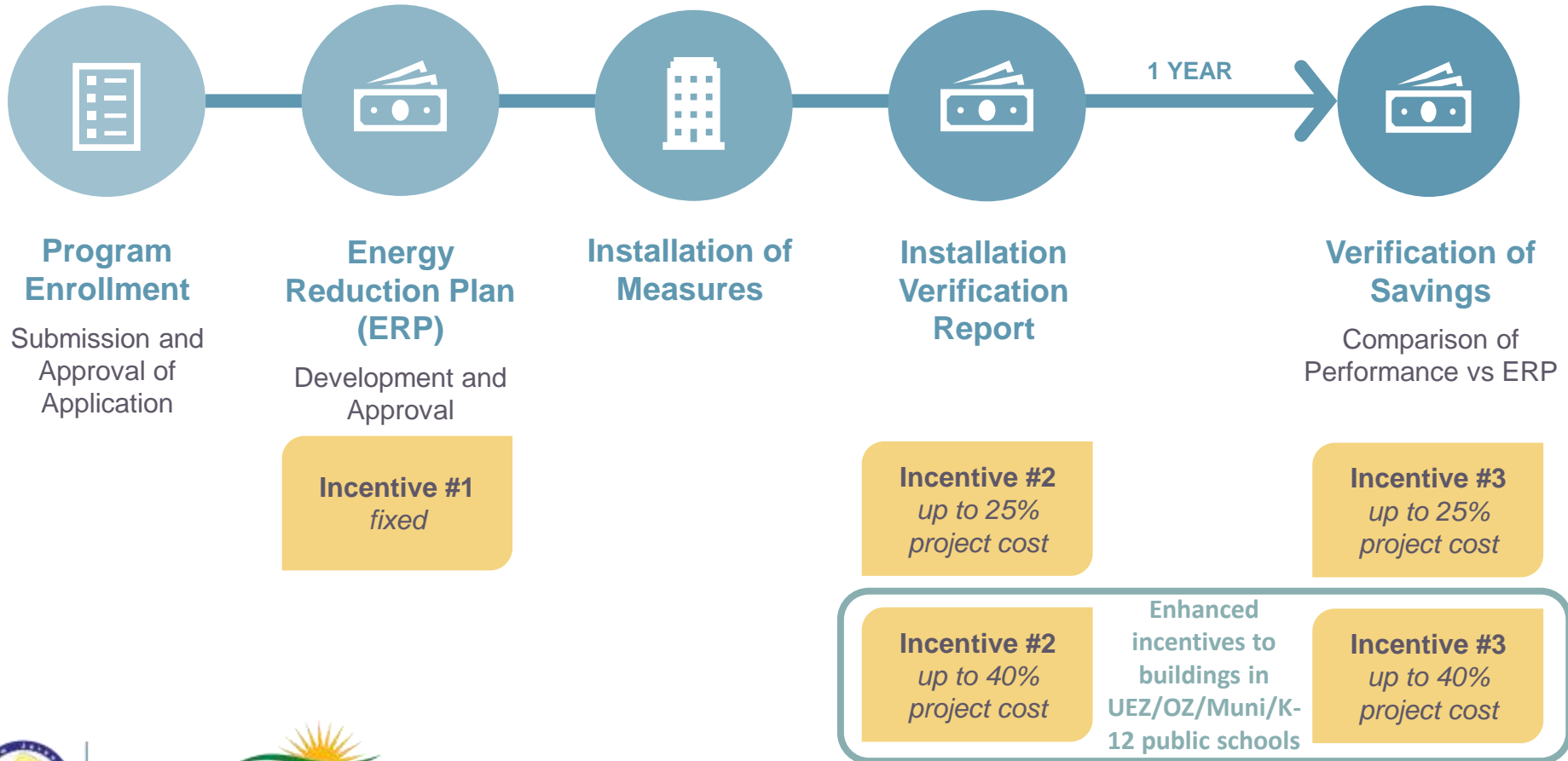
INCENTIVE CAP

- 50% of project cost (or 80% for UEZ/OZ/ MUNI/K-12 Public Schools) up to \$2M per project / \$4M per entity annually
- Incentive payments #2 and #3 are doubled for UEZ/OZ/ MUNI/K-12 Public Schools

Pay for Performance

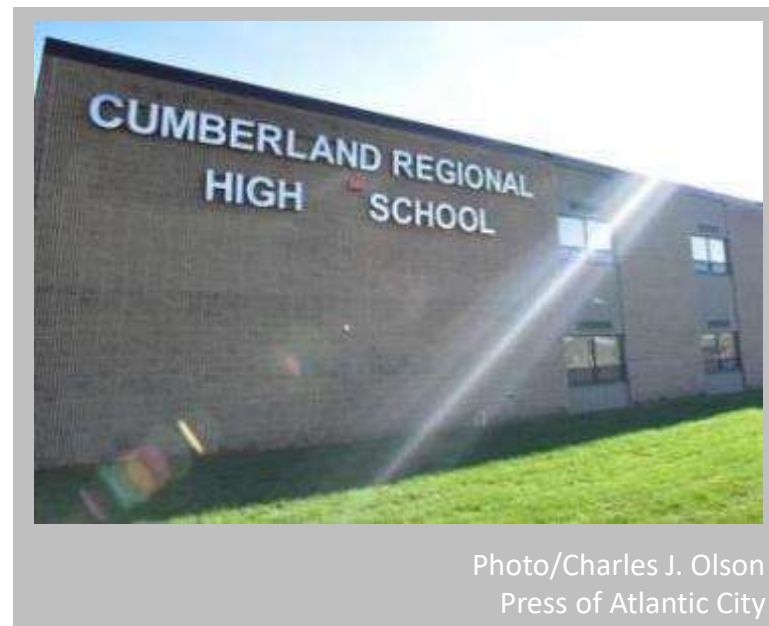
NJCleanEnergy.com/P4P

COMPREHENSIVE PROGRAMS



CUMBERLAND REGIONAL HIGH SCHOOL

- High School
- Pay for Performance - EB
 - Steam Boilers Replaced with Hot Water Boilers
 - HVAC Controls
 - Replace Air Handling Units and Ventilators.
 - Lighting upgrades, internal and external to LED
- **Total Project Cost: \$2,824,050**
- **Committed Incentive: \$240,993***
- **Annual Savings: \$100,035**
- **Project Payback: 27.9 years**



Photo/Charles J. Olson
Press of Atlantic City

This case study was from a previous fiscal year and may not represent current incentive levels or costs.



*Includes \$139,203 paid. The remaining amount committed and paid after savings verified.

Direct Install

NJCleanEnergy.com/DI

COMPREHENSIVE
PROGRAMS

WHO

Small to medium sized C&I existing facilities seeking to replace inefficient equipment

SIZE TO QUALIFY

Average annual peak demand <200 kW in the previous 12 months

ABOUT

- A pre-approved regional Participating Contractor will do a walk-through evaluation and guide users through the program phases
- Turn-key process with fast project turnaround time

INCENTIVE CAP

- \$125,000 incentive funding per project/building (\$250K UEZ/OZ/ MUNI/K-12 Public Schools), or
- \$250,000 per entity (\$500K ESIP; \$4M UEZ/OZ/ MUNI/K-12 Public Schools)



Direct Install

NJCleanEnergy.com/DI

COMPREHENSIVE
PROGRAMS

Facilities in Urban Enterprise Zones (UEZ), Opportunity Zones (OZ), municipalities, and K-12 public schools:

INCENTIVE FUNDING

Up to **80%** of installed cost is paid directly to the contractor

CUSTOMER

20% of installed cost

All other eligible facilities:

INCENTIVE FUNDING

Up to **70%** of installed cost is paid directly to the contractor

CUSTOMER

30% of installed cost

HOBOKEN CITY HALL

- Municipal Building
 - LED Lighting upgrades
 - HVAC Systems
 - Programable Thermostats
 - Low flow Aerators
- **Total Project Cost: \$54,552**
- **Incentive: \$38,187**
- **Annual Savings: \$17,288**
- **Payback Period: < 1 Year**



This case study was from a previous fiscal year and may not represent current incentive levels or costs.

Customer Tailored Energy Efficiency Pilot

COMPREHENSIVE PROGRAMS

NJCleanEnergy.com/CTEEP

WHO C&I customers seeking a streamlined/single application for participants submitting for multiple different technology types

SIZE TO QUALIFY N/A

ABOUT

- On site assistance available
- One application form for multiple prescriptive or custom measures
- Utilizes SmartStart Incentives
- Additional technical incentive available to offset soft costs associated with developing and planning custom projects

INCENTIVE CAP Maximum incentive per entity is the lesser of:

- \$250,000 entity cap,
- 50% of eligible project costs, or
- Buy-down to 1-year payback

Up to \$10,000 for technical assistance of custom project evaluation

SAME INCENTIVE VALUES AS SMARTSTART

Customer Tailored Energy Efficiency Pilot

COMPREHENSIVE PROGRAMS

NJCleanEnergy.com/CTEEP

Payment schedule based on program variation:



Energy Efficiency Plan Approval



Installation Complete

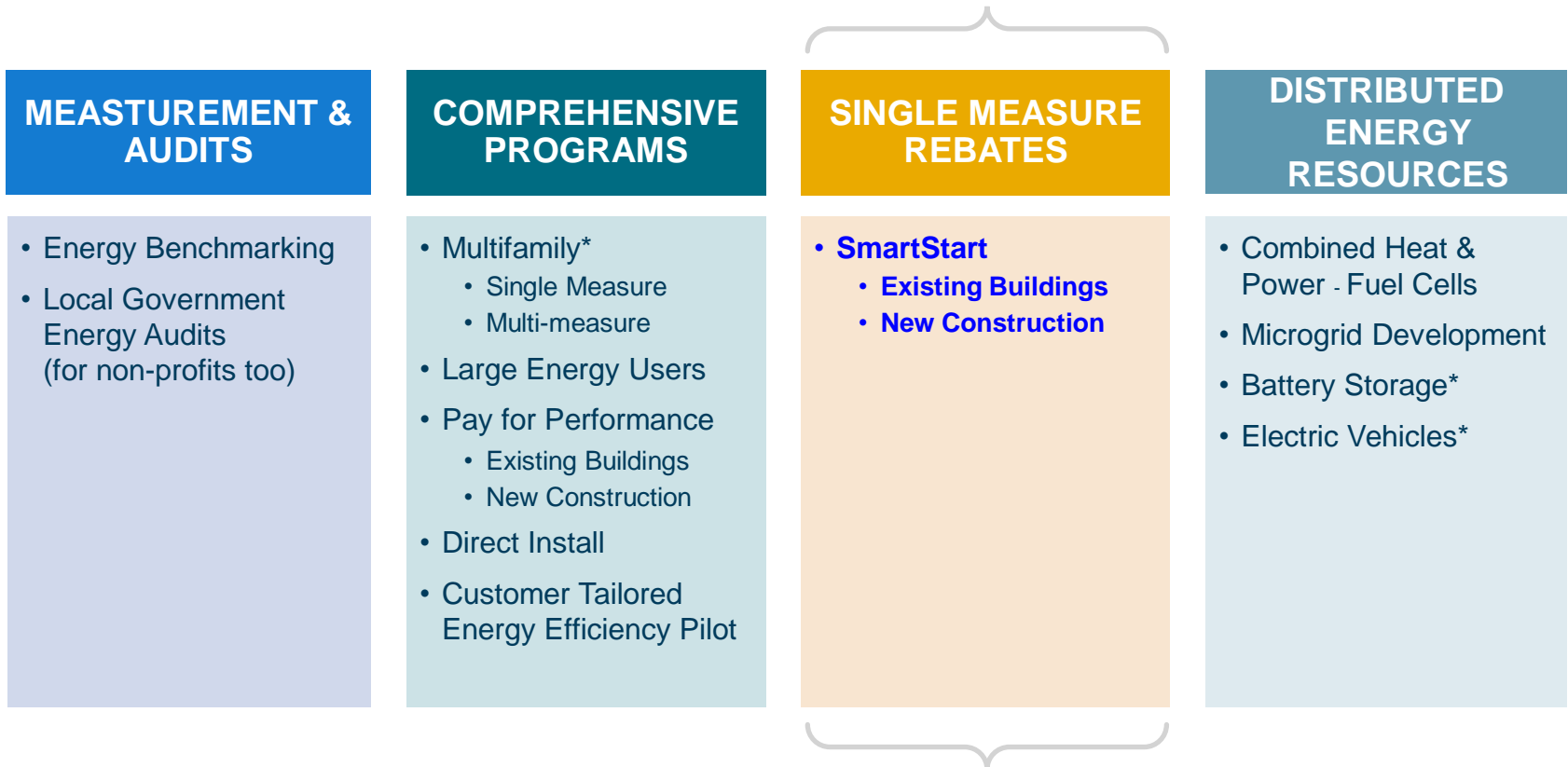


Performance Verification

Technical Assistance (Optional)	50%	50%	
CTEEP Prescriptive Measures		100%	
CTEEP Custom Measures		90%	10%

C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily



** coming soon!*

SmartStart

NJCleanEnergy.com/SSB

SINGLE MEASURE
REBATES

WHO

All C&I: Commercial, Industrial, Agricultural, Government, Non-Profit and Institutional customers

SIZE TO QUALIFY

N/A

ABOUT

- Individual high efficiency equipment rebates for new construction, renovation, remodeling, equipment replacement
- Prescriptive and custom designed measures
- Pre-approval required for lighting \geq \$100,000 and all custom measures

INCENTIVE CAP

- Prescriptive: \$500,000 for each electric or gas account
- Custom, lesser of the following:
 - \$0.16/kWh and/or \$1.60/therm saved annually;
 - 50% of incremental installed cost; and
 - Buy-down to 1 year payback based on incremental cost and savings



PRESCRIPTIVE INCENTIVES

- Lighting & Lighting Controls
- Packaged HVAC
- Boilers & Water Heaters
- Chillers
- VFDs
- Food Service
- Refrigeration

Existing buildings
prescriptive only:

**DOUBLE INCENTIVES
FOR OZ/UEZ/ MUNI/
K-12 PUBLIC
SCHOOLS**



CUSTOM INCENTIVES

- New or innovative technologies proven to be cost-effective and not listed as prescriptive
- Projects must have a minimum first year energy savings of 75,000 kWh or 1,500 therms
- Project pre and post inspection required

C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily

MEASUREMENT & AUDITS

- Energy Benchmarking
- Local Government Energy Audits (for non-profits too)

COMPREHENSIVE PROGRAMS

- Multifamily*
 - Single Measure
 - Multi-measure
- Large Energy Users
- Pay for Performance
 - Existing Buildings
 - New Construction
- Direct Install
- Customer Tailored Energy Efficiency Pilot

SINGLE MEASURE REBATES

- SmartStart
 - Existing Buildings
 - New Construction

DISTRIBUTED ENERGY RESOURCES

- **Combined Heat & Power - Fuel Cells**
- Microgrid Development
- Battery Storage*
- Electric Vehicles*

** coming soon!*

Combined Heat & Power - Fuel Cells

DISTRIBUTED
ENERGY

NJCleanEnergy.com/CHP

WHO

C&I customers that require on-site electric generation that either does or does not utilize waste heat

SIZE TO QUALIFY

N/A - Projects must pass a cost-effectiveness test and run 5,000 full load equivalent hours per year (3,500 for critical facilities)

ABOUT

- Combined Heat & Power (CHP) units generates electricity and recycle waste heat to provide heating or cooling
- Resiliency with return on investment
- Technology-neutral incentives
- Fuel Cells (FC) with or without heat recovery (HR)

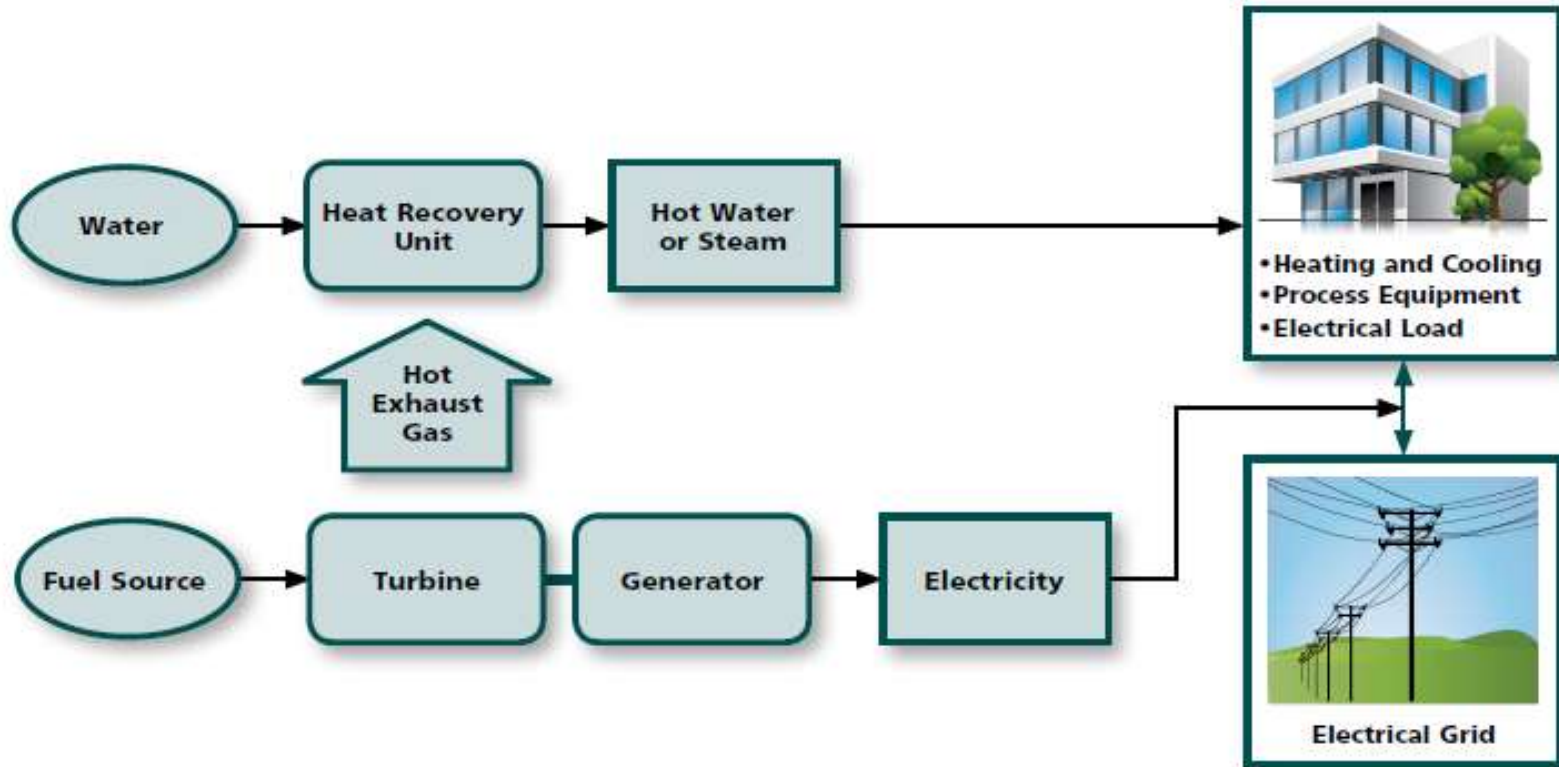
INCENTIVE LEVELS

- CHPs and FC with HR have a project cap of \$2MM - \$3MM
- 25% bonus for critical facilities with black-start/islanding capabilities
- Up to 30% incentive bonus for CHP using biofuel
- FC without HR have a project cap of \$1MM

Combined Heat & Power

NJCleanEnergy.com/CHP

DISTRIBUTED
ENERGY



Combined Heat & Power - Fuel Cells

DISTRIBUTED
ENERGY

NJCleanEnergy.com/CHP

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/Watt) ⁽⁵⁾	% of Total Cost Cap per project	\$ Cap per project	
CHP powered by non-renewable or renewable fuel source, or a combination ⁽⁴⁾ : <ul style="list-style-type: none"> • Gas Internal Combustion Engine • Gas Combustion Turbine • Microturbine 	≤500 kW ⁽¹⁾	\$2.00	30-40% ⁽²⁾	\$2 million	
	>500 kW – 1 MW ⁽¹⁾	\$1.00			
	Fuel Cell with Heat Recovery (FCHR)	>1 MW – 3 MW ⁽¹⁾	\$0.55	30%	\$3 million
		>3 MW ⁽¹⁾	\$0.35		
Fuel Cell without Heat Recovery (FCwoHR)	Same as above ⁽¹⁾	Applicable amount above	30%	\$1 million	
Waste Heat to Power (WHP) ⁽³⁾ 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 ⁽¹⁾	\$1.00	30%	\$2 million	
	>1 MW ⁽¹⁾	\$0.50	30%	\$3 million	

+critical facility/blackstart bonus of 25%

More Information

VISIT

NJCleanEnergy.com

CALL

(866) 657-6278

NEWSLETTER

NJCleanEnergy.com/NEWSLETTER

LISTSERVS

NJCleanEnergy.com/LISTSERVS



@NJCleanEnergy


Commercial EE Outreach Action

For 10 points:

- **Outreach letter** sent to local businesses on municipal letterhead
TIP: The contractor will often pay for the mailing cost
- **At least one additional Direct Install outreach and education effort :**
 - Setting up a webpage about Direct Install on the municipal website
 - Workshop or “breakfast” with the Mayor
 - Chamber of Commerce follow up mailing
 - Staff person or a volunteer follow up via phone or in person
 - Creating a newsletter for businesses highlighting the Direct Install Program
 - Visible recognition program for businesses that have participated
- ***For an additional 10 points*** document that the 2.5% eligible entities signed direct install contracts with contractor, during campaign



Wyckoff Case Study, 20 pts.



TOWNSHIP OF WYCKOFF
MEMORIAL TOWN HALL • 340 FRANKLIN AVENUE
WYCKOFF, NEW JERSEY 07481-1907
TEL: 201-891-7000 FAX: 201-891-9359

February 6, 2019

Dear Owner of Business Property:

The Wyckoff Environmental Commission/Wyckoff Green Team and the Wyckoff Chamber of Commerce are reaching out to make you aware of a State of New Jersey program (offered by the NJ Board of Public Utilities (NJBPU) in partnership with Sustainable Jersey) that provides hands-on assistance to help reduce your energy bills and save money on your bottom line while helping to create a cleaner, healthier community.

This state program will pay up to 70% of the cost of energy savings upgrades to your building and can be completed in as little as 90 days. The program, called **DIRECT INSTALL**, begins with an initial FREE, absolutely no-obligation energy assessment of your building. Once completed, the payback period on your initial investment can be as short as one year... while the energy and cost savings you will enjoy can last up to 15 years.

The Township of Wyckoff has previously utilized this effective program and we were able to improve energy efficiency in our municipal buildings at a fraction of total costs of the improvements we would normally have expended without the **"NJ DIRECT INSTALL PROGRAM."** Businesses can enjoy the same benefits to their bottom line, and recoup the savings in their energy bills to make their businesses more competitive.


Below is the contact information for our local NJ Direct Install Contractor (established by the NJBPU after advertised competitive bidding), as well as the name of our Bergen County Coordinator to help guide you through this program. Please reach out to them so that we can help you start to save money and energy right away.

For more information about the NJDirect Install Program, please visit: <http://njcleanenergy.com/commercial-industrial/programs/direct-install>



NJ Board of Public Utilities Approved Direct Install Contractor
Mr. Fran Burke at Lime Energy
fburke@lime-energy.com

Bergen County Coordinator for NJDirect Install Program
Mr. Mike Mandzik at TRC Solutions
MMandzik@trcsolutions.com

Sincerely,
Wyckoff Township Committee




Thomas J. Madigan, Mayor
Rudolf E. Boonstra
Melissa D. Rubenstein
Brian D. Scanlan
Timothy E. Shanley



The Township of Wyckoff has developed this notice to apprise business property owners in the Township of Wyckoff of this NJBPU Program for Energy Savings.

TIP: Top performing towns report that endorsements of the program from local businesses that have already participated is a KEY success strategy.

The Wyckoff Environmental Commission,
in association with the **Wyckoff Chamber of Commerce**,
is pleased to present:



New Jersey's Clean Energy Commercial & Industrial Programs

Which program is best for your business?

New Jersey's Clean Energy Program offers financial incentives to create a more efficient New Jersey – and gives your business a competitive advantage!
By upgrading your facilities with energy-efficient equipment or incorporating energy-efficient technology into your building projects, you can modernize your facilities and **receive big dividends on efficiency investments.**




Learn about:

OPEN TO ALL BUSINESSES IN NEW JERSEY
Join us: Wyckoff Chamber of Commerce, February Meeting
Larkin House 380 Godwin Ave, Wyckoff, NJ 07481

FEBRUARY 28TH, 2019
8:00 AM

Questions? Email: wec@wyckoff-nj.com



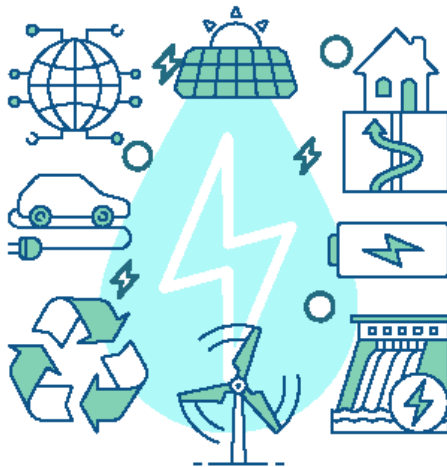
Mercer County Hub Collaborative Campaign

ATTENTION ALL MERCER COUNTY BUSINESSES

The New Jersey Clean Energy Workshop
September 19, 2019, 8 a.m. – 10 a.m.
The Boathouse at Mercer Lake | 334 S. Post Rd., West Windsor

On behalf of Mercer County Executive Brian M. Hughes, the Mercer County Office of Economic Development invites you to learn about energy resource programs that will help you become more energy efficient and improve your business's bottom line!

This *FREE WORKSHOP* features presentations by the Mercer County Office of Economic Development, the Board of Public Utilities, the New Jersey Clean Energy Program and the Direct Install Program. A continental breakfast will be served.



For more information or to register, contact Ed Kemler in the Mercer County Office of Economic Development at 609-989-6555 / ekemler@mercercounty.org

Mercer County
Sustainability Coalition is
doing a Commercial Energy
Efficiency Outreach
Campaign.

Commercial Energy Efficiency Outreach Action

20 Point level = 2.5% Contracts signed during outreach campaign
 Gold Star Standard in Energy = 5% Lifetime completions

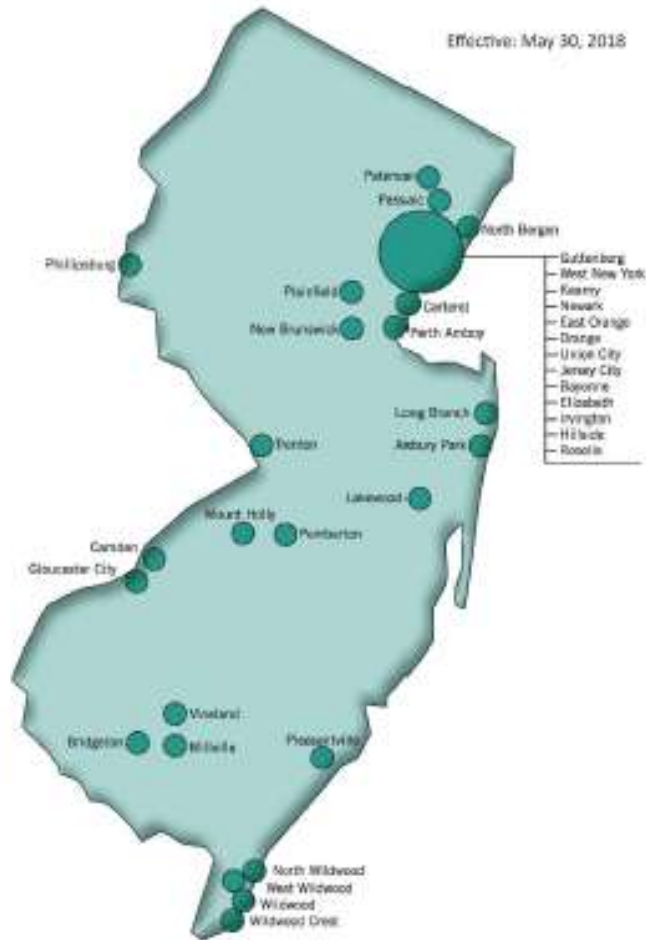
Commercial (Direct Install) Projects Needed

Municipality	County	C&I Taxed Parcels	# Projects = 2.5%
Aberdeen Township	Monmouth	187	5
Absecon City	Atlantic	188	5
Alexandria Township	Hunterdon	36	1
Allamuchy Township	Warren	19	1
Allendale Borough	Bergen	65	2
Allenhurst Borough	Monmouth	27	1
Allentown Borough	Monmouth	39	1
Alloway Township	Salem	34	1
Alpha Borough	Warren	70	2
Alpine Borough	Bergen	18	1
Andover Borough	Sussex	58	2
Andover Township	Sussex	144	4
Asbury Park City	Monmouth	378	10
Atlantic City	Atlantic	1483	38
Atlantic Highlands Borough	Monmouth	94	3
Audubon Borough	Camden	157	4
Audubon Park Borough	Camden	9	0

List of participation rates by town is included in the text of the Commercial Energy Efficiency Outreach Action.



NJ Urban Enterprise Zone



Enhanced incentives for Opportunity Zones and Urban Enterprise Zones



NEW JERSEY
URBAN ENTERPRISE
ZONE PROGRAM

www.nj.gov/dca/affiliates/uez



Opportunity Zone Map

Two useful links:

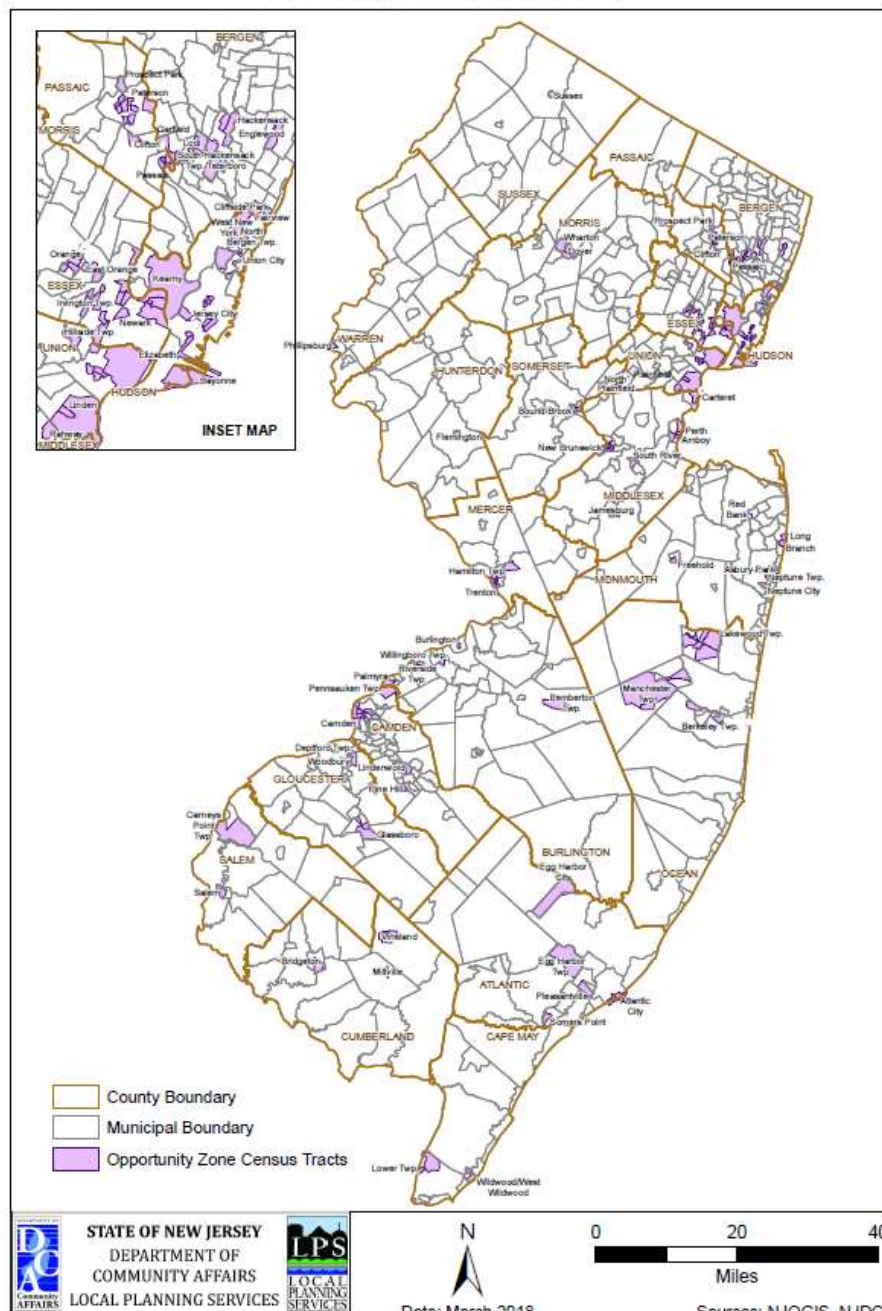
Source for static map and list of towns:

<https://nj.gov/governor/njopportunities/zones/municipalities/index.shtml>

Interactive map is here:

<https://njdca.maps.arcgis.com/apps/webappviewer/index.html?id=96ec274c50a34890b23263f101e4ad9b>

Designated Opportunity Zones
by Census Tract in New Jersey



Residential Portfolio of Programs

NJCleanEnergy.com/RESIDENTIAL

HOME PERFORMANCE W/ ENERGY STAR®

- Whole-house and safety solutions for existing homes
- Air sealing, insulation, heating and cooling upgrades
- Up to a \$4,000 rebate + 0% financing up to \$10,000 or .99% up to \$15,000

WARMADVANTAGE & COOLADVANTAGE

- Stand-alone rebates for heating and cooling systems
- Furnaces, boilers, water heaters, central air conditioners, mini-splits, heat pumps, etc.



ENERGY EFFICIENT PRODUCT REBATES

- Includes ENERGY STAR® certified refrigerators, dryers, washers, air purifiers, dehumidifiers, room air conditioners
- Appliance Recycling



RESIDENTIAL NEW CONSTRUCTION

- Builders work with a rater to properly certify the homes to ENERGY STAR® certified or Zero Energy Ready Home levels



COMFORT PARTNERS

- A FREE program including lighting upgrades, hot water conservation, replacement of fridges and thermostats, insulation upgrades and heating and cooling maintenance **for income eligible families**



Incentives

NJCleanEnergy.com/HP

HOME PERFORMANCE
WITH ENERGY STAR®

Incentives based on Total Energy Savings for single-family homes (1-4 units) & townhomes

\$2,000 up to \$4,000 cash incentive

Plus:

- 0% Interest loan up to \$10,000 or
- **0.99% interest loan up to \$15,000**
- **Up to \$1,000 Urban Enterprise Zone (UEZ) Bonus**



Sustainable Jersey Supporters & Sponsors

Program Underwriters



Grants Program



Corporate Sponsors

* 10th Anniversary Sponsors

PLATINUM



GOLD



SILVER



BRONZE



Sustainable Jersey for Schools Supporters & Sponsors

Program Underwriters



Grants Program



Corporate Sponsors

PLATINUM



GOLD



SILVER



BRONZE



Upcoming Events

Energy Events

Webinar

How Energy Savings Improvement Plans Fund Energy Upgrades (ESIP)
November 13, 2019 @ 1 PM-2 PM

Focus Group Meeting (via conference call)
Community Solar

November 7, 2019 @ 9:30 AM-11 AM
[registration required](#)

Webinar

Getting Started with Energy Actions: Residential Energy Efficiency Outreach
December 4, 2019 @ 1 PM – 2 PM



Upcoming Events

- Implementing Complete Streets at the Local Level
 - Free Training
 - January 9, 2019 @ 9:30 AM – 4:00 PM
 - Rowan College of South Jersey, Cumberland Campus
 - 3322 College Drive, Vineland, NJ 08360
- Sustainable Jersey Online Listening Session Submission
 - Deadline: November 10
 - <https://www.planetcivic.com/town-initiative>



Cape May's ESIP-School District plus Municipal

Building	Building area in square feet	Baseline Energy Usage Data from Energy Audit Date ----->		total kbtu per month	Baseline EUI	Potential Savings identified from Energy Audit		total kbtu per month after energy upgrades	EUI after Energy Upgrades	% Change EUI in Facility	Weighted
		Enter your grid purchased electricity (kWh) in this column	Enter your natural gas (therms) in this column			Enter potential electricity savings from ECMs (kWh) in this column	Enter potential natural gas savings from ECMs (therms) in this column				
City Hall	22,479	272,704	2,376	3171999.68	141.11	55,306	1,788	2391555.23	106.39	-0.25	-0.06
Franklin Street School	10,676	9,463	1,875	298288.27	27.94	4,249	1,165	130427.50	12.22	-0.56	-0.06
Welcome Center	2000	50,877	1,496	702319.65	205.36	17,709	1,237	382650.49	111.89	-0.46	-0.02
Water Works Building	3,420	1,624,600	2,544	17677665.77	8838.83	3,092	228	17620589.36	8810.29	0.00	0.00
Fire House	2,000	120,160	4,110	1719283.09	251.36	20,440	1,131	1381476.29	201.97	-0.20	-0.01
Public Works Complex	6,840	18,160	10,719	1320112.45	317.03	4,460	1,131	1153560.43	277.03	-0.13	-0.01
Library	4,164	58,591	1,931	830664.20	199.49	17,904	103	627975.26	150.81	-0.24	-0.01
Nature Center 1	1,296	5,291		56702.69	43.75	4,462	0	8884.24	6.86	-0.84	-0.01
Nature Center 2	1,876	5,286	1,065	168474.11	89.80	4,446	875	28952.13	15.43	-0.83	-0.02
Elementary School	43,560	220,600	17,300	4180630.49	95.97	121,070	878	2790955.09	64.07	-0.33	-0.15
Street Lights		62,530				35,910	0				
		2,448,262	43,416			289,048	8,536				-33.68%
Adapted from Solar Oregon's site EUI calculator for homes http://solaroregon.org/downloads/eui-calculator/view											

- Reduced energy use over 30%
- \$34K in incentives from the NJCEP through the Smart Start Program
- Adds \$18,387 to the two operating budgets

Energy Savings Improvement Plan

- ESIP How-To Guide
 - Case Studies
 - Flow chart
 - Contracting options
 - Glossary

How to Implement an Energy Savings Improvement Plan
Sustainable Jersey How-To Guide, V.2



Sustainable Jersey
Sustainability Institute at The College of New Jersey
Forcina Hall, 3rd Floor
2000 Pennington Rd.
Ewing, NJ 08628-0718

<http://www.sustainablejersey.com/grants-resources/publications/>



Sustainable Jersey Annual Luncheon

Tuesday, November 19, 2019

12:00pm – 1:45pm

The Crown Ballroom, Sheraton Convention Center Hotel, Atlantic City

Highlights:

- Pre-Luncheon Networking Session (10:30am - Noon) **Certifying communities should arrive early to have their group photo taken prior to the start of the luncheon*
- Luncheon (Noon – 1:45pm)
- Recognition of the 2019 Sustainable Jersey Certified Communities
- Conveyance of Special Awards



[REGISTER](#)

